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Innovations and Consequences A study of Raymond College, University of the Pacific

Jerry G. Gaff
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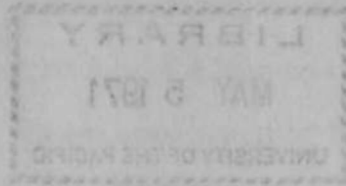
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INNOVATIONS AND CONSEQUENCES:

A STUDY OF RAYMOND COLLEGE, UNIVERSITY OF THE PACIFIC



by

Jerry G. Gaff

August 31, 1967

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DEDICATION

In performing this research, I have become increasingly aware of the impact of a few individuals on my thinking. Because of their beneficial influence on my personal development I would like to dedicate this work to:

Warren Bryan Martin, whose vision conceived of Raymond, whose rhetoric infused it with value, and whose administrative skills brought it to life, all of which made it a college of consequence for me;

Walter C. Wagner, who with his concern, wisdom, and personal example has taught me as he has taught many others to more closely approximate the high calling of a teacher;

R. Eugene Wise, a personal friend whose thoughtfulness and breadth of understanding has strengthened my grasp of educational matters and whose constructive criticism of my developing ideas have served to clarify and deepen them;

My parents and grandparents, the earliest and probably the best teachers I have ever had;

Sally S. Gaff, my wife, whose keen mind, constant encouragement, and own personal sacrifices have contributed immeasurably to my intellectual and personal growth.

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PREFACE

This is a study of a college, Raymond College of the University of the Pacific. Raymond is different from most schools in that it is a "cluster" college and one of those rare institutions which have attempted radical innovations in higher education. The school has attempted to give a full and fair trial to some of the newest ideas for improving liberal arts undergraduate education. Thus, in addition to being a small college on the campus of a larger university, it offers a different calendar, a Bachelor of Arts degree after three years, a common "core" curriculum, independent study for all students, an alternative to letter grades, primarily the seminar method of instruction, and a campus-wide "living and learning" milieu. Because it has forged these modern structures in an attempt to realize the classical values of a liberal education, Raymond is the scene of a significant experiment in which the consequences of these contemporary ideas may be observed. In using this single school as a case study, I attempt to achieve three main purposes: first, to describe the cluster college concept which originated from this university and its place in American higher education; second, to describe the Raymond program with its explicit criticisms of the traditional philosophies and practices of undergraduate education and with its creative alternatives to them; and third, and most importantly, to analyze the consequences of both the Raymond program and the cluster college development at this university.

Because a person cannot write even a single interpretation of human behavior without betraying his most basic assumptions and values, I will attempt to make some of my biases explicit so that the reader may at least be aware of the position from which I speak. I joined the Raymond faculty in the fall of 1964, the college's third year of operation, participated actively

in the life of the school for three years, and recently resigned to accept a position at the Center for Research and Development in Higher Education at the University of California, Berkeley. I was attracted to Raymond because I thought it would afford me an opportunity to be closer to students, to know them and for them to know me more intimately, and to have a greater impact on their thought processes and personal development than might be the case in other settings. My expectations were more than fulfilled. During my stay at Raymond I was able to know several students in depth, to listen to their joys and sorrows, to help them cope with their problems, and to observe those young persons grow toward maturity. To my surprise these experiences caused me to grow intellectually and personally also.

During the past few years I have tried to develop an educational philosophy. While that philosophy is far from being exhaustive and absolute, I have come to believe that a liberal education should free a student from the narrow beliefs a late adolescent inevitably brings with him to college, that it should liberate his mind by introducing him to knowledge about the nature of the social and physical world surrounding him, that this knowledge should enhance and illuminate his private inner world, that his encounter with this knowledge should lead to a personal transformation in the student from an immature self with old attitudes, beliefs, and actions into a newer, more mature self, one more consonant with his greater understanding. Such an education involves both destroying the old and creating the new style of life; it often means causing an intellectual, value, and even emotional crisis in the lives of students and helping those delicate youngsters resolve their crises in ways which are more personally satisfying and socially useful than their earlier patterns. I would like to think that by cultivating the minds and personalities of their students, institutions of higher learning might act as a catalyst to constantly renew their

society. These faith statements provide at least a glimpse of the value position from which I will speak.

In 1965, as I was involved in the Raymond experiment, I applied for a grant from the United States Office of Education to conduct a study of the program. The application was approved, and this monograph represents the final report of the research to that organization. This is an unconventional final report. It is not intended only as a technical report to fellow researchers (though it does contain the relevant technical details); it is rather a report which can be read and understood by the layman unfamiliar with the terminology of social science or the complexities of statistics. I believe the Raymond experiment is too valuable to be relegated simply to professional journals or the data bank; I intend for this study to be informative to the administration, faculty, and student body of the University of the Pacific so that they may better understand their own institution and use this knowledge to create the best possible university.

Since this report is quite lengthy, it may be helpful to the reader to have an overview of its organization and the major findings so that he may discern the sections which are most relevant to him. Chapter I attempts to place the cluster college in the context of contemporary higher education, and Chapter II contains a description of the Raymond program. The primary evaluation of Raymond is largely statistical and comprises Chapter III. This bulky section is divided into several parts including a discussion of the method, instruments, samples, and results. The results obtained from each of four instruments are presented separately and in succession; for each test the results for Raymond and the rest of the university are discussed separately. A summary interpretation section is included for each school on each test, and the hurried reader may want to read only those summaries to discover the core findings.

The major findings indicate that the innovations of Raymond have placed it among the ranks of the leading liberal arts colleges in the United States, that Raymond has created an educational climate which is radically different from that found in the rest of the university, and that the two different programs have dramatically different consequences for their students. A more impressionistic assessment of the various features of the Raymond program including their weaknesses as well as their strengths is presented in Chapter IV. That section also contains a discussion of the utopian mentality with which the school was established and an analysis of the crucial but often ignored post-utopian stage of development into which it is currently moving. The final chapter presents an impressionistic view of the impact of Raymond on the rest of the university, suggesting how the cluster college may be an active agent for the renewal of that larger institution.

A project of this magnitude must be a cooperative effort. John Leland provided assistance with the data tabulation and ordering; Kathy Mumm and Betsy Siegelkoff typed large sections of the developing manuscript; Gene Wise graciously consented to read the manuscript and made several valuable suggestions for improving it; and Sally Gaff provided immeasurable help from the time the proposal was prepared until the final copy was typed. To all of these persons I extend my deepest appreciation.

Jerry G. Gaff

August 31, 1967

I. THE CLUSTER COLLEGE IN CONTEMPORARY HIGHER EDUCATION

Knowledge has certainly never in history been so central to the conduct of an entire society. What the railroads did for the second half of the last century and the automobile for the first half of this century may be done for the second half of this century by the knowledge industry: that is, to serve as the focal point for national growth.

This conjecture by Clark Kerr (1963, p. 88) reflects the radically changed attitude toward knowledge in contemporary America. No longer is knowledge regarded as a useless luxury for the elite few; rather, it is increasingly viewed as indispensable for the smooth and efficient operation of the technologically complex American society, as the precondition for solving pressing social problems ranging from national defense to disease, from poverty to pollution.

The university, the only social institution which specializes in the creation, transmission, and application of knowledge, has responded to the nation's need. There has been in recent years a virtual "knowledge explosion," which, according to the sociologist Daniel Bell (1966, p. 74), has four different dimensions: "the 'exponential growth' of knowledge, the 'branching' of new fields of knowledge, the rise of a new intellectual technology, and the rapid expansion of research and development as an organized activity of government." This increased knowledge has been diffused more widely than ever before in the country's history as institutions of higher learning now enroll over six million students and annually award upwards of a half million Bachelor degrees, over 100,000 Master's degrees, and 15,000 doctorates (Simon & Grant, 1964). The university, to use Kerr's (1963, p. 87) phraseology, "has become a prime instrument of national purpose."

The university has had to make severe changes in order to yield to the

national calling, and perhaps they have been best summarized by Bell (1966, p. 88).

In less than seventy-five years, the modern university, with the graduate school at the center rather than the college (despite its overwhelmingly larger number of students), has come to dominate American higher education. The graduate school arose in response to several needs: the increase in knowledge, the emphasis on scholarship as against teaching, the corollary emphasis on research as a coequal function of the university professor, and the need to train teachers for the burgeoning number of colleges in the country. These needs remain, and, in fact, are multiplied by the proliferation of new fields of knowledge and the extraordinary increase in college attendance in the country.

What is new today, and constitutes the further transformation of the American universities, is the predominant concern with research, the creation of new research institutes, centers, and laboratories, as the major organizational feature of the university, and the role of the federal government in underwriting the costs of this development. The university today, whether private or state, has come to be a quasi-public institution in which the needs of public service, as defined by the role of the research endeavor (whether initiated by the government or by the faculties), becomes paramount in the activities of the university.

To Bell's general description of the modern university may be added Kerr's 1963 (pp. 7-8) statement of the size and influence of one specific university.

The University of California last year had operating expenditures from all sources of nearly half a billion dollars, with almost another 100 million for construction; a total employment of over 40,000 people, more than IBM and in a far greater variety of endeavors; operations in over a hundred locations, counting campuses, experiment stations, agricultural and urban extension centers, and projects abroad involving more than fifty countries; nearly 10,000 courses in its catalogues; some form of contact with nearly every industry, nearly every level of government, nearly every person in its region. Vast amounts of expensive equipment were serviced and maintained. Over 4,000 babies were born in its hospitals. It is the world's largest purveyor of white mice. It will soon have the world's largest primate colony. It will soon also have 100,000 students -- 30,000 of them at the graduate level; yet much less than one third of its expenditures are directly related to teaching.

In both the general and specific statements by these two students of American higher education one can see that the great gains in knowledge production, graduate training, and service to the society have been

correlated with the decline of the college (Bell) and the relative neglect of teaching (Kerr). As research develops, teaching lags; as professors spend more time consulting with government and business, they spend less time consulting with students; as teachers devote more time and energy to graduate education, they have less to devote to undergraduate education. In short, the transformation of the university into an instrument of national purpose has been made at the expense of liberal arts undergraduate education. This nation can ill afford that cost, for it is a liberal education which best prepares the student to become a more effective and humane specialist. To neglect the education of undergraduate students in the interest of research and development is like spending accumulated capital to increase one's current standard of living. Such practices to be sure satisfy current needs but only for a short time and only by restricting possible future growth.

For some time the neglect of liberal arts undergraduate education was hidden from public view, but in the last decade two major factors have publicized this matter. First and less conspicuous, the quiet methods of social science have been directed, albeit belatedly, toward higher educational institutions themselves, and for the most part, undergraduate education has been found wanting. Nevitt Sanford (1962, p. 1009) in the final chapter of The American College, states:

It should now be plain to all that our colleges are not doing what they might to realize their potential or even to achieve minimal objectives. It should be plain, indeed, that our colleges, with the cooperation -- both deliberate and unwitting -- of major forces in our society and through ill-designed social organization and poorly motivated teachers, actually deprive thousands of students of the opportunity to find themselves and to educate themselves.

A second and much more conspicuous factor testifying to the educational inadequacy of the modern university are the widespread student revolts launched in 1964. One typical manifesto (in Lipset & Wolin, 1965, pp. 211-212)

from Berkeley in 1964 stated the essence of the student position.

We get a four-year-long series of sharp *ataccatos*: eight semesters, forty courses, one hundred twenty or more 'units,' ten to fifteen impersonal lectures per week, one to three oversized discussion meetings per week led by poorly paid graduate student 'teachers.' Over a period of four years the student cog receives close to forty bibliographies; evaluation amounts to little more than pushing the test button, which results in over one hundred regurgitations in four years; and the writing of twenty to thirty-five 'papers' in four years, in this context means that they are of necessity technically and substantially poor due to a lack of time for thought. The course-grade-unit system structure, resting on the foundation of departmentalization, produces knowledge for the student-cog which has been exploded into thousands of bits and is force-fed, by the coercion of grades.

Rare indeed is the university in which a sizeable percentage of the student body does not sympathize with the truth they recognize in this lament, and it is the exceptional school that has not had its own "Little Berkeley."

Though the problem of providing a vital undergraduate liberal education is serious, it is a limited one considering the total functioning of the university. The question is this. How is it possible to have a university which is dedicated to serving society by creating new knowledge, by diffusing that knowledge widely, by applying that knowledge to the solution of social problems, and still provide an effective liberal education for more undergraduates than ever before in the nation's history?

It is interesting that at a time when weaknesses in undergraduate programs are being increasingly documented (Sanford, 1962; Summerskill, 1962; Clark & Trow, 1966; Goldson, et. al., 1950; Jacob, 1957), and student criticisms merit front-page publicity, unprecedented numbers of would-be freshmen still enter the colleges. But it is ironic that this numerical crisis, which threatens further to undermine the quality of college education, may itself germinate the seeds of educational innovations which will help solve the problem of size and improve the quality of instruction. As one educator expressed it,

The flood of students we must expect in American education...is not a misfortune, but a boon, and it may well be that under the pressure of necessity we shall correct some long-recognized weakness in our educational system. Under the pressure of necessity we may do some things we should long ago have done but would not be likely to do even now, except under the spur of necessity.

This 1957 statement by Clarence Faust (in Baskin, 1965, p. vi) has proven to be prophetic, for the subsequent decade of higher education has responded to these challenges in many novel ways.

Perhaps the most significant structural innovation devised to cope with the growing demands of more quality for larger numbers of undergraduates is the "cluster college." The idea of a cluster college is quite simple. It is merely a small college on the campus of a larger and usually established institution. Such a college is not to be confused with a department or school within a university in that the cluster college has its own institutional identity within the university as symbolized by its own name, and as signified in its distinctive curriculum, its separate residence halls, and its special social regulations. Further, it is administratively separate from the established university hierarchy replete with Deans, departmental chairmen and faculty committees; instead it is directly responsible only to a few higher ranking administrators, an arrangement which frees it to attempt substantial innovations and which protects those innovations from the usual academic power structure and its vested conventional interests.

The cluster college has several distinct advantages over an independent school. It is by definition small which makes for the possibilities of a close community involving close student-faculty relations and personalized instruction. Second, because it is freed from some of the traditional academic and social restrictions, the cluster college is able to experiment with new philosophies or methods of instruction. This experimentation can be performed on a limited scale which can be afforded by most universities. A third

advantage of the cluster college arrangement, especially when compared to the creation of a totally independent school, is that by virtue of its being a part of an older and established institution, it can tap into the central supporting facilities -- business offices, the development staff, libraries, maintenance -- and thereby effect a substantial economy. Also, because it is only semi-autonomous, it can share in the educational strengths of the "parent" school by encouraging students to take part of their program, especially their specialization or laboratory work, in that larger school. Finally, since educational ferment is likely to be a prime function of the innovative school, the cluster college can act as the critical conscience of the university. Because it has more flexibility to effect innovative ideas in undergraduate education, and because it may provide keen competition with the more conventional schools on the same campus, the cluster college may become an active agent for educational reform in the rest of the university. Just as the academic community historically has served as the critical conscience of the society, so may the cluster college act as the conscience of the modern university as it is tempted to slight non-utilitarian undergraduate liberal education in favor of what increasingly are thought to be more urgent and practical social demands.

The idea of a university composed of a series of discrete smaller units is not new; this is the basic structure of Oxford and Cambridge. The idea of a campus composed of several cooperating colleges is not new even in the United States; this is the structure of the Claremont Colleges, for example. But the idea of establishing a series of smaller semi-autonomous colleges on the periphery of an established university as a mechanism to accommodate numerical growth, to experiment with ways to improve the quality of undergraduate liberal education, and to serve as a catalyst for innovation

within the whole of that university is new; this concept was introduced into American education by Robert E. Burns, President of the University of the Pacific. Since President Burns and the Pacific Board of Regents officially decided in 1960 to adopt the cluster college concept as that university's policy of long term growth, dozens of universities throughout the country have seized upon this type of structure as a way to alleviate their "undergraduate problem." Because this structure is so new, however, universities can only adopt it without full awareness of the possible consequences. Since the University of the Pacific has been a pioneer in conceiving and implementing the cluster college concept, it is fitting that knowledge of the advantages and disadvantages of the cluster college as it has encountered them be communicated to others in educational circles. This is one of the major purposes of this monograph.

It may appear surprising that an answer to a problem of undergraduate education in the era of the multiversity should come from a school like Pacific. It is a small, private, church-related college in an age of the large, public, secular university; as such, it is supposed to be out of the mainstream of American higher education. And yet the type of school that Pacific represents has long been a guardian of undergraduate liberal education in this country. It is entirely understandable that from such a school should come not just criticisms of the impersonal multiversity but also creative solutions to its problem.

In addition, the College of the Pacific (as it was called prior to 1960) had been feeling some of the same tensions of the large university. While it has historically had a core liberal arts college and schools of music and education, it added schools of pharmacy in 1955 and of engineering in 1957. Although the College of the Pacific enrolled only a total of 1655 full-time undergraduates in the fall of 1959, this represented a growth rate of 174% since 1951. Furthermore,

the statistics pointed to a student avalanche in the near future. Thus, while Pacific was a small college, in terms of its own recent history and projected future, it was suffering the same growing pains both in terms of institutional complexity and numerical size, as the large university. But these pains were perhaps felt more acutely because of its traditional commitment to a friendly, religious, and familial campus catering primarily to undergraduates.

In reflecting upon the role of the small private college in the context of California's expanding public education, President Burns recognized that his school could not compete in the areas of university strength, i.e., research, graduate training, or professional consulting. But perhaps, he thought, the small size and limited resources of Pacific could be used to advantage. It could specialize in providing community, close student-faculty relations, and the personal touch in education which tends to be foreign to the multiversity. One way Pacific might respond to its own past growth and expected future demand for its services would be to develop a series of cluster colleges around the periphery of the existing campus; by following the Oxford-Cambridge model it could "grow larger by growing smaller." In an original burst of enthusiasm, the president envisioned the creation of 15 different schools in a like number of years. That plan proved too ambitious and was soon tempered by experience; still by fall 1967 Pacific will have three cluster colleges in operation.

II. THE RAYMOND PROGRAM

Once the general cluster college plan was formulated and adopted, the focus of attention shifted to the design of the program for the first school, Raymond College. The president and the then Academic Vice President, Samuel L. Meyer, selected Warren Bryan Martin, at the time a 36 year old college chaplain and chairman of the religion department at Cornell College, to become the first Provost of Raymond. This triumverate created the Raymond program.

The selection of Martin, a dynamic, young, visionary educator with a bent toward educational philosophy altered the original direction of the cluster college idea at Pacific. If Burns saw these schools as primarily techniques to provide personalized education within the context of an expanding university, Martin saw them as devices to attempt substantive innovations within both a national and local context of traditionalism. Seizing the freedom offered him by the President and the Board of Regents Martin determined to fill the new cluster college form with the content of a thoroughly contemporary liberal arts college. To describe this program, containing as it does a searching analysis of the modern American college and creative alternatives to many conventional practices -- this is a second purpose of this monograph.

The intent here is not to chronicle developments of the emergent Raymond program, not to disentangle past and perhaps unrecoverable events so as to ascribe authorship to the various dimensions of the final product, not to discuss the practical problems which arose in translating the plan into practices, and not to elaborate on the obvious inability to realize all the original ideals. Rather the main features of the current program will be described as well as the educational philosophy on which those features are based. In general terms this

description represents the vision as conceived by Martin, approved by Burns and Meyer, and implemented by the faculty. To be sure there have been differences between these pioneers, but there is a definite concensus concerning the fundamentals of the program, a concensus forged largely by the imagination and rhetoric of Martin. The method of participant observation is used here by the author to describe the Raymond culture as it is understood by the "natives." The basic data have been gathered from college publications, speeches by administrators, discussions in faculty meetings, and innumerable experiences in the culture. In describing the innovations and their rationale, an attempt will be made to capture the utopian spirit with which, until recently, these practices have been ensconced. Though the utopianism originally permeating Raymond College has faded, the primary innovations and their philosophical bases remain virtually unaltered.

Every new institution should be built with a sense of purpose, with a clear idea of what it can and should become. Raymond's purposes have perhaps best been articulated by Martin (1963, p. 1):

To train the mind and discipline the emotions; to encourage curiosity and imagination, creativity and personal authenticity; to bring man into contact with the records of the past and the realities of the present; to help the young student recognize and carry through his obligation to his fellow men and to society; to help him make the most of all that is around him and all that is within him, so that he may be equal to the challenge of the future; to help produce, in a world, better men and better citizens -- these have always been regarded as the prime functions of liberal education in America.

These multiple goals are some of the values which have long been regarded as the defining criteria of a liberating education. In its goals then, Raymond is quite traditional and typical; reference to these lofty ideals may be found in even the most crusty college catalogue. The only way its values differ from those of other institutions of higher learning is that Raymond takes these goals seriously. Accordingly, it has attempted to self-consciously

create a contemporary academic structure in which these values may be most effectively realized.

But how to best achieve the goals of personal liberation? Certainly there is no simple device which will assure an effective education. Well conceived curriculum in the hands of poor teachers will not be effective; good teachers can do very little if they are not supported by a sensitive administration or if they are separated from students by imposing academic structures. A good education seems to be like a clock; in both the whole device can function effectively only if all the component parts fit together. Given the complexity involved in specifying what is required to make the delicate educational mechanism work best, it is perhaps easier first to detect what disrupts it.

The values of a liberal education have been threatened many times in the history of the United States. One of the earliest and enduring threats is the professional school dedicated to preparing students with the skills necessary for performing specific tasks in the society. During the latter half of the 19th and early part of the 20th centuries schools of agriculture, engineering, mining, forestry, pharmacy, education, business administration and a number of other job-training programs became vital and valuable parts of the burgeoning university, but their narrowly conceived purposes and programs made them antithetical to the intellectually or personally liberating education. Though professional schools provide necessary services to the society, and though they recently have tended to broaden their philosophies and practices to provide increasing amounts of general education, they still tend to be in opposition to the basic values of a liberating education. Raymond by virtue of its commitment to the liberating arts, consciously rejects specific vocational preparation as a goal and opts instead for a non-vocational, or better, a multi-vocational, education.

A second major threat to liberal education is the increasing size of higher

educational institutions. The democratization of higher educational opportunity accompanied by the increased social value of a college education, the increased affluence of the American citizenry, the spread of public universities offering inexpensive education, and the coming of college age of the post-World War II "baby crop," has made an extraordinary demand on existing staff and facilities. Indeed, such demand threatens to make education impersonal and thus to undercut the possibilities for student intellectual and personal growth stemming from encounters with the best of the present and past minds. Gigantic universities may be the easiest, most obvious, and, in the short term, most economical way to meet the social demand, but education at these large "state preserves" is seldom the type educational philosophers have in mind when they describe the goals of a liberal education. Pacific has provided Raymond's response to the problem of size by limiting the school to 240 students and 24 faculty; although this answer is no solution to the national problem, it does cope with the matter of large size at this school.

Ironically, a third threat to effective liberal education comes from the very academic institutions which proclaim its goals. As the university "has become a prime instrument of national purpose," it has compromised its liberalizing undergraduate obligations. Higher education seems to have become mesmerized by academic traditions and entangled in its own often unexamined academic web; colleges in and out of multiversities have forfeited much of their power to enhance the lives of students.

Some decades ago W.F. Ogburn (1922) , coined the phrase "culture lag," to indicate that technological developments in the material culture change so rapidly that there is a substantial time lag before the non-material culture can adapt to them. Currently in higher education there seems to be a substantial academic lag. The semester calendar, the curriculum built of academic disciplines, the system of grading and testing, the departmental structure, and a host of related

traditional and widespread practices are based upon assumptions, philosophies, and realities of the past which have been superceded by a society with different assumptions, with new values, and with infinitely more knowledge than any previous one.

It is in response to the threats to a liberal education from within the academic community itself that Raymond makes its greatest and most creative contributions. It attempts to expose the academic lag by examining the rationale underlying conventional practices, and it offers some creative alternatives with which to realize time-honored ideals of a liberal education. The details of the program will be described below.

The Calendar The semester calendar used at most institutions of higher learning is a carry-over from an agricultural society which required the services of the youngsters on the farms during the summer, and despite, or perhaps because of, its longevity, there is little evidence of its educational advantages which its continued usage merit. The usual four-year duration of the college program is equally arbitrary, there being not a single shred of evidence that it takes that long -- and no longer -- for a student to become liberally educated. This arbitrary length of a college education is to be sure rationalized by another long-standing but equally skeptical custom, the mathematization of the learning process on the basis of an archaic educational psychology of largely Germanic origin. This practice assumes that a course is equivalent in value to a number of "units," the precise number to be determined by the amount of time a student spends in physical contact with a professor each week. A student is required by another convention to accumulate approximately 120 such units before he can receive a degree, a convention which makes it necessary, in the vast number of cases, for a student to remain in college for a total of four years.

The unit system of reckoning a student's amount of education and the

associated requirement that a student stay in contact with professors for four years before he became liberally educated may have been justified when it was assumed that there was a finite amount of knowledge, that the professor was the repository of knowledge, and that the goal of education was to transmit intact part of this body of knowledge to the students. But these practices are curious vestigial academic organs in an age when all indications point to continuous expansion of knowledge, when modern technology has reduced the professor to only one of several sources of knowledge, and when a student's factual store of knowledge is doomed to short term obsolescence after leaving the halls of learning. In the modern spirit there is greater need to teach the student to be an active inquirer of truths rather than a passive recipient of truth, an organizer and interpreter of his world rather than a repository of out-moded facts. Though there may indeed be sound reasons for retaining the semester calendar and the unit system which in combination require a student to spend four years to become liberally educated, the old rationale for them is antiquated and evidence for their effectiveness has nowhere been presented.

Recently colleges have recognized both the educational liabilities of the semester plan which contains two "lame duck" sections in the first semester (between Thanksgiving and Christmas, and between Christmas and the end of term), and the economic waste resulting from idled facilities during the lengthy summer vacation. In the wake of such criticism the quarter system and the even newer "trimester" program are being more widely adopted. Both of these calendars provide for a student to accelerate his college education and to obtain a degree in less than 4 years. Raymond has devised a three-term, three-year plan in response to the same problem. Students take three courses during each of three 12-13 week terms for three 10-month academic years, after

which they receive a Bachelor of Arts degree. The three-term, three-year plan is a deliberate attempt to circumvent the pitfalls of the shortness of the quarters and the unpopularity of the summer tri-mester. At Raymond the fall term begins late in August and runs without break until the Thanksgiving recess; the winter term starts one week later and lasts until mid-March with only the Christmas interruption; after about a 10-day break, the spring term begins and runs until mid-June. This arrangement allows for two of the three terms to be uninterrupted by the major holidays, thus permitting greater concentration throughout each term; it allows for a 7-10 day rest period between terms; and it provides a nine-week summer vacation which should be enough to recharge faculty and student psychic batteries in preparation for the subsequent year. ?

Originally there was some apprehension about adopting a program only 3/4 as long as the conventional one, and in order to justify this innovation within even the archaic "contact time" terms, some ingenious figuring was done (Martin, 1963, p. 5).

Each term is twelve to thirteen weeks in length, and each term provides 62 or 63 sixty-minute class meetings. With five meeting periods of sixty minutes each week the Raymond student has more "contact time" with the professor and the class than the student who follows the conventional semester schedule where there are 70 - 75 class days per semester (with examination days and other special events often included in this total) and only fifty minutes for each class meeting. Each term at Raymond, therefore, has the weight of a semester. The total program includes nine such terms rather than eight semesters.

*Raymond was
initially defensive
when it insisted
on this equal-
ization.*

Although the Raymond community does not regard contact time as a reliable index of a student's education, this arithmetic does serve to justify its departure from tradition in terms of the rationale underlying that very tradition.

There is no a priori reason to assume that a student will be any more or less liberally educated after three than after the usual four years, but there

is some reason to think that the goals Raymond has taken for its own may be realized in its specially designed program within three years. It must be clear that while Raymond offers a Bachelor of Arts degree after three years, it is not an accelerated program. Unlike the quarter and trimester programs which allow acceleration through the very same program, Raymond does not attempt to cram into three years what other schools do in four. It is an entirely different program in that it is totally dedicated to a general education. While it can offer some specialization in the academic disciplines, it is content to leave to the graduate schools, professional schools, and corporations the task of providing disciplinary specialization and vocational training. In this age the multiversity has superior facilities, larger and more specialized faculties, which allows it to provide the best possible disciplinary specialization; the professional schools and businesses can train their apprentices better than could a small liberal arts college. Raymond is content to specialize in general education. If students can make progress in acquiring a broad general education, developing critical intellectual tools, and appreciating methods by which knowledge is produced; if they can become increasingly sensitive to themselves and others and progressively develop personally satisfying and socially useful identities, then Raymond will have accomplished its goals. And most students can make a major start in realizing these purposes, it is felt, in three years.

In place of the "unit" system Raymond has adopted a course plan. There is no necessary reason for assuming that a student will be any better educated by taking a number of courses than by taking a number of units, but neither is there any reason for assuming the reverse. The course system does have the advantage of allowing a student to concentrate his intellectual efforts in fewer areas than is generally true under the unit system. The particular course system used at Raymond is different from most others in that students take only

three courses each term rather than the usual four or five, a practice which, it is thought, will allow students to probe more deeply into each, thereby making each course a deeper and more rewarding intellectual experience. Each course can be assigned a value of 5 "units" if needed for transfer, graduate school, or other external purposes.

The Curriculum Criticisms of the conventional curriculum are widespread and detailed. The academic disciplines, usually assumed to be the building blocks of the curriculum, are simply unable to contain all the accumulating knowledge. Too often they serve as Procrustean beds into which knowledge is thrust so that its dangling limbs which could make contact with other areas are lopped off; when this happens the disciplines fragment and compartmentalize the student's view rather than expanding and liberating it.

The classic liberal arts goal of broadening a student's mind by offering him significant introductions into diverse intellectual areas has been compromised frequently by substituting bland and superficial surveys of disintegrated disciplines, surveys which may serve the disciplines more than they serve the students. Under the pressure of faculty specialists more and narrower courses have been proliferated, courses which are perhaps more relevant to the research interests of the professor than they are to the educational needs of the student. The decision to allow students to chart their own educational course through this rapidly growing academic jungle under the elective principle has made a mockery of the intention behind a liberal education.

The Raymond response to these challenges has been to devise a modern general education program which rivals in design those earlier models at Chicago, Columbia, and Harvard. Raymond is one of the very few colleges in the United States to be totally dedicated to general education.

Though the curriculum emphasizes the traditional divisions of the

humanities, the social sciences, and the natural sciences, and though it contains such prosaic disciplinary course titles as Chemistry, Philosophy, and Economics, it is unique in the following ways.

1. The curriculum is composed of two sections. The largest section is the "core curriculum," a group of twenty three courses which must be completed by every student. This core curriculum, undoubtedly the smallest number of courses offered by any college in the country, has eliminated the frills and retained only the traditional academic disciplines. This core prescribes for every student a balance among the conventional divisions of knowledge, natural science, social science, and humanities. The core courses are these:

- Written and Oral English - (Primarily writing instruction, taken in the first term of the first year)
- Introduction to the Modern World - (A unique offering, usually team-taught, inter-disciplinary, and focused on some themes of the contemporary world, taken in the first term of the first year)
- Language - (French, German, and Spanish are offered, three terms, first year)
- Readings in World Civilization - (A history of Western civilization, two terms, taken in the first or second year)
- Readings in World Literature - (Largely European and American literature, two terms, taken in the first or second year)
- Mathematics - (Through calculus, two terms, taken in the first year)
- Physics
- Chemistry
- Biology
- Readings in Non-Western Civilization
- United States History
- Political Science
- American Civilization
- Philosophy
- Religion
- Fine Arts
- Economics
- Sociology
- Psychology

The formulation of this core curriculum is not based on any "every educated man must have knowledge of this area" philosophy. Nor is the rationale to present to the student an overview of all the knowledge of each discipline or to present even all of the useful disciplines; the knowledge expansion has converted these arguments

into mere cliches. The rationale is simply to expand the mental horizons of the student by introducing him to some -- not all -- major issues, facts, theories, values, views, methods and assumptions which have emerged within the context of several relevant academic disciplines.

At a time when course offerings in most schools are growing in a desperate attempt to keep pace with the new knowledge, Raymond has cut the curriculum to the bare minimum; at a time when the elective principle reigns supreme and when most current innovations give students more freedom to choose what they want to study, Raymond has opted for a heavily prescribed curriculum.

The core curriculum is unique in a second way. Though the core is composed of what appears to be a series of introductions to academic disciplines, it would be misleading to assume that these are mere surveys. Most introductory courses attempt to achieve two often mutually contradictory purposes; they try to provide a general introduction to satisfy the breadth requirements of those who will not pursue advanced work in that discipline (usually the majority), and they try to lay the foundations for any student who wants to take any further upper level work in that discipline. These competing purposes are usually resolved by providing a survey of most sub-divisions of the discipline; since time is limited, superficiality is often the result. At Raymond no "majors" or "minors" are required; each course is thereby freed from its disciplinary straight jacket. In such a situation there is no need to make the introductory first course a preparation for advanced study; the entire effort of the teacher can be directed toward the non-major student; and there is no need to attempt a futile survey of an entire discipline. In short, each teacher is free to serve the intellectual needs of his students rather than the supposed demands of his discipline.

Even though each course is removed from the limiting context of the "major," it is still possible that faculty might teach the familiar broad and superficial

survey, and it is possible that a three-year diet of such surveys might produce dilettantes rather than well educated young men and women. But there are some institutional safeguards against this happening. While the structure of the curriculum is disciplinary, the Raymond ethos and image are interdisciplinary. The rhetoric emphasizes that intellectual interests cannot be confined within disciplinary boundaries, that all areas of each discipline need not be "covered" in each course, and that faculty and students should attempt to relate the knowledge gained in one course to that of other courses. In the Raymond philosophy each course, like the school itself, should attempt only a few things but should do them well; thus most courses feature a block and gap method and often utilize a theme approach. In abandoning the supposed obligation of the teacher to "cover" all areas of his discipline in the introductory course, the courses are transformed from a bland survey to a depth study of a few representative major issues. By cutting through the disciplinary categories, the general education found at Raymond is far from the low level or superficial one often suggested by that term; students can gain intellectual depth within each course, and they can pursue their same interests from the different vantage points of several related courses. Students can gain intellectual depth in ways other than by taking a disciplinary "major." This is why when the introductory surveys have been criticized widely Raymond dares to build an entire required curriculum around "introductory" courses, and why it can believe such an approach will provide both intellectual breadth and depth.

Two other structural innovations further the attempt to build intellectual depth into each course. Since the student enrolls in only three courses at once and studies only those three areas during uninterrupted terms, he may be more likely to think in the terms of each discipline as filtered through the professor, to play-act various intellectual roles, thus, fixing the logic and language of his

study into his very thought processes. Also, the fact that a core curriculum exists in such a small school assures that approximately a third of the student body at any given time is involved in similar study, and this concentration is likely to stimulate dialogue outside of class and create a community of scholars. The predominantly seminar method of instruction and the deliberately created "living and learning" climate which will be mentioned later tend further to protect the core courses from degenerating into conventional surveys of the disciplines.

It should not be supposed that because most courses are prescribed, students have no academic choice or that a core curriculum in a small school precludes intellectual diversity. In the Raymond philosophy courses are sufficiently open-ended that students may pursue their own unique intellectual interests. Thus, while the choice of courses is removed from the student, he is given freedom to think about the issues, ample opportunity in the seminar situation to develop and defend his own personal stance, and considerable latitude to follow his own special interests within most courses. Additional intellectual diversity results from the rather frequent changing of course content, the multiplicity of faculty philosophies, and the different course pattern adopted by different students, all of which allows each student to develop intellectual in a unique way. But perhaps the greatest spur to diversity is the second half of the curriculum, independent study.

2. The second segment of the Raymond curriculum is called specialization. In addition to taking the entire core, each student must take four specialization courses. This provision is intended to give students the opportunity to develop additional strength and depth in some area (s) of their intellectual interests. Specialization does not mean developing a traditional academic disciplinary "major"; cross disciplinary and integrative study is encouraged. If a student

feels that he desires a "major" for graduate school or other purposes, he can take all of his specialization in the same discipline thereby earning 20 "units," which combined with his core course or courses would normally give him 25 - 30 "units," enough for a "major" at most schools.

Specialization study may take many forms. The most common form is tutorial or independent study with an individual faculty member, the content of which can be any intellectually defensible and mutually agreeable topic. A student may participate in special seminars offered on an irregular basis by the faculty. These courses often are interdisciplinary and may involve two or more teachers; a comparative literature seminar offered by two language and one literature teachers, a seminar on American national character taught by an American civilization and a psychology professor, and a course on the impact of science and technology on contemporary society conducted by a chemist are examples of these irregular offerings. Or, he may enroll in a regular academic course elsewhere within the University of the Pacific. This program of independent study differs in two ways from most which are in operation throughout the country. First, it is an established segment of the curriculum (four of 27 courses) and not a mere appendage to the rest of the program. Second, it is an integral part of the curriculum for all students, not just the ones who have "proven themselves" by excelling in the more faculty structured courses.

A final word should be said about the nature of the instructional process. Raymond assumes that when given the opportunity students will participate actively in their own education by engaging in substantial dialogue with their peers and professors over relevant intellectual matters. It is felt that only by such student involvement can the ideals of a liberal education be realized. To this end the curriculum is structured so that each of the core or special seminar courses are small, generally 12 - 15 with more smaller rather than larger.

Thus, the entire curriculum is oriented to seminars, tutorials, and independent study; class and individual discussions are the basic instructional device; regular lectures are the exception rather than the rule. The entire curriculum is purposefully designed to encourage serious discussion about major issues in several areas of knowledge by interested people, discussion which should excite the minds of students and stimulate their growth toward intellectual and personal maturity.

Evaluation The evaluation in use at most educational institutions are, like the unit system and curriculum, based on an archaic philosophy of education. It ultimately rests on the assumption that the expert teacher can reliably measure the relative amount of knowledge which was acquired by a student simply by observing his performance in specially contrived testing sessions. The student's performance relative to some absolute standard or to the achievement of his peers can, it is further assumed, be summed up and expressed in a letter grade. By combining the amount of time spent in the presence of the teacher each week (unit value) with his relative performance on the tests (achievement value), a student can discover the educational value of any course. By averaging this quantity obtained from all of his courses, a student can calculate his grade point average. It is that number which is assumed to summarize the amount of learning he has received during the whole of his college career. That such a confused and questionable set of assumptions and calculations has been so widely adopted by almost every college in the United States and perpetuated through the 1960's is strange indeed.

Though the rationale behind this conventional grading system is entirely out of touch with what is known about human learning and educational psychology, it is especially harmful in two ways. The tests from which student achievement is inferred may be unrelated to the thinking processes of the

student or to the growth he experienced from the course. When students realize their grade is crucial to their future life chances but otherwise irrelevant, they may become cynical and competitive and regard the entire academic process as a game to be played. In this way the grading system not only defeats its own purposes of accurately measuring a student's knowledge, but actually subverts the very ends of the educational enterprise. Also, the cryptic letter grade, no matter how naively precise, simply fails to provide a meaningful report of a student's actual learning in a course or a career.

Raymond has tried to re-evaluate evaluation procedures and to devise a system which aids rather than hinders the process of educating young men and women. Because of the seminar arrangement students have an opportunity to engage in dialogue throughout the term. There is little need in most courses to contrive artificial testing situations in which students "perform"; they are in effect tested daily in a number of different "real life" intellectual activities, and they may receive continuous and instant feedback from the teacher. Because of the close contact between teacher and student, the formal assignments are more likely to be geared to the needs of the students, and students are better able to understand -- even challenge -- the teacher's rationale behind such assignments. These conditions provide checks on both groups -- teachers and students -- and improve the chances that evaluation procedures are closely related to what is meaningful to the students.

Further, the letter grading system has been abandoned; a student's performance in a course is either "Satisfactory" or "Unsatisfactory." To supplement these simple designations, each student receives a "term letter" from each of his teachers at the conclusion of each term. This letter might range in length from a single sentence to several pages, and it contains comments concerning the teacher's evaluation of the student's total performance in his

course. It is thought that a term letter provides more relevant feedback to the student than a letter grade; this device usually outlines a student's strengths and weaknesses in a course as well as points the way to his future growth.

Since the classes are designed to be much more free of conventional evaluation procedures, it was thought that there should be an occasional testing period to provide a check on students who might misuse their freedom. Accordingly, all students at the end of their freshman year are required to take a set of comprehensive examinations, the passing of which is a precondition to returning for the intermediate year.

Living and Learning Climate Too often there is a sharp dichotomy between the academic functions and the social functions of the college campus. Classes meet in academic buildings and frequently proceed without reference to the personal-social lives of students which are spent in the faculty-less dormitories or fraternities. Where the academic matters are separated from the rest of student life, young people cannot be personally transformed by a liberal arts education; where faculty have no more contact with students than their formally structured class meetings, they cannot be expected to have much impact on their lives.

At Raymond there has been a deliberate attempt to expand the classroom to the entire campus and to bring the campus into the classroom. Several decisions have been made with this goal in mind. First, the school is entirely residential. While the university has several fraternities and sororities, no Raymond students may join; all must live in the Raymond dormitories. All facilities including four dormitories, the Provost's Lodge (the administrative center), the Common Room (an informal student gathering place), and the dining hall are located in a compact corner of the university. This arrangement drives home to the student the various connections between all aspects of his

life on the campus and makes for a more integrated educational experience . There have been no separate classroom or faculty office buildings which would serve to emphasize the division of function; rather classrooms and faculty offices have been located in student dormitories.

Student-faculty contact is further enhanced by providing teachers with five free meals per week in the student dining hall, thereby encouraging them to eat lunch with students and additionally accenting the intimate connections between living and learning. In addition, there is an all-college night once a week at which time there is a formal dinner, and approximately every two weeks a speaker or cultural performer, usually of national stature, provides an evening program. Finally, in such an environment there will be many informal social contacts between faculty and students. In all of these ways the intellectual life and the academic life is intimately connected with the personal and social lives of students in an attempt to engage them in the learning process.

Faculty Just as the curriculum in most colleges is constructed from the basic unit of the discipline, so are faculty organized according to a departmental structure. Separated as they are from their colleagues and students in other fields and from administrators by these high rise departments, faculty may tend to lose perspective of the whole educational endeavor. Because they are rewarded by the quantity and quality of research they perform, as judged by the similar specialists in their guild, they often turn from their teaching duties, especially of low level general education courses, and serve their personal interests better by concentrating their professional attention on graduate or upper divisional teaching and research. Rather than form an allegiance to the institution, they often adopt a primary loyalty to their guild. In all of these ways the faculty may sabotage the liberal education of their

undergraduate students.

Raymond has attempted to enhance the impact of faculty by inventing new structures and by appealing to different satisfactions. The departmental structure is abandoned, since there is usually only one teacher responsible for each disciplinary course, since there are no academic "majors," and since the faculty is small enough that it can conduct most of its business by meeting as a committee of the whole. These procedures allow -- indeed, force -- faculty to interact closely with subject matter specialists they would otherwise seldom meet. Hopefully such interaction fosters a humility in each concerning the relative value of his competence, a respect for the knowledge contained in other disciplines. And perhaps it might free the faculty from slavish conformity to their disciplines and free the way for them to develop a primary allegiance to the college and the education of its students.

Further, the faculty was granted freedom to participate actively and democratically in the crucial policy decisions which determined the stance of the college. It was hoped that this wide ranging responsibility for the total life of the new college would be taken seriously by the faculty and that they might become more sensitive to the complex issues involved in forging and managing a new school. By enlisting their help in thinking through the administrative issues, faculty would hopefully become more sympathetic to the plight of their two administrators, the Provost and the Dean of Student Life, and the administrators would hopefully not forget the matters of importance to the teaching faculty.

Raymond has attempted to remedy the practice of rewarding classroom professors with salary increases, promotions, and tenure on the basis of criteria extraneous (though perhaps not unrelated) to teaching. While it has in no way solved the ever present riddle of exactly how to evaluate good teaching,

the compactness and intimacy of the environment makes it possible to detect a professor's contribution to the community and to reward him accordingly.

Other experimental programs have failed because of their weak financial base; the faculty in effect subsidized the college by toiling for low salaries. Although the University of the Pacific had been moderately low on the American Association of University Professors pay scale, Raymond faculty are paid somewhat more than their colleagues in the university by virtue of the fact that the three-term academic year requires them to work at least five weeks longer. It was hoped that this adequate but modest salary combined with the psychic rewards available from teaching in this novel and stimulating college would be sufficient inducement to attract and retain a competent faculty of teacher-scholars who will thrive in this environment.

In addition to these structural features and their philosophical bases, a word should be said about the general characteristics of the faculty actually employed. Most are young (the oldest was 44 when hired), male, and holders of the doctorate. Over half either have received substantial graduate training in more than one discipline or have worked in rare interdepartmental graduate programs. Since many came to Raymond soon after graduate school, their prior teaching experience had been limited or non-existent. Surprisingly and in contrast to many teaching oriented schools, almost all the Raymond faculty are actively engaged in creative scholarly research. It is interesting to note that most of this research bears the stamp of the Raymond environment, for it has a distinct interdisciplinary quality. The study of existentialist literature, German socialism, marine ecology, the relationship between relativity theory and the metaphysics of Whitehead, a sociological study of William Jennings Bryan and the Populist movement, and an ironic interpretation of history are examples of some varieties of the current research being

conducted which have an interdisciplinary thrust.

In all of these ways Raymond College has attempted to attack the problem of an academic lag in the philosophy and structure of undergraduate liberal arts education. There is no a priori evidence that these innovations either singly or in combination will in fact provide any better education than the conventional practices. But in the context of mounting evidence that conventional programs so frequently fail to achieve their purposes, it seems not only defensible but prudent to experiment with contemporary alternatives such as these.

The radically innovative Raymond program stands in contrast to the more conventional practices of the older and more established division of the university. The liberal arts college, the professional schools of education, engineering, music, and pharmacy and the graduate school all follow two 16-week semesters and utilize the unit system. While each school sets some of its own degree requirements, all students receiving a baccalaureate degree must complete a minimum of 124 units. Normally a student takes 15-17 units, or four to six different courses, per semester.

The curriculum is organized according to academic disciplines, and there are a few curricular requirements for all students at COP. Regardless of which school in which they are enrolled, all must complete six units of freshman composition, three units of speech, six units of Western civilization, four units of religion, and two units of physical education.

In addition to these general requirements, the liberal arts college, requires several other courses for students who wish to earn a Bachelor of Arts degree. They must complete either a six unit mathematics sequence if a non-science major or a 10 unit sequence if a science major, or achieve a second years level of competency in one of several languages, including French, Spanish,

German, Latin, or Greek; and they must take a course in personal hygiene. Students are required to complete an academic major by completing 24 units in some one department or an interdepartmental major by compiling 40-60 units in two or more departments. Finally they are required : a) to take six units in the humanities in two of the following three areas: 1) music or art, 2) literature, and 3) philosophy or religion; b) to take six units in social science in two of these areas: 1) economics or business administration, 2) history or political science, 3) psychology, 4) sociology or home and family living, 5) geography; and c) to take eight units in a natural science , including biological sciences, chemistry, physical geography, geology, and physics.

Evaluation at COP is by means of the familiar letter grading system. To qualify for graduation a student must accumulate a grade point average of at least 2.00 (C).

Predominantly a residential school, COP requires all undergraduate women and all underclass men to live on campus unless living at home or with close relatives. Approximately 2/3 of the students live in dormitories, while the remainder live in five social fraternities and five sororities. Numerous extracurricular activities are available to the students including a non-required weekly religious chapel, various religious organizations, a campus YMCA-YWCA, student government, several inter-collegiate athletics, intramural sports for both men and women, dramatics, forensics, a campus radio station, musical groups including an orchestra, band, and choir, a campus newspaper, honor societies, student professional associations, and special interest clubs. Despite its rapid growth, the school is still sufficiently small that most students know a significant proportion of the student body. The students and the faculty combine to create a friendly small

campus atmosphere.

Because COP is so much in step with the most widespread practices in higher education and because Raymond is so out of step with that same beat, these two segments of the same university provide an excellent setting for a natural experiment. A scientific study of the consequences of these two alternate programs promises to add to the accumulating knowledge of the process by which young adults acquire a liberal education.

Certainly, a college merely because it is preceded by a new word "character," is not necessarily any better or worse than any other college. Both may be effective or ineffective, and each must be evaluated according to its own merits. A three-term, three-year calendar may have as many drawbacks as the other calendars; the core curriculum may be experienced as too rigidly by the students; the core curriculum may be too rigidly prescribed, as disciplinary and sterile as even the most rigorous liberal education. It may be that the chief advantage of a liberal education is not the acquisition of a body of knowledge, but the development of a habit of mind, a habit of mind that is not content with a body of knowledge, but that is content with a habit of mind. It may be that the chief advantage of a liberal education is not the acquisition of a body of knowledge, but the development of a habit of mind, a habit of mind that is not content with a body of knowledge, but that is content with a habit of mind. It may be that the chief advantage of a liberal education is not the acquisition of a body of knowledge, but the development of a habit of mind, a habit of mind that is not content with a body of knowledge, but that is content with a habit of mind.

III. AN EVALUATION OF THE RAYMOND PROGRAM

The Raymond program, no matter how creatively conceived, no matter how well designed, no matter how energetically enacted, and no matter how glowingly portrayed, must at some point be put to rigorous empirical test. Its promises as described in Chapter II, must be compared with its products, and both must be compared with other colleges.

Certainly, a college merely because it is preceded by a new word, "cluster," is not necessarily any better or worse than any other college; both may be effective or ineffective, and each must be evaluated according to its own merits. A three-term, three-year calendar may have as many drawbacks as the other calendars; the core curriculum may be experienced as too confining by the students; the core courses may be as bland and superficial, as disciplinary and sterile as even the most useless introductory survey; specialization may degenerate into disciplinism, or it may offer more freedom for independent study than students can profitably use; seminars can be merely another setting for faculty to lecture, albeit to a smaller group of listeners, or they may degenerate into rambling "bull sessions" devoid of intellectual content; without the constant threat of grades, students who have been raised on the grading system for 12 years may lack the motivation to discipline their study; the close student-faculty relationship may undermine the students' respect for the experience and knowledge of the professors; the "living and learning" balance might be tipped either way resulting in "living without learning" or "learning without living." In short, Raymond College conceivably could be just as disastrous a failure as it could be a magnificent success. There is no a priori basis on which such an undertaking can be evaluated. Knowledge of the consequences of these practices, not

knowledge of the purposes or rationale behind them, must form the basis of that evaluation. To provide such an evaluation of the consequences of Raymond within the context of the University of the Pacific is the third and most fundamental purpose of this report.

Rationale and Method One of the insurmountable difficulties of studying the consequences of the innovations at a college like Raymond is that since it is a holistic creation, there is no way to isolate the effects of the separate practices from one another. One can only study the school as a whole, that is, study the consequences of the sum total of all the different features of this particular program as it is uniquely constituted rather than examine the effects of each feature independently of the rest.

The decision was made to conduct a comparative, statistical survey of students at Raymond and the other divisions of the University of the Pacific, employing questionnaires and a cross-sectional design as the primary evaluation of the school. Perhaps each of these separate methodological decisions should be explained more fully by considering the available alternatives. The following questions were asked:

- 1) Should the study involve only Raymond or should it include other schools?

While the definite focus was Raymond, it is difficult, if not impossible, to understand one institution by examining it alone; an institution is best understood by comparing it with others. Since Raymond is a cluster college, the most reasonable comparison would be with other parts of the same university. Not only would such a comparison determine whether the cluster college was significantly different from the other divisions, a condition necessary to justify its continued separate existence, but it contained the seeds of an intriguing natural experiment. Since Raymond admits students through the same central admissions office serving the entire university, there was the

likelihood that the students attracted to COP, especially to its liberal arts college, and to Raymond might be similar; if they were in fact similar, and if the two environments were in fact different, then any differences in student outcomes could be explained in terms of the differential impact of the two educational programs.

But it would be helpful for both Raymond and COP to be compared to a wider variety of colleges. Rather than to resort to a costly and time-consuming study of many different schools, the problem was resolved by adopting questionnaires which have multi-college normative data available. In this way it would be possible to obtain widely comparative data and still concentrate the study on the campus of the University of the Pacific.

2) Should the primary data come from students, faculty or administrators?

Ideally it would be desirable to obtain data about the institution from all of these sources, but the press of time and energy precluded such comprehensiveness. If a choice had to be made, it was thought that data from the students was of higher priority than the other groups. Much of what is known about colleges comes from public relations pamphlets or from the necessarily limited ideologies of faculty and administrators. While these sources are valuable, they must be supplemented with the views of students, the people for whom the entire system exists.

It can be argued that students may misperceive their environment, distort the intentions of teachers and administrators, and undervalue immediately unpleasant demands which may bring beneficial long-term results. These possibilities must be granted. But no reasonable person would claim that professors or administrators are immune from the same errors. Furthermore, what students believe to be the case is usually more important in influencing their behavior than what others believe or what is "objectively" true. This

study will be concerned with obtaining the students' views, right or wrong, about their educational experience, for their views are by definition true for them and fundamental to anyone interested in understanding higher education.

3) Should the method of gathering evidence concerning the students be that of a participant-observer assuming the stance of an anthropological field worker (as was done in the description of the Raymond program), or should it be a student survey which would provide evidence directly from the undergraduates themselves and yield data more easily treated statistically. The anthropological method has the virtue of allowing the investigator to probe deeply any area he desires, and such a method may yield insightful configurations of variables. Because the author has lived for three years in the Raymond culture, has participated actively in the life of the college, and has had close contact with a number of students, he has in effect obtained valuable information by the anthropological method. Thus, at times in this monograph he will draw from this experience and speak as an anthropologist.

But the method of participant-observation has two major limitations. Because of the selectivity of his informants, the anthropologist is in a poor position to talk about the distributions of traits he may discover in a population. If one is interested in the distribution of characteristics, he must employ a more representative sample and use a more statistically oriented methodology. Second, the method of participant-observation is susceptible to distortion by the biases, values, and beliefs of the investigator.

Because the author is interested not only in the configurations of traits but also in their distribution among students, and because his association with Raymond may have given him not only a deeper appreciation of that culture but also some of the cultural biases, it was felt that the primary evaluation

should utilize a statistically grounded student survey. Of course numbers and statistics never stand alone -- they must be interpreted. The interpretations contained herein are made on the basis of the author's formal training in social psychology, his knowledge of higher education, and his experience with the Raymond experiment, and his contact with the entire university. If prejudices still seep through in the interpretation, they will at least be checked by the student reported facts. Further, enough of the raw data will be included so that readers may make interpretations on the basis of their training and experience.

4) Should the study design be longitudinal or cross-sectional?

Perhaps the ultimate design would be a longitudinal study of the same students as they progress through the entire program, testing students before and after, as well as periodically throughout their college years. The advantages of such a design are obvious, but the difficulties are that it would be at least one full college generation before the results of this extraordinarily expensive and time-consuming study would be known. By then the school and character of the entering students perhaps will have changed enough to make some of the conclusions of limited practical value, although to be sure, the intellectual value would still remain.

The cross-sectional method involving a representative sample of all classes and segments of the school at any given point in time can provide relatively quickly, efficiently, and inexpensively a description of the environment and students. Because it has these practical advantages, the cross-sectional design was chosen.

5) Should the study rely on student reports of their own experiences or on their perceptions of the experiences of others? Presumably both sets of factors, extracted as they are from the same persons, would be positively

related, but either could serve as a valid focus. The decision was made to take advantage of a set of theoretically grounded questionnaires which measure both personalities of students and their perceptions of their educational environment.

6) What specific measuring devices should be employed?

Observation of student behavior, depth interviews, and an examination of materials in students' files could give valuable insights, but by their very nature such findings would be difficult to manipulate statistically, impossible to make reliable inter-school comparisons, and possibly contaminated by observer bias, to say nothing of being expensive and time consuming. On the other hand, questionnaires (which are in effect highly structure interviews) do lend themselves to numerical treatment, comparisons between groups, and prejudice control; also they are more easily and simply administered.

Just because questionnaires are so tightly structured, there is a possibility that by imposing a priori categories upon students' experiences, individuals may distort their self-reports by forcing them into the inappropriate molds of the questions. One way to minimize this problem is to ask many different questions from which answers one may more fully sense the full meaning of the responses.

Descriptions of the Instruments The major instruments used in the statistical portion of this research are the following questionnaires: the College Characteristics Index (CCI) developed by George G. Stern and C. Robert Pace, College and University Environment Scales (CUES) devised by Pace, the Activities Index (AI) constructed by Stern, and the Gaff Questionnaire (GQ) designed by the author. Since each of the first three have been discussed in detail elsewhere (Stern, 1963a; 1963b; Pace, 1963), they will be described only briefly here.

The CCI contains 300 items which describe activities, policies, procedures, and attitudes which might be found in various undergraduate colleges, and each student is asked to report whether the statement is a true or false description of his school. The items are ordered so that they can provide an index of 30 different types of environmental pressures which impinge on the respondent, such as demands for order, achievement, and affiliation; each of the 30 scales is measured by 10 different items.

CUES is composed of 150 of the same items as on the CCI, but it has a different psychometric structure. CUES is constructed so that 30 different items provide a measure of five dimensions of a college; practicality, community, awareness, propriety, and scholarship. Its different statistical structure and normative sample allows it to provide additional information even though the items are identical to some on the CCI.

Whereas the first two instruments ask a student to report his perceptions of characteristics in his educational environment, the AI is a personality test which asks him to report his personal preferences; the first two provide information about the environment of a student, while the AI provides data concerning his individual needs. The AI contains 300 items referring to activities which a person might perform, such as "engaging in mental activity;" the student is asked to say whether he likes or dislikes each activity. The construction of the AI parallels that of the CCI in that the same 30 scales are measured by 10 items each. By using these two tests in combination, one can discover both how a student perceives the demand structure of his college and what he reports to be his own need structure.

In addition to these three widely used instruments, a fourth one constructed by the author was used. The GQ is an omnibus 286-item questionnaire designed to measure some variables not covered by the other

three, variables which may be of considerable import to the educational process. Specifically it provides a basic classification of a student in terms of class, sex, and academic specialization, and measures some of his family characteristics, high school activities, college academic and extra-curricular activities, educational philosophy, major sources of life satisfactions, future career and educational plans, openness to classroom communication, perceived characteristics of teachers in different academic disciplines, educational goals and degree of attainment, attitudes, and sources of anxiety.

The Samples Data were obtained from three separate samples of students. First, questionnaires were distributed to the entire population of Raymond College on Wednesday, May 11, 1966, and 139 or 91% returned completed questionnaires by the end of that week.

Second, it was hoped that a large and representative sample of all full-time undergraduates enrolled at UOP, excluding cluster colleges, could be obtained. A random sample of 264 students was selected by choosing every seventh name in a student directory. Since some had withdrawn after the directory was prepared and since some had changed campus residences, a number of students (about 20) could not be contacted. A mimeographed letter was sent to each person describing the nature and purpose of the study and asking him to meet at one of the college dining halls on Monday, May 9, 1966, a week hence; forty students attended and eventually completed questionnaires.

Subsequent attempts to obtain cooperation from the remainder of the original sample produced 50 more sets of completed questionnaires. Finally, seven additional students, not a part of the original 264 and all upperclassmen, were recruited from the first summer session, giving the non-cluster sample a total of 97. Since 90 of this number represents a return rate of only 34% from

representative of that?

the original sample and since the seven students from summer school were added to the earlier number, this group must not be regarded as a random sample of all the students in the non-cluster population. These 97 will be labeled hereafter in this report the College of the Pacific (COP) sample.

not random in and questionnaire to report compared to Raymond sample

It was originally thought that while the total COP sample would provide an interesting comparison with Raymond, the liberal arts college in particular would be the best possible comparison in this natural experiment. However, a tabulation of the responses from the total COP sample and from only that portion (70%) enrolled in the liberal arts school was made for all items on the GQ, and there was virtually no difference on any item. Because the liberal arts students make up the majority of the COP sample and because the data fail to show any significant difference between that part and the whole, only the data for the whole of COP will be presented. Apparently the COP liberal arts college would not be an appreciably better comparison for Raymond than the whole of COP.

questionnaire is a survey in part of the data is not much different + several items

A third population was later studied, the freshmen students who entered Raymond during the fall of 1966. Questionnaires were distributed to a random sample of 52 of the 92 entering freshmen during a class on Thursday, September 8, 1966, the first week of school. Forty-two or 81% returned the completed questionnaires within the next four days. Although not a true "before" measure was obtained -- the freshmen had experienced an orientation session and had spent nearly a week on campus -- their responses do provide a measure of students very early in their Raymond career.

Data concerning the representativeness and the comparability of the samples will be found in Tables 1-5. The Raymond sample, consisting of nearly the entire population, is evidently representative of the college. Unfortunately the 97 students in the COP sample are neither a large percentage

of the 1843 full-time undergraduates enrolled in the Spring of 1966 nor perhaps representative of the total COP group by virtue of a random selection. But a non-random sample does not necessarily mean that it is unrepresentative of the larger population. Further evidence is required for a definite answer to the question of representativeness. Data bearing on this issue and on the matter of the comparability of the samples will be found in Tables 1-5.

too vague. cannot be taken as basis.

In Table 1 it can be seen that the percentage of students in the COP sample closely approximates the percentage of students recently graduated from each school. (The registrar reports that the number enrolled in each school is not available.) If the percentage graduated is an accurate index of the number of students enrolled, then the sample appears to be representative of the differential enrollment within COP.

cannot be assumed w/o further evidence

Table 2 contains data concerning the proportion of the samples and of the actual enrollment in each class. It can be seen that the COP sample again closely approximates its population as does the Raymond sample. Although Raymond is not directly comparable to the COP sample because it has only three classes, it appears to have more freshmen and fewer seniors.

The COP sample appears to be drawn somewhat disproportionately from women than from men as can be seen in Table 3. However, it is not different from the Raymond sample in any statistically significant fashion. Again the Raymond sample is similar to its enrollment in terms of sex ratio.

and does not accurately reflect ratio of COP

Students were asked to give their general area of academic specialization, and the percentage of each sample in each area is found in Table 4. There is no way to know what proportion of the populations from which these samples were drawn actually specialize in each area, but it is possible to compare the samples with one another. Significantly more of the Raymond sample specialize in Humanities and fewer in Professional Training than is the case for the COP sample.

A final comparison between the samples will be in terms of academic rank in class as estimated by the students themselves. Since the students are never provided with this information, their answers must be quite impressionistic, but nonetheless relevant. In Table 5 it can be seen that students in all three groups rank themselves in about the same distributions.

How can a P. student make such an evaluation if not given an answer can make it

There were no significant differences between the Raymond and COP groups.

To summarize these data concerning the samples, it appears that the COP sample, while non-random, may be representative of full-time undergraduates enrolled in its various schools and of those enrolled in the several classes. It is somewhat heavily weighted with women. Though the evidence is not uniform, the COP sample does appear to be relatively representative of the students in its population on these dimensions. The Raymond sample does represent its entire student body.

this is sound reasoning and is supported by evidence

Regarding the question of the comparability of samples, the Raymond sample and the COP sample do not differ in a statistically significant way in terms of the sex ratio or reported academic rank. Concerning academic specialization, more of the Raymond group prefer Humanities and fewer Professional Training. While not amenable to statistical testing, there appear to be more freshmen and fewer seniors in the Raymond sample than in the COP one. On these several dimensions the Raymond sample appears to be only partially similar to the COP sample.

Results The results will be discussed separately for each questionnaire and for each section of the university. After a preliminary analysis of general student characteristics drawn from the Gaff Questionnaire, the data from the College Characteristics Index, College and University Environment Scales, Activities Index, and additional information from the Gaff Questionnaire will

be presented in that order.

1. General Student Characteristics As might be expected at a private university with high tuition in a state renowned for its widely available and high quality public higher educational institutions, most students are from families of relatively high socio-economic status. The Gaff Questionnaire contains measures of parental occupation, education, and income, three variables frequently used to measure social class. Seventy-seven percent of the Raymond sample, and eighty-eight percent of the COP group reported their father to be either a professional, a high level executive, an owner, manager, or partner in a small business, or a governmental official. Fifty-two percent of the Raymond students and fifty-nine percent of the COP students indicated their fathers had completed college, while the comparable percentage of college graduates among the mothers were forty percent and forty-seven percent. There were no statistically significant differences between the Raymond and COP samples on these occupation and education variables. Both groups reported fairly high family incomes, but the COP group is significantly higher than Raymond, as can be seen in Table 6. Thus, most students at this university are from relatively high status families and with the exception that Raymond students have somewhat less affluent parents, they are not significantly different on social class measures than students in the COP sample.

An attempt was made to obtain some indication of the level of cultural and intellectual sophistication in the homes which the students were reared. One crude but objective measure of these variables would be the number of magazines found in the home. In response to the question, "How many magazines do your parents regularly buy or subscribe to?" 85% of the Raymond and 89% of the COP samples answered three or more. A more

subjective measure was a question pertaining to the degree of parental interest in "artistic, dramatic, musical or other cultural events." Reporting that their parents were either "interested" or "very interested" were 70% of the Raymond students and 75% of the COP students. On the question concerning intellectual sophistication of their parents, 54% of the Raymond and 65% of the COP samples said their parents were either "very" or "fairly" sophisticated in intellectual matters. On each of these measures there were no statistically significant differences between Raymond and COP. These sketchy data indicate that the general cultural and intellectual level of the families of students in the Raymond and COP samples are similar.

The data only show similarity in student appreciation of these levels

A third background factor studied was the students' high school experiences. Most students in both samples describe themselves as "fairly active" or "very active" in high school extracurricular activities, 75% of the Raymond, and 84% of the COP groups choosing those words to characterize themselves. While about a quarter of each sample held no elective office, 61% of the Raymond and 57% of the COP students reported that they held two or more. Further, 59% of the Raymond and 48% of the COP samples said that they either "fairly" or "very" frequently attended "artistic, dramatic, musical, or other cultural events" while they were in high school. On all of these questions there was no significant difference between Raymond and COP.

However, high school intellectual differences do show up between groups. An inspection of Table 7 shows that a larger proportion of Raymond students graduated in the top 10% of their high school class than did the COP sample. In addition, it appears that the Raymond students had higher College Entrance Examination Board aptitude test scores. A check of the records reveals that the first three classes had average Verbal Aptitude scores of 585, 581, and 590, and average Mathematics Aptitude scores of 564, 547, and 589. Similar data are

unavailable for the COP students. But the samples were asked to report their results. While these reports may be somewhat unreliable because they were made from memory, they do show a significant difference which tends to confirm this relative pre-college intellectual superiority of the Raymond students over those from COP.

*Again, no
cluster con-
clusion is
justified for
lack of reliable
data*

In reviewing the socio-economic level, the family background and the high school experiences of students, it appears that the students at Raymond College and the College of the Pacific (including the professional schools) are more alike than different. The Raymond sample is very much like the students in the rest of the university, suggesting that it, like the other schools of the university, attracts students from a similar socio-cultural pool. Most students appear to have been well-rounded high school students who came from well educated and culturally aware families of a relatively high socio-economic stratum. That the Raymond students are admitted through the all-university admissions office perhaps helps to account for their relative similarity to those from COP. These data suggest that the creation of a cluster college, even a radically innovative one, does not automatically create a new market for its services, as might, for example, a new independent college established in a different geographical area.

*this is
given*

Though there is much similarity between students at COP and Raymond, there is one notable difference. The Raymond sample had higher intellectual aptitude and achievement prior to their entrance than their COP counterparts. This suggests that there is an important filtering process through which students who come to the university must pass. A somewhat larger proportion of the brighter entrants apparently gravitate to Raymond. Whether this selection is made by the students on hearing of the opportunities at Raymond or by the admissions staff cannot be answered by these data. But since a number of

*see
above*

personality attributes have been associated with intellectuality, the data suggest there is a differential sorting of students from the same social pool into Raymond and COP according to psychological criteria. Exactly how and on what basis this sorting occurs is unknown, perhaps even to the heavily burdened admission officers.

2. The College Characteristics Index (Raymond College Results)

One of the ways the CCI may be analyzed is to look at the percentage of students who agree or disagree that each of the three hundred items accurately describes their school. However, to analyze every one of the three hundred items would be a formidable task. Accordingly most item analyses include a consideration of only those items on which there is a considerable degree of agreement or disagreement among most students. In the Raymond sample there was a high degree of consensus in the students' perceptions of their environment; a fact which suggests that Raymond may be quite a homogeneous community. Ninety-four questions were answered in the same way by ninety per cent or more of the students, forty-three of which were answered with over ninety-five per cent agreement. To keep this part of the analysis down to manageable size, only those ninety-four questions on which there was almost unanimous agreement will be presented. In order to provide intellectual baskets in which to hold this many separate items, they will be grouped into three categories; first, faculty and administration characteristics, second, facilities and practices of the institution, and third, student characteristics. Following each item will be the percentage of Raymond students who believe that it is an accurate description of their school; and for comparative purposes, the percentage of the COP sample answering in the same way will be included.

Items pertaining to the faculty and administration include descriptions of both formal and informal practices, characteristics of teachers in and out of

class, and student-faculty relationship. These various items have been grouped by the author on the basis of a subjective inspection of the data into four different headings representing different student-perceived values of the institution. The first value could be described as free and open intellectual dialogue between all members of the community. The following specific items indicate this thrust.

	<u>Percent Agreeing</u>	
	Raymond	COP
The values most stressed here are open-mindedness and objectivity	90	34
There is a high degree of respect of non-conformity and intellectual freedom	96	23
The school has an excellent reputation for academic freedom	99	23
Students are encouraged to criticize administrative policies and teaching practices	97	29
A well-reasoned report can rate an A grade here even though its viewpoint is opposed to the professors	94	74
In class discussions, papers, and exams, the main emphasis is on breadth of understanding, perspective, and critical judgment	95	73
Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects	91	58
Most courses are a real intellectual challenge	91	24
Faculty members bring lots of energy and enthusiasm into their teaching	99	58
Most of the professors are dedicated scholars in their fields	96	75
Learning what is in the text book is enough to pass most courses	9	62
In many courses the broad social and historical setting of the material is not discussed	4	45

The second general value appears to be a casual, flexible and informal style of life. This quality can be inferred from the following items.

	<u>Percent Agreeing</u>	
	Raymond	COP
On nice days many classes meet outdoors on the lawn	92	26
Courses, examinations, and readings are frequently revised	96	61
In talking with students faculty members often refer to their colleagues by their first name	91	33
There are a good many colorful and controversial figures on the faculty	90	54
In many classes students have an assigned seat	1	55
Students almost always wait to be called on before speaking in class	8	66
Classes meet only at their regularly scheduled time and place	9	86
Everyone knows the snap courses to take and the tough ones to avoid	6	82
Frequent tests are given in most courses	8	59

A third quality is an emphasis upon independence and individualism which can be seen in the following items.

Students here are encouraged to be independent and individualistic	96	32
There is considerable interest in the analysis of value systems and the relativity of societies and ethics	95	43
Student organizations are closely supervised to guard against mistakes	4	46
Students must have a written excuse for absence from class	1	45
Students who are not properly groomed are likely to have this called to their attention	9	54
The school administration has little tolerance for student complaints and protests	4	62

	Percent Agreeing	
	Raymond	COP
The faculty tend to be suspicious of students' motives and often make the worst interpretations of even trivial incidents	6	18
Students don't argue with a professor; they just admit they are wrong	1	16

A fourth orientation is a personal and equalitarian concern of the faculty for their students.

The professors go out of their way to help you	92	64
The professors really talk <u>with</u> the students, not just <u>at</u> them	96	58
Most faculty members are liberal in interpreting regulations and treat violations with understanding and tolerance	93	75
Channels for expressing students' complaints are readily accessible	90	36
Most of the professors are not interested in students' personal problems	6	33
If a student wants help, he usually has to answer a lot of embarrassing questions	6	24
The professors seem to have little time for conversation with students	3	18
Students almost never see the professors except in class	1	28
Open display of emotion would embarrass most professors	7	56
Faculty members are impatient with students who interrupt their work	4	32
Faculty members and administrators see students only during scheduled office hours or by appointment	7	43
Students address faculty members as "professor" or "doctor"	7	82
Faculty members rarely or never call students by their first names	1	28

Two items which defy classification in the above categories are:

	<u>Percent Agreeing</u>	
	Raymond	COP
Students and faculty are proud of their tough mindedness and their resistance to pleaders for special causes	9	30
"Alma Mater" seems to be more important than "subject matter" at this school	2	35

This second group of items refers to facilities of Raymond which may shed light on its character. Few students agreed that:

The library is exceptionally well equipped with journals, periodicals, and books in the natural sciences	7	31
Laboratory facilities in the natural sciences are excellent	8	8

Students formed a strong consensus concerning these practices.

All undergraduates must live in university approved housing	98	65
There are definite times each week when dining is made a gracious social event	94	82
Many famous people are brought to the campus for lectures, concerts, student discussions, etc.	91	61
There are no fraternities or sororities	96	0
In many courses grade lists are publicly posted	0	35
Fire drills are held in student dormitories and residences	1	56
There is a lot of fanfare and pageantry in many of the college events	5	41
The college offers many really practical courses such as typing, report writing, etc.	2	12

By looking at a third grouping of items which resulted in 90% or more agreement, it is possible to infer major value orientations inherent in the Raymond student climate. The first major cluster of student values could be labeled anti-collegiate and are inferred from the following items.

	<u>Percent Agreeing</u>	
	Raymond	COP
Student pep rallies, parades, dances, carnivals, or demonstrations occur very rarely	91	38
Receptions, teas, or formal dances are seldom given here	95	21
Students really get excited at an athletic contest	9	65
It's important socially here to be in the right club or group	6	56
Initiations and class rivalries sometimes get a little rough	0	62
Students take a great deal of pride in their personal appearance	4	82
Students are expected to play bridge, golf, bowl together, etc. regardless of individuals' skill	1	20
There are lots of dances and parties, social activities	1	60
Many students drive sports cars	0	57
For a period of time freshmen have to take orders from upper classmen	1	35
Proper social forms and manners are important here	2	64
This college's reputation for marriages is as good as its reputation for education	5	38
The student leaders here have lots of special privileges	7	34

A second major quality in the student culture is an emphasis upon intellectuality.

A controversial speaker always stirs up a lot of student discussion	96	49
A lecture by an outstanding literary critic would be poorly attended	6	60
Few students are planning post-graduate work in the social sciences	8	45
Many students have special good luck charms and practices	5	17

	<u>Percent Agreeing</u>	
	Raymond	COP
There is very little studying here over the weekends	6	62
Students are more interested in specialization than in a general liberal education	1	50
Very few students here prefer to talk about poetry, philosophy, or mathematics as compared with motion pictures, politics, or inventions	9	77
Most students are interested in careers in business, engineering, management, and other practical affairs	5	60

A third aspect of the student culture is an interest in art and in aesthetic experience.

Student rooms are more likely to be decorated with pennants and pin ups than with paintings, carvings, mobiles, fabrics, etc.	8	67
Students are sometimes noisy and inattentive at concerts or lectures	8	38
To most students here art is something to be studied rather than felt	8	55

A fourth value complex could perhaps be labeled spontaneous expressive-ness, or in negative terms, opposition to rationalized and socialized control.

The way people feel around here is always pretty evident	92	58
Many informal student activities are unplanned and spontaneous	93	48
A lot of students here will do something even when they know they will be criticized for it	90	35
Students frequently do things on the spur of the moment	98	83
When students do not like an administrative decision, they really work to get it changed	90	34
Students commonly share their problems	94	86
There is a great deal of borrowing and sharing among the students	96	89

	<u>Percent Agreeing</u>	
	Raymond	COP
Activities in most student organizations are carefully and clearly planned	8	46
Dormitory raids, water fights, and other student pranks would be unthinkable here	3	1
Students who are concerned with developing their own personal and private system of values are likely to be regarded as odd	1	25
Religious worship here stresses service to God and obedience to His laws	4	58

A final cluster of items indicates that students are changeable, active and energetic.

Students here can be wildly happy one minute and hopelessly depressed the next	97	62
Few students here would work or play to the point of exhaustion	8	48
Students who work hard for high grades are likely to be regarded as odd	6	20

Although it is difficult to classify in any of the above categories; few students agreed that:

There are many foreign students on the campus	4	78
---	---	----

Since the 300 items were designed to measure 30 different variables, the CCI may be analyzed a second way by examining the scores of the 30 scales. The full definition of each scale may be found in Appendix A. An individual's score for any scale may be obtained by simply counting the number of the 10 items which are answered in the direction of the variable. Group scores may be calculated by averaging the individual scores. In order to facilitate comparisons with groups not directly studied here, normative data for each scale are available. In this presentation all the data will be reported in such a way as

¹
The colleges and universities constituting the normative group for the CCI and the AI are listed in Appendix B.

to afford a comparison with the entire normative distribution. The particular comparative device used will be the standard score which here, as with the AI, has a mean of 0 and a standard deviation of 2. Because many readers may be unfamiliar with this device, Table 8 contains the percentile equivalents of selected standard scores; by consulting this table, a person can translate any standard score into the more familiar percentile rank.

The scale data for the whole of the three samples are contained in Table 9. These data are ordered from the highest to the lowest standard scores for the Raymond sample so that one may immediately observe that school's most extreme and probably most typical features. In reading the scale scores it is important to note that on bi-polar scales such as Counteraction-Inferiority Avoidance, a positive score indicates a tendency toward the first pole, i.e., Counteraction; a negative score on a bi-polar variable indicates a tendency toward the second pole. The larger the number, the more uncommon the trait is in the normative group. Thus, the 5.42 score of the Raymond sample on the measure of Counteraction-Inferiority Avoidance indicates a very high degree of Counteraction, while the -5.11 on the Deference-Restiveness scale shows a minimum amount of Deference. An interpretation and discussion of these data will follow the presentation of additional data.

In addition to examining the data contained in the individual items and the theory-based scales, the CCI lends itself to a third kind of interpretation. The 30 scales were subjected to a principal components-equamax analysis by David Saunders (unpublished, undated report, cited in Stern, 1963a, p. 11), and eleven first order factors (groupings of scales whose scores vary together) were discovered. A refactoring of these first order factors yielded two second order factors (groupings of first order factors whose scores vary together). These two second order factors called the Intellectual Climate and

Raymond
Entering
Freshmen
N=62

Table 8. Conversion of Standard Scores with Mean of 0 and Standard Deviation of 2 into Percentiles

Standard Score	Percentile	Standard Score	Percentile
6.00	99+	- .50	40
5.50	99+	-1.00	31
5.00	99	-1.50	23
4.50	99	-2.00	16
4.00	98	-2.50	11
3.50	96	-3.00	7
3.00	93	-3.50	4
2.50	89	-4.00	2
2.00	84	-4.50	1
1.50	77	-5.00	1
1.00	69	-5.50	1-
..50	60	-6.00	1-
.00	50		

Table 9. College Characteristics Index Scale Standard Score Means According to the Raymond Data¹

Scale	Raymond N=139	COP N=96	Raymond Entering Freshmen N=42
15. Fantasied Achievement	5.42	-1.54**	4.58*
8. Counteraction- Inferiority Avoidance	5.32	-2.53**	6.20*
5. Aggression-Blame Avoidance	4.91	2.01**	.47**
12. Emotionality-Placidity	4.38	-2.07**	4.67
13. Energy-Passivity	4.15	-3.54**	4.99*
18. Impulsiveness- Deliberation	3.93	.75**	4.22
30. Understanding	2.72	-2.83**	2.76
21. Objectivity-Projectivity	2.36	-2.61**	3.49**
11. Ego Achievement	2.24	-1.35**	3.48**
27. Sensuality-Puritanism	2.11	-1.48**	2.51
25. Reflectiveness	1.67	-2.11**	3.43**
17. Humanities, Social Science	1.54	-1.98**	2.52**
2. Achievement	1.31	-2.29**	2.68**
6. Change-Sameness	.18	-2.41**	1.73**
4. Affiliation	-.38	-.12	1.64**
20. Nurturance-Rejection	-.85	-.71	1.33**
16. Harm Avoidance- Risktaking	-.87	-2.70**	-1.10
29. Supplication-Autonomy	-1.44	.89**	.58**
26. Science	-1.55	-3.06**	.97**
28. Sexuality-Prudishness	-1.91	1.03**	-.88**
14. Exhibitionism- Inferiority Avoidance	-2.08	-2.82**	2.96**
3. Adaptability-Defen- siveness	-2.29	-.45**	-2.86
10. Dominance-Tolerance	-2.54	1.67**	-3.11
19. Narcissism	-3.40	1.80**	-.89**
1. Abasement-Assurance	-3.52	2.82**	-4.60**
24. Practicalness- Impracticalness	-3.65	-.06**	-2.55**
7. Conjunctivity- Disjunctivity	-3.81	-2.30**	-1.33**
23. Play-Work	-3.89	1.87**	-.66**
22. Order-Disorder	-5.01	.97**	-2.81**
9. Deference-Restiveness	-5.11	1.20**	-4.86

¹This standard score scale has a mean of 0 and a standard deviation of 2. The norms are based upon results of 1,993 juniors and seniors in 32 colleges.

* Statistically significant difference from Raymond sample using t-test and .05 level of confidence.

**Statistically significant difference from Raymond sample using t-test and .01 level of confidence.

the Non-Intellectual Climate represent the best summary of the CCI data. Subsequent research has shown these two second order factors to be of considerable importance.

The Intellectual Climate factor measure has been found (Stern, 1963b) to be positively correlated with other measures of academic achievement such as the following: Knapp-Greenbaum Index of Scholars per 1000 graduates ($r = .80$); rate of graduates receiving a Ph. D. from 1936-1956 ($r = .76$); per cent of National Merit Scholar entrants in 1956 ($r = .49$); number of Merit Scholars per 1000 students in 1960 ($r = .59$); National Merit Scholarship Qualifying Test means ($r = .71$); College Board (SAT) mean Verbal scores ($r = .83$); and College Board mean Mathematical scores ($r = .34$).

In a major report of research with the CCI Stern (1963b) indicated that of the schools he studied, no school more than one standard deviation below the mean on the Intellectual Climate factor was known for its academic excellence, while the top 11 schools on this measure were the widely respected Antioch, Bennington, Bryn Mawr, Goddard, Oberlin, Reed, Sarah Lawrence, Shimer, Swarthmore, Vassar, and Wesleyan. The evidence indicates that the Intellectual Climate factor measures aspects of college environments which are positively associated with various other measures of undergraduate academic achievement. By obtaining a school's measure on the Intellectual Climate factor and the first order factors which compose it, it should be possible to gain an insight into its academic strength. Since there are normative data available, it is possible to see how any particular school compares with its institutional peers on these measures.

The factors which compose the intellectual climate are defined by Stern (1963a, pp. 18-21) in the following way.

- Factor 10. **Work-Play.** It reflects an absence of activities associated with dating, athletics, and other forms of collegiate amusement. (From scales of Prudishness, Harm Avoidance, Work, Deliberation)
- Factor 11. **Non-Vocational Climate.** The items reflect opportunities to engage in theoretical, artistic, and other "impractical" activities. Other items imply an absence of expectation, coercion, or demands for student conformity to conventional values. (From scales of Impracticalness, Sensuality, Restiveness, Disorder, Defensiveness)
- Factor 1. **Aspiration Level.** A high score on this factor indicates that the college encourages students to set high standards for themselves in a variety of ways. These include opportunities for students to participate in decision-making processes involving the administration of the school, and administrative receptivity to change and innovation, thus implying that a student's efforts to make some impact on his environment have some probability of being successful. But a high level of aspiration is also encouraged by introducing students to individuals and ideas likely to serve as models of intellectual and professional achievement. (From scales of Counteraction, Change, Fantasied Achievement, Understanding)
- Factor 2. **Intellectual Climate.** These items reflect the qualities of staff and plant specifically devoted to scholarly activities in the humanities, arts, and social sciences. (From scales of Reflectiveness, Humanities- Social Sciences, Sensuality, Understanding, Fantasied Achievement)
- Factor 3. **Student Dignity.** This factor is associated with institutional attempts to preserve student freedom and maximize personal responsibility. Schools high on this factor tend to regulate student conduct by means other than legislative codes or administrative fiat. There is a minimum of coercion and students are generally treated with the same level of respect accorded a mature adult. (From scales of Objectivity, Assurance, Tolerance)
- Factor 4. **Academic Climate.** This factor stresses academic excellence in staff and facilities in the conventional areas of the natural sciences, social sciences, and the humanities. (From scales of Humanities- Social Sciences, Science)
- Factor 5. **Academic Achievement.** Schools high in this factor set high standards of achievement for their students. Course work, examinations, honors, and similar devices are employed for this purpose. (From scales of Achievement, Energy, Understanding, Counteraction, Conjunctivity)
- Factor 6. **Self Expression.** This factor is concerned with opportunities offered to the student for the development of leadership potential and self assurance. Among the activities serving this purpose are public discussions, debates, projects, student drama and musical activities, and other forms of participation in highly visible activities. (From scales of Ego Achievement, Emotionality, Exhibitionism, Energy)

The Non-Intellectual climate factor shares the Self-Expression factor, but the most important measures here are three factors reflecting a high level of organization of student affairs, both academic and social. The remaining two factors are associated with student play and an emphasis on technical and vocational activities. The specific factors and their definitions are the following.

- Factor 6.** Self Expression. See above
- Factor 7.** Group Life. The items here reflect various forms of mutually supportive group activities among the student body. These activities are of a warm, friendly character, more or less typifying adolescent togetherness, but they also reflect a more serious side to this culture as represented in activities devoted to the welfare of fellow students and less fortunate members of the community. (From scales of Affiliation, Supplication, Nurturance, Adaptability)
- Factor 8.** Academic Organization. The various components of this factor may be regarded as the environmental counterparts of the needs for orderliness and submissiveness in the individual. High scores on this factor are achieved by institutions which stress a high degree of organization and structure in the academic environment. (From scales of Blame Avoidance, Order, Conjunctivity, Deliberation, Deference, Narcissism)
- Factor 9.** Social Form. In some respects this factor represents the formal institutionalization of those activities represented in Factor 7 (Group Life) . There is in fact considerable overlap between these two factors, but Factor 9 minimizes the friendly aspects of Factor 7 while stressing its welfare components. Schools characterized by this factor also offer opportunities for the development of social skills of a formal nature and in some respects suggest the finishing school counterpart of the vocational climate represented in Factor 11 below. (From scales of Narcissism, Nurturance, Adaptability, Dominance, Play)
- Factor 10.** Play-Work. Schools high in this factor offer opportunities for participation in a form of collegiate life reminiscent of the popular culture of the 1920's. These are the institutions sometimes referred to as the fountains of knowledge where students gather to drink. (From scales of Sexuality, Risk-taking, Play Impulsiveness)
- Factor 11.** Vocational Climate. These items emphasize practical, applied activities, the rejection of aesthetic experience, and a high level of orderliness and conformity in the student's relations to the faculty, his peers, and his studies. (From scales of Practicalness, Puritanism, Deference, Order, Adaptiveness)

The factorial data for the whole of the three samples along with some normative comparisons are contained in Table 10. A graphic comparison of factor scores obtained from juniors and seniors at four of the elite liberal arts colleges identified by Stern (Bryn Mawr, Oberlin, Shimer, and Vassar) and factor scores from Raymond is found in Figure 1.

According to student perceptions Raymond College is radically different from the College of the Pacific. Indeed, two more different segments of the same university, both claiming the same goals, probably cannot be found anywhere in the United States.

In addition to establishing a distinctive sub-culture within the university via the structure of a cluster college, a second major finding is that Raymond seems to have created the very kind of academic atmosphere it desired. On the basis of these data it appears that only four years after its founding, Raymond ranks among the leading liberal arts colleges in the country as judged by a number of criteria of academic productivity.

More specifically the evidence indicates that to an extreme degree Raymond stimulates high aspirations of personal achievement, especially in a broad array of intellectual and aesthetic activities; it urges students to expend great effort to realize those ambitions; it accords students personal dignity and invites their participation in both the academic and social life of the college; it encourages the free expression of ideas and fosters the awareness and behavioral expression of even anti-social impulses. At the same time it has personalized and intellectualized undergraduate education, it has overcome the academic regimentation, the peer group accent on campus fun and games, and the vocational orientation so predominant at most colleges. Such are the perceptions of the Raymond students when compared with the views of their counterparts at other schools.

Table 10. College Characteristics Index Factor Standard Score Means¹

Factor	Raymond N=139	COP N=96	Raymond Entering Freshmen N=42
I. Intellectual Climate	3.01	-2.70**	3.55
-10. Work-Play	.86	-2.23**	-.78**
-11. Non-Vocational Climate	4.03	-.74**	3.50
1. Aspiration Level	3.46	-2.96**	4.07
2. Intellectual Climate	2.57	-2.17**	3.26
3. Student Dignity	3.11	-2.66**	4.15**
4. Academic Climate	.11	-2.89**	2.10**
5. Academic Achievement	2.42	-3.32**	3.71**
6. Self-Expression	3.58	-3.59**	5.76**
II. Non-Intellectual Climate	-3.72	.50**	-1.31**
6. Self-Expression	3.58	-3.59**	5.76**
7. Group Life	-1.50	-.29**	.14**
8. Academic Organization	-5.51	.07**	-2.96**
9. Social Form	-3.23	1.06**	-1.22**
10. Play-Work	-.86	2.23**	.78**
11. Vocational Climate	-4.03	.74**	-3.50

¹This standard score scale has a mean of 0 and a standard deviation of 2. The norms are based upon results of 1,993 juniors and seniors in 32 colleges.

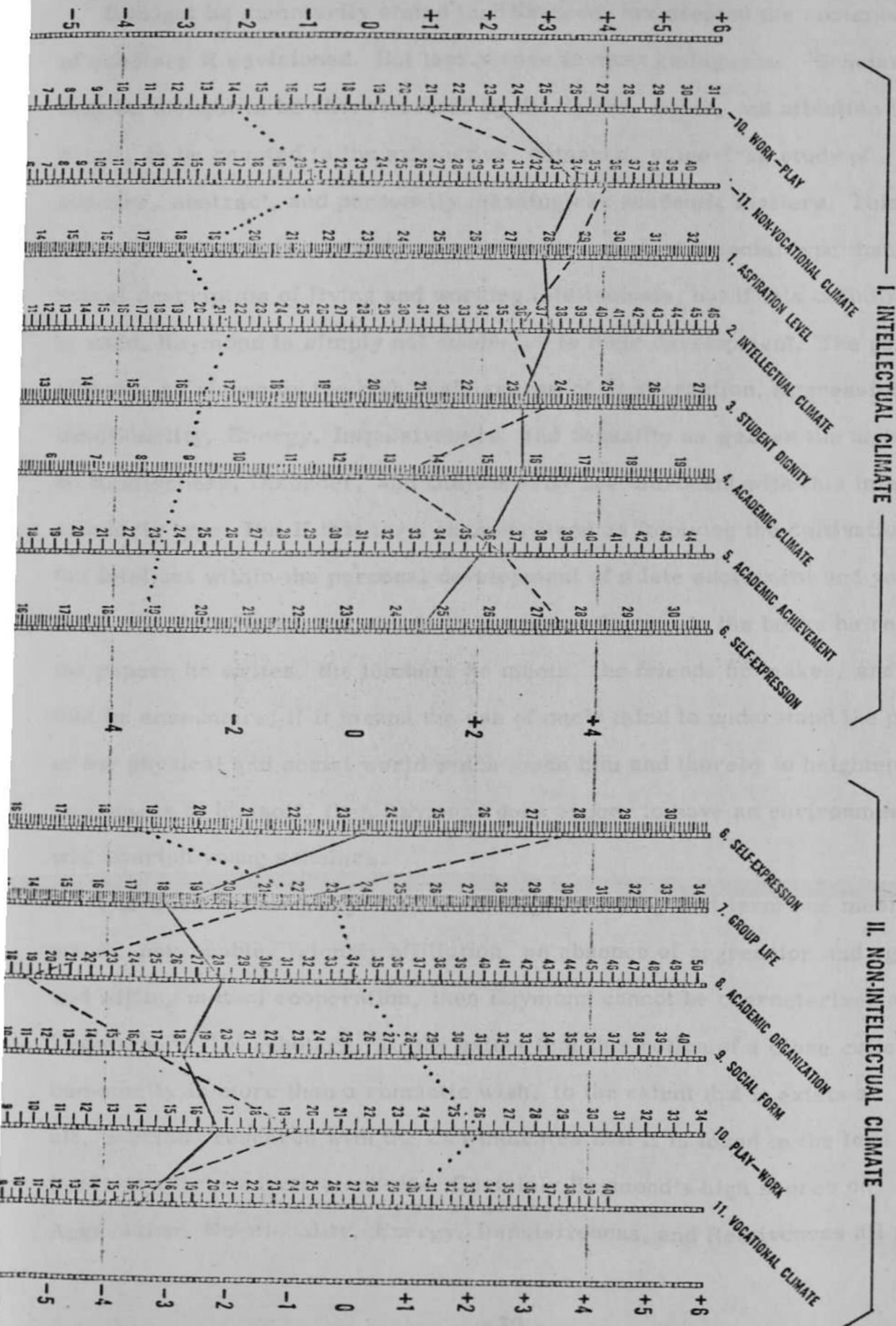
**Statistically significant difference from Raymond sample using t-test and .01 level of confidence.

Figure 1. CCI Scores for Raymond, COP, and Four Elite Colleges

GROUP FACTOR SCORE PROFILE—COLLEGE ENVIRONMENT (CCI)

NORMS BASED UPON 1993 JUNIORS AND SENIORS ENROLLED IN 32 COLLEGES.

STANDARD SCORES ($\bar{X} = 0, \sigma = 2$)



It might be summarily stated that Raymond has created the community of scholars it envisioned. But that phrase is most ambiguous. "Scholars" may be thought to be characterized by discipline, order, and attention to detail, to be devoted to the exhaustive, detached, value-free study of obscure, abstract, and personally meaningless academic matters. This sense of the term is probably more of a caricature of a social type than an actual description of living and working intellectuals; but if this definition is used, Raymond is simply not conducive to their development. The personal vivacity as shown by the high scale scores of Counteraction, Aggression, Emotionality, Energy, Impulsiveness, and Sexuality as well as the high scores on Restiveness, Disorder, and Disjunctivity are dissonant with this image of the scholarly type. But if that term is understood as implying the cultivation of the intellect within the personal development of a late adolescent and young adult who, like Narcissus, tends to see his reflection in the books he reads, the papers he writes, the teachers he meets, the friends he makes, and all that he encounters; if it means the use of one's mind to understand the parts of the physical and social world which touch him and thereby to heighten the awareness of himself, then Raymond does appear to have an environment which will nourish young scholars.

The word "community" is also ambiguous. If by that term one means warm, personable, friendly affiliation, an absence of aggression and egoism, and willing mutual cooperation, then Raymond cannot be characterized as a "community" of scholars. To the extent that this notion of a close college community is more than a romantic wish, to the extent that it exists at all, previous research with the CCI indicates that it is found in the less intellectually productive schools. Certainly Raymond's high scores on Aggression, Emotionality, Energy, Impulsiveness, and Restiveness all point

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to an extremely free and individualistic ethos which borders on social anarchy and personal egocentricity. The low scores on the scales of Adaptability, Narcissism, Abasement, and Play suggest that students fail to perceive pressures for them to exercise restraint, to attend to proper social form, or to cultivate what to them may be a superficial social impression. In such an environment marked by intellectual and social abrasiveness, where young men and women are exercising their minds, experiencing new sensations, acting out impulses, and trying on different selves, "community" in its idealized sense is unlikely. But if that term is taken to mean a group of persons bound together by a set of values and regulating themselves by some structures, then Raymond is not only a community but a distinctive one whose freedom, equalitarianism, individualism, and tolerance fosters scholarly investigation.

Thus, while the phrase "community of scholars" does partially capture some of the qualities of the Raymond environment, the phrase "intellectual existentialism" may be a better one. The students perceive two major pressures, to develop and sharpen their intellects, and to develop and enhance their existential selves. Their minds are used largely to serve their selves. It should be no surprise that the Raymond climate is perceived to contain pressures toward intellectual existentialism. The small size of the school, the primacy of dialogue, the opportunity for personal encounters, the absence of conventional academic trappings, and the living and learning arrangements are all innovations which attempt specifically to foster intellectual investigation which expands the individual consciousness of each student. The innovations were especially designed to provide an intellectually sound and personally relevant education. These data indicate that they have done just that, and to a degree uncommon in American colleges.

What seems to be lacking in the Raymond environment are the values of discipline and order, respect for and commitment to institutions, patience and a future time orientation, sympathetic tolerance for the views and failings of others (especially those in positions of authority or contented with the status quo), humility about one's own ideas, social propriety, and a sense of practicality. In short, the self-restraining virtues traditionally associated with the Christian faith seem to be weak or absent. In their place have been substituted the more individualistic and assertive virtues of intellectual existentialism, virtues more consistent with the psycho-social stage of development of most college age youth.

These findings, though valid, are reported for the whole of the Raymond sample and they provide comparisons between Raymond and other colleges. It may be that despite the small size, the high degree of consensus in answering the individual items, and the apparent homogeneity of the school, there are differences in the way students within Raymond perceive the climate. In order to determine whether there were differences among sub-groups within Raymond, further analyses were made. Since previous theoretical and empirical studies (Holland, 1963; Astin and Holland, 1961; Astin, 1965; Stern, 1962) have shown that different departments, divisions, and schools within the same university often have different climates, an analysis of the CCI factor scores of students who reported they were concentrating in the Humanities, Social Sciences, and Natural Sciences was made. There were no significant differences. Another analysis was performed between those students who ranked themselves highest and lowest in their classes. Again there was no statistically significant difference.

An analysis of the three classes revealed some differences. Table 11 contains the three factors on which the statistically significant variations

were found. In regard to each of the factors, Aspiration Level, Academic Achievement, and Academic Organization, the freshmen scored significantly higher than the seniors, and the intermediates were in the middle ranges.

The fact that freshmen tend to see more academic organization than the seniors (though far less than almost all students in the normative group) may be due to the relatively more conventional freshman curricular offerings such as English, foreign language and mathematics, courses which require more order and discipline than some of the others. Apparently the longer one remains in the Raymond program with its seminars and independent study, the less organization is perceived.

If the older students perceive less structure, they also perceive less pressure toward high aspirations and academic achievement. Aspiration Level refers in large part to student attempts to influence the life of the school. It is evident that students cannot be efficiently consulted on all decisions pertaining to the operation of the college, and their advice cannot always be accepted by even a sympathetic faculty and administration. When most students expect to be ultimately influential in the life of the school and subsequently become sobered by the realities of the decision-making process, they will probably become more temperate in their perceptions of the extent of student participation in the life of the college.

The perception of fewer pressures toward academic achievement by the older students may be due to their developing higher personal standards and viewing Raymond relatively lower from their relatively higher vantage point. Hence, it might be an indication of increasing intellectual sophistication on the part of the older students. Or it may reflect a discovery that in the less structured intermediate and senior years, a person may impress some of his peers and his teachers with discussions lacking in intellectual discipline

and rigor. There is no way at this time to determine with certainty whether either or both of these interpretations are correct. But since 45% of the entire student body believe "personality pull and bluff get students through many courses," only 31% think "there are no favorites at this school," and 33% say "anyone who knows the right people in the faculty or administration get a better break here," there is considerable evidence that personal dialogues and encounters and minimum of structure can not only strengthen but also weaken academic achievement.

If the internal analyses on the basis of academic concentration, academic achievement, and class produced only these minor differences, the study of sex differences was another matter. No fewer than six of the 13 various factors and 12 of the 30 scales showed significant differences in the way men and women perceive the Raymond environment. Those scales and factors are contained in Table 12.

These data provide evidence that the men and women at the very small and seemingly homogeneous Raymond College actually live in somewhat different worlds. They live in physically different dormitories and this very separation may give the women and men the opportunity to retreat from their student roles to styles of living which correspond more closely to the conventional sex roles. The females perceive their environment to be more emotional, exhibitionistic, humanistic-social scientific, nurturant, and impulsive, all qualities more associated with the feminine than the masculine sex role. Perhaps social separation of the sexes into segregated living units creates different social worlds for men and women.

But if the sexes live in different physical facilities, they more fundamentally live in somewhat different psychic realities. That is, men and women seem to perceive the very same social conditions differently. Perhaps this difference

Table 12. College Characteristics Index Means for Scales and Factors with Differences Between Raymond Males and Females

	Men N=58	Women N=75
<u>Scale</u>		
1. Abasement-Assurance	-2.91	-3.90**
2. Achievement	.68	1.68**
11. Ego Achievement	1.68	2.65**
12. Emotionality-Placidity	3.42	5.08**
14. Exhibitionism-Inferiority Avoidance	-2.76	-1.87*
15. Fantasied Achievement	4.98	5.71*
17. Humanities-Social Science	1.15	1.83*
18. Impulsiveness-Deliberation	2.98	4.70**
20. Nurturance-Rejection	-1.33	-.57*
21. Objectivity-Projectivity	1.49	2.87**
26. Science	-2.28	-.96**
30. Understanding	2.23	3.01**
<u>Factor</u>		
I. Intellectual Climate	2.58	3.25*
1. Aspiration Level	2.99	3.78*
3. Student Dignity	2.38	3.47**
4. Academic Climate	-.54	.61**
5. Academic Achievement	1.87	2.73**
6. Self-Expression	2.62	4.13**

* Statistically significant difference using t-test and .05 level of confidence.

**Statistically significant difference using t-test and .01 level of confidence.

results because even today the female in this country is assigned to the position of a second class citizen. Not only does she have little access to certain occupations, but she earns less money, receives less prestige and wields less power than a male performing the same functions. Even on the college campuses the women are "protected" by restraining social rules and regulations and may even be inhibited and less aggressive about pursuing her ideas in formal and informal settings. Because the women at Raymond are relatively less hampered by social and academic restrictions, they may think they are accorded relatively more freedom, treated more equally, and rewarded more on the basis of their merits than is true for their age-mates elsewhere. From their vantage point of having been liberated from the pervasive and restricting feminine mystique, the women may be more likely than the men to regard the very same environment to be more supportive of their individual endeavors (higher assurance score), to be more encouraging of personal achievement (higher achievement, ego achievement and fantasied achievement scores), and to channel achievement in intellectual directions (higher understanding score). In light of the relative freedom experienced by Raymond women, they may be inclined to be less suspicious of school authorities (higher objectivity and lower abasement scores), and less cynical toward the more definite and authoritative areas of study (higher science score). The culturally defined masculine role is more consonant with the intellectually assertive (even aggressive), individualistic, critical and expressive role of the Raymond students; lacking such a new-found sense of freedom to achieve status on the basis of one's merits, the men may be somewhat less charitable in their views of the environment. Indeed, the men may find their previous ascribed status challenged in this climate which is predominantly an intellectual meritocracy.

In addition to the possibilities that Raymond sexes live in physically and psychically different realities, these data may be explained in another way. Perhaps a predominantly young male faculty has internalized the masculine and feminine mystiques and unconsciously they may be in fact more tolerant and supportive of the women, and more harsh and demanding of the men. Or possibly, the girls, having forsaken temporarily the conventional co-ed role concerning social life in general and dating in particular, and having accepted the call of the intellectual life, at least temporarily, may need to think that their sacrifice is worthwhile; one way for them to rationalize their decision is to elevate the environmental pressures which are perceived to "force" one in an intellectual direction. Or perhaps the co-eds simply enjoy the personal attention they receive from the young male faculty and respond more favorably to their academic demands than do the men students.

Whatever the reason, it is certain that the Raymond women perceive the school as more intellectual and more free, as supporting higher aspirations and academic achievement, and as permitting more self-expression than do the Raymond men. One wonders whether the same might be true if the school had been staffed with a young female faculty.

Very little information is currently available concerning the expectations high school students have of college. And this despite the fact that for the foreseeable future over a million students will enter college every fall (Simon & Grant, 1964). A recent study by Stern (1966) provides some partial answers. He asked 3,075 students to complete the CCI in such a way as to describe the four very different schools they were about to enter (Beloit, Cazenovia Junior College for Women, St. Louis University, and Syracuse University).

test influence of
females' work in
faculty.

Most of the students at each school, Stern discovered (p. 410), "...had expectations that could only have been fulfilled at Utopia U." Looking at the six factors comprising the Intellectual Climate factor, and the five variables comprising the Non-Intellectual Climate factor, he continues, "Less than one college in six actually scores as high as this on any of the eleven factors, and no schools combine these activities with anything like the consistency anticipated by these new students." The entering freshmen are not aware of the fact that schools which "... maximize the intellectual climate minimize the provisions for extracurricular activities."

What is most interesting, however, is that the entering students at each of these four very different schools had similar expectations. The fact that they shared a common misunderstanding about the specific qualities of their chosen colleges led Stern to infer that they hold a cultural stereotype about the nature of colleges in general. This stereotype is so powerful that it, more than any knowledge entering students may have about the schools they choose, influences their expectations. The stereotype is apparently reinforced by their friends, family, and high school counselors, the primary sources of information consulted by prospective college students. But the colleges themselves must be partly responsible for this image-reality disjunction. Public relations oriented news releases, promotional literature, recruitment talks, and admission interviews are likely to show the school's strengths to best advantage and to ignore its weaknesses, a practice which may be effective in selling the school but which buttresses the stereotype that colleges are more ideal than in fact they are. Since illusions are vulnerable to disillusion, students with unrealistic expectations must generally become somewhat disappointed with their choice of college; the grander the dream, the greater the disappointment. Student apathy, activism and alienation

may be the understandable reactions to such disillusionment.

With the findings of Stern's multi-college study in mind, it is possible to examine the results of the entering freshmen sample on the CCI. Recall that the questionnaires were distributed one week after they arrived on campus, after the new students had experienced an orientation program and four days of classes. Though not a true "before measure," their responses do provide evidence of how these students conceive of Raymond shortly after their arrival on campus.

By inspecting the scores on the various factors in Table 10 one can discern that on both the Intellectual Climate and the Non-Intellectual Climate factors as well as all nine of the different first order factors composing those measures, the entering freshmen rated the school higher than did the existing student body. Though the entering students are relatively more accurate in describing the intellectual dimensions of the school than the non-intellectual, the fact that they expected more of each suggests that they share the cultural stereotype about the nature of college as suggested by Stern.

In order to probe more deeply the "distorted" views of Raymond held by the entering freshmen students, one can look at the specific items on which their answers diverged from those given by the students who had lived on the campus for one to three years. All 73 items on which the two groups differed 20% or more are contained in Appendix C. Here it will suffice to indicate the major types of differences.

First, it is interesting that while the Raymond students describe the school as possessing qualities of some of the academically best colleges in the nation, the entering freshmen expect it to be even more demanding, faculty to be more stimulating and concerned with students, and the school

to provide more enriching intellectual and cultural experiences than the general student body believes is the case.

Second, they expect to find much more emphasis on typically collegiate extra-curricular activities, athletics, dating, partying, fun-seeking, and the like than the older students report exists. Third, the newer students expect more and better physical facilities, especially the library and science laboratories, than the veterans say the school has.

Additionally, the new recruits have some expectations which appear to be carried over from high school and to be consistent with a lower level of psycho-social maturation. More caution, control of impulses, conscientiousness, respect for authority, acceptance of rules, and overt affiliation is anticipated; it is thought that religion will be more emphasized; and more conventional and practical consequences of education, such as job security and family happiness, are expected than the student body reports is actually true of the school. Finally, they expect more student variety than apparently they will find at Raymond.

The College Characteristics Index (College of the Pacific Results)

Before discussing the COP data, one must explore the implications of the non-random sample. From such a non-random sample is it possible to draw any conclusions about the school? Previous research done on the CCI and the closely related CUES provides some answers. Pace and Stern (1958) found press profiles obtained from students are highly consistent with those obtained from faculty and administration at the same schools. Anne McFee (1959) learned that there is as much agreement among students on subjective and impressionistic items as on more objectively verifiable items. Other studies by McFee (1961), Florence Brawer (in Pace, 1963, pp. 53-60) led Pace (1963, pp. 56-58) to conclude, "... there are no clear indications

that personal characteristics of the reporters -- sex, achievement, scholastic aptitude, or personality measures -- have an important influence on the perception of environmental characteristics."

On the basis of the evidence that there are not important differences among sub-groups on the CCI and CUES, Pace and Stern have proceeded on the assumption that a random sample is unnecessary. Indeed, the normative data for the CCI was derived from 1933 juniors and seniors at 32 colleges and universities, a non-random sample with an average size of 60.

After the analysis of the Raymond data did yield a few class and many sex differences -- a result startling in light of this past research -- one cannot be so sanguine about drawing conclusions about the whole of the COP student body from this sample. However, because COP is much smaller than many universities studied with these instruments, because the COP sample size is over 150% of the average sample used to derive norms for the CCI, and because there is evidence which will be presented later in this section that there are no significant differences between sub-groups of the COP sample (not even the analysis on the basis of sex, the only variable on which it is known that the sample is non-representative of the student population, produced differences), it seems reasonable that conclusions drawn from the sample can be generalized to the entire student body.

There was relatively less consensus of the COP student perceptions of their environment than existed among the Raymond students, probably because it is a larger, more diverse institution. However, 88 items were answered in the same direction by more than 75% of the sample at COP. As with the Raymond item analysis, these items will be divided into three categories: first, faculty and administration characteristics; second, facilities and practices of the institution; and third, student characteristics;

within each category, several sub-groups will be made. Following each item will be the percentage of the COP sample who think that characteristic is true of their school; for comparative purposes, the percentage of the Raymond sample answering in the same way will be included.

The students perceive two dominant qualities in the faculty. First, the faculty are seen to be dedicated scholars who are friendly and interested in students. The following specific items indicate this quality.

	<u>Percent Agreeing</u>	
	COP	Raymond
Most of the professors are dedicated scholars in their fields	75	96
Most faculty members are liberal in interpreting regulations and treat violations with understanding and tolerance	76	94
The professors seem to have little time for conversation with students	18	3
The faculty tend to be suspicious of students' motives and often make the worst interpretation s of even trivial incidents	18	6
The professors really push the students' capacities to the limit	18	73
If a student wants help, he usually has to answer a lot of embarrassing questions	24	6

A second perceived aspect of the faculty is a well-organized, structured and relatively formal approach to academic matters, or in negative terms their dislike for academic disorder. The following items were indicative of that trend.

Most courses are well-organized and progress systematically from week to week	77	74
Professors usually take attendance in class	75	25
Classes meet only at their regularly scheduled time and place	86	9

	<u>Percent Agreeing</u>	
	COP	Raymond
Students address faculty members as "professor " or "doctor "	82	7
The faculty and administration are often joked about or criticized in student conversations	91	83
Professors often try to provoke arguments in class, the livelier the better	23	81
Discussions get quite heated with a lot of display of feeling	20	83
Class discussions are typically vigorous and intense	15	79
The school has an excellent reputation for academic freedom	23	99
Many faculty members seem moody and unpredictable	21	13
The faculty encourage students to think about exciting and unusual careers	20	68
When students dislike a faculty member they make it evident to him	23	67

One item which seems to be dissonant with the others in this category was:

There seems to be a jumble of papers and books in most faculty offices	79	83
--	----	----

One small cluster of items indicates that students perceive limitations in the physical plant. The following items suggest this characteristics.

Special museums or collections are important possessions of the college	18	10
Laboratory facilities in the natural sciences are excellent	8	8
The library has paintings and phonograph records which circulate widely among the students	5	13
The school is outstanding for the emphasis and support it gives to pure scholarship and basic research	24	48

A second general cluster of items refers to order, structure, and

symmetry in the institution.

	<u>Percent Agreeing</u>	
	COP	Raymond
Campus architecture and landscaping stress symmetry and order	79	73
The campus and buildings always look a little unkempt	9	25
There are paintings or statues of nudes on campus	5	33

Four other items which refer to procedures and which do not fit well into any of the above categories are the following.

There are psychology courses which deal in a practical way with personal adjustment in human relations	88	68
If a student fails a course he can usually substitute another one for it rather than take it over	20	27
The college tries to avoid advertising and publicity	23	14

By far the majority of items about which students agree occur in this category. This suggests that the student peer group culture contains more clearly defined goals and procedures than the academic culture. There are seven distinguishable clusters of values apparent in the student culture. The first value could be described as a heavy emphasis upon extra-curricular collegiate activities both formal and informal. The specific items indicating this value are the following.

Every year there are carnivals, parades, and other festive events on the campus	95	14
There is an extensive program of intramural sports and informal athletic activities	76	35
It is easy to get a group together for card games, singing, going to the movies, etc.	78	43
Student parties are colorful and lively	76	44

	<u>Percent Agreeing</u>	
	COP	Raymond
Most students here really enjoy dancing	91	75
There is a lot of excitement just before the holidays	98	89
New jokes and gags get around the campus in a hurry	84	77
Drinking and late parties are generally tolerated despite regulations	80	84
There are definite times each week when dining is made a gracious social event	82	94
Students frequently go away for football games, skiing weekends, etc.	94	61
There are no fraternities or sororities	0	96
Receptions, teas or formal dances are seldom given here	21	95
Dormitory raids, water fights, and other student pranks would be unthinkable here	1	3
There are no favorites at this school, everyone gets treated alike	24	31
Students rarely get drunk and disorderly	10	12

A second value thrust appears to be an emphasis on affiliation and friendliness which can be inferred from the following items.

There is lots of informal dating during the week at the library, snack bar, movies, etc.	75	64
Students often help one another with their lessons	92	86
Students spend a lot of time talking about their boy or girl friends	82	27
There is a great deal of borrowing and sharing among the students	89	96
Students commonly share their problems	86	94
Students spend a lot of time together at the snack bars, taverns, and in one another's rooms	90	61
Students frequently study and prepare for examinations together	76	70

	<u>Percent Agreeing</u>	
	COP	Raymond
Boy-girl relationships in this atmosphere tend to be practical and uninvolved, rarely becoming intensely emotional or romantic	17	19
There always seems to be a lot of little quarrels going on	23	40
Most students here would not want pets (dogs, cats, etc.) even if they were allowed to have them	22	17

A third cluster of items suggest a laissez-faire attitude toward academic and intellectual matters which allows the students who are interested to pursue their concerns in these directions but which allows other students who are not so inclined to escape many of the academic hardships which they might otherwise have to endure.

Tutorial, or honor programs are available for qualified students	85	88
Everyone knows the snap courses to take and the tough ones to avoid	82	6
Most students get extremely tense during examination periods	86	84
There are courses which involve field trips to slum areas, welfare agencies, or similar contact with under privileged people	83	83
Students who work hard for high grades are likely to be regarded as odd	20	6
The college offers many really practical courses, such as typing, report writing, etc.	12	2

A fourth cluster of items suggests a set of values that might be categorized as typically middle class rather than cultural or intellectual.

The future goals for most students emphasize job security, family happiness, and good citizenship	85	9
Very few students here prefer to talk about poetry, philosophy, or mathematics as compared with motion pictures, politics, or inventions	77	9

	<u>Percent Agreeing</u>	
	COP	Raymond
When students get together they seldom talk about trends in art, music, or the theater	82	41
Concerts and art exhibits always draw big crowds of students	10	47
Society orchestras are more popular here than jazz bands or novelty groups	5	9
A lot of students like chess, puzzles, double-crostics and other abstract games	23	55

A fifth value nexus appears to be an emphasis upon proper behavior and traditionally sanctioned values, or in negative terms, a disrespect for non-conformity. The following items suggest this value.

Most students dress and act pretty much alike	88	15
Students quickly learn what is done and not done on this campus	91	51
Students think about dressing appropriately and interestingly for different occasions, classes, social events, sports, and other affairs	81	10
Students take a great deal of pride in their personal appearance	82	4
Students are expected to report any violation of rules and regulations	76	30
There is a high degree of respect for non-conformity and intellectual freedom	23	96

A sixth value thrust appears to be an emphasis on order, inhibition, and passivity, all of which are indicative of an unwritten student code to control the expression of strong feelings. The items indicating this thrust are these.

Students put in a lot of energy into everything they do -- in class or out	23	71
Students get so absorbed in various activities that they often lose all sense of time or personal comfort	25	78
Student elections generate a lot of intense campaigning and strong feeling	20	11

	<u>Percent Agreeing</u>	
	COP	Raymond
When students run a project or put on a show, everybody knows about it	12	71
Books dealing with psychological problems or personal values are widely read and discussed	23	70
A great deal of enthusiasm and support is aroused by fund drives for Community Chest, Red Cross, Refugee Aid, etc.	8	10
Spontaneous student rallies and demonstrations occur frequently	6	17

One item which appears on the surface to be contrary to this value thrust is the following:

Students frequently do things on the spur of the moment	83	98
---	----	----

But since inhibitions and aggressions often break through the controls, this apparent indication of impulsivity seems at a deeper level to be consonant with this other evidence of order.

A final value complex appears to be a token acknowledgement of individualism and student responsibility.

Students are frequently reminded to take preventive measures against illness	22	17
Students don't argue with the professor-- they just admit they're wrong	16	1
Many students have special good luck charms and practices	17	5
Students are expected to play bridge, golf, bowl together, etc. regardless of individual skill	20	1

The CCI scale data which were contained in Table 9 are presented in Table 13, but here they are ordered from the highest to the lowest scores of the COP sample. The variables are defined in Appendix B.

The factor data for COP are contained in Table 10 on page 68, and the

Table 13. College Characteristics Index Scale Standard Score Means Ordered According to the COP Data¹

Scale	COP N=96	Raymond N=139
1. Abasement-Assurance	2.82	-3.52**
5. Aggression	2.01	4.91**
23. Play-Work	1.87	-3.89**
19. Narcissism	1.80	-3.40**
10. Dominance-Tolerance	1.67	-3.11**
9. Deference-Restiveness	1.20	-5.11**
28. Sexuality-Prudishness	1.03	-1.91**
22. Order-Disorder	.97	-5.01**
29. Supplication-Autonomy	.89	-1.44**
18. Impulsiveness-Deliberation	.75	3.93**
24. Practicalness-Impracticalness	-.06	-3.65**
4. Affiliation	-.12	-.38
3. Adaptability-Defensiveness	-.45	-2.29**
20. Nurturance-Rejection	-.71	-.85
11. Ego Achievement	-1.35	2.24**
27. Sensuality-Puritanism	-1.48	2.11**
15. Fantasied Achievement	-1.54	5.42**
17. Humanities-Social Science	-1.98	1.54**
12. Emotionality-Placidity	-2.07	4.38**
25. Reflectiveness	-2.11	1.67**
2. Achievement	-2.29	1.31**
7. Conjunctivity-Disjunctivity	-2.30	-3.81**
6. Change-Sameness	-2.41	.18**
8. Counteraction-Inferiority Avoidance	-2.53	5.32**
21. Objectivity-Projectivity	-2.61	2.36**
16. Harm Avoidance-Risktaking	-2.70	-.87**
14. Exhibitionism-Inferiority Avoidance	-2.82	-2.08**
30. Understanding	-2.83	2.72**
26. Science	-3.06	-1.55**
13. Energy-Passivity	-3.54	4.15**

¹This standard score scale has a mean of 0 and a standard deviation of 2. The norms are based upon results of 1,993 juniors and seniors in 32 colleges.

**Statistically significant difference from COP sample using t-test and .01 level of confidence.

factor definitions are found on pages 65-66.

The relatively high scores on the factors of Play and Social Form, the scale scores of Risktaking, Play, and Narcissism, Dominance, and Sexuality, and the large number of items reflecting the predominance of organized and informal peer group social activities -- all of these measures coalesce to indicate that students perceive the most typical quality of COP to be its sociability. Campus life seems largely oriented toward dating and partying, casual and formal social events, overt affiliation and consumatory diversion. The school is perceived to have a friendly atmosphere featuring the common forms of student extra-curricular amusement.

Outside of the quality of sociability, there seems to be no other characteristic measured by the CCI on which COP scores higher than the normative distribution. Curiously, there seems to be more agreement, more consensus among the students about what is lacking than about what is distinctively present at COP. There is only one factor score over one standard deviation above the mean but eight factors more than one standard deviation below the mean; 20 of the 30 scales have negative scores; only two scales are more than a standard deviation above the mean, but twelve are more than a standard deviation below the mean. There is indeed student agreement but it is a consensus of what COP does not have in relation to other schools.

An overriding student view is a weak press of intellectuality. Every one of the eight factors comprising the Intellectual Climate measure is negative, seven more than a standard deviation below the mean; the scales of Science, Understanding, Counteraction, Reflectiveness, and Humanities-Social Science are all far below the mean; and few of the items indicating pressure of an academic or intellectual sort receive much agreement. This is not to say there are no academic demands, nor does it mean there is an absence of

learning; these data merely indicate that students perceive more pressures from the total institution to participate in social life than to engage in academic matters.

Associated with high social and low intellectual demands is a perceived lack of student freedom. The low factor scores of Student Dignity and Self-Expression and the high scale scores of Abasement, Deference, Passivity, Inferiority Avoidance, Sameness, and Placidity all indicate an abundance of academic and social rules and regulations which effectively control the activities of students. There is a definite student perception of authoritarianism and paternalism, on the part of the campus authorities, however well meaning they may be. But it is not only the authorities who are perceived as restricting the freedom of students; there is an indication that students themselves prefer this type of well structured environment. The attention they pay to social impression, their disrespect of non-conformity, their emphasis on order, restraint, and inhibition of impulses, and their liking of formal and organized group activities all suggest that COP students seem well-fitted to their perceived college.

The presence of sociability and the absence of intellectuality and freedom are obviously interrelated. In a college tightly structured academically, where lectures and grades predominate, teachers are perceived to be authority figures, and are separated from students by a variety of academic structures, students may feel that intellectual matters are to be endured rather than devoured. In a school where social rules are thought to be made by "the administration" students may perceive little opportunity to think and act on the basis of their own versions of right and wrong. Perceiving restraints from the formal structure of the institution, perhaps the students have created an informal peer group culture in which they can escape the watchful eye of the authorities, set their own standards, express their impulses, and enjoy the thrills of late adolescent life. If this peer group culture has values antithetical to the

values of the formal academic and social structures, it probably represents little loss to the students who could not find satisfactions there in the first place. These data suggest that COP is presently dominated by this collegiate peer group culture.

In order to determine whether there were important differences in the way the environment was perceived by various sub-groups within the COP sample, several additional analyses were performed. Perhaps most crucial is the analysis according to class, because the normative data were based upon reports of juniors and seniors. It might be that these COP data, elicited as they were from all four classes, may contain class differences which would restrict the above normative comparisons. When the responses of the juniors and seniors were compared with the results of the freshmen and sophomores, there were statistically significant differences on only two factors. The upper classmen perceived the school higher on Self-Expression and lower on Aspiration Level.

Additional analyses of men and women factor scores resulted in no differences, and a comparison between the high and low academic students resulted in only one difference. The high academics perceive less Self-Expression than the lows. In sum, perceptions of the college appear to be nearly the same for all of these divisions of the sample on the basis of class, sex, and academic rank.

3. College and University Environment Scales

CUES is a questionnaire using 150 of the same items on the CCI, but it has an entirely different psychometric structure, a different normative sample (though it overlaps the CCI norm group), and a different theoretical rationale. Each of five insitutional variables, Practicality, Community, Awareness, Propriety, and Scholarship, is measured by 30 items. Rather than conceiving

the student responses as ways they individually structure their college environment. Pace prefers to think of their answers as institutional characteristics; he focuses on institutions while Stern focuses on individuals. In line with Pace's interests, CUES is scored only for the college as a whole; no individual scores are calculated. The most common way to measure a variable is to give the school a point for each item answered in the direction of the variable by 66% or more of the student body. The assumption is that if 2/3 of the students agree on an item, it can legitimately be called an institutional characteristic. An institution's total score for any variable is determined by the number of the 30 items answered in the direction of the variable. In order to compare one college with others, a normative sample of 50 institutions representative of actual enrollment in the United States (not representative of all colleges since there are far more small colleges than large but only a small proportion of students are enrolled in them.)² By relating a school's score on a variable to this normative distribution, it can be compared with a nationally representative group of its peers.

The five variables have been defined by Pace (1963, pp. 24-25), and it would be appropriate to quote from him.

Scale 1. Practicality. . . This combination of items suggests a practical, instrumental emphasis in the college environment. Procedures, personal status, and practical benefits are important. Status is gained by knowing the right people, being in the right groups, and doing what is expected. Order and supervision are characteristic of the administration and of the classwork. Good fun, school spirit, and student leadership in campus social activities are evident.

The atmosphere described by this scale appears to have an interesting mixture of entrepreneurial and bureaucratic features. Organization, system, procedures, and supervision are characteristic of many large enterprises, both public and private, industrial, military, and governmental, but they are not limited to large agencies. Such hierarchies as exist, however, may be interpersonal as well as organizational, so that it is not only useful to understand and operate within the system but also to attain status within it by means of personal associations, and political or entrepreneurial activities.

There are, of course, many practical lessons to be learned from living

²The colleges and universities constituting the normative group for CUES are listed in Appendix D.

in an environment that has these characteristics and opportunities. Certainly such characteristics are encountered widely in the larger society.

- Scale 2. Community. The combination of items in this scale describes a friendly, cohesive, group-oriented campus. The environment is supportive and sympathetic. There is a feeling of group welfare and group loyalty which encompasses the college as a whole. The campus is a community. It has a congenial atmosphere.

The small college in a small town immediately comes to mind as a prototype--with friendly and helping relationships among the students and between the students and faculty. Some large universities, however, manage to have a strong sense of community; and some small colleges have an atmosphere that is better characterized by privacy, personal autonomy, and cool detachment than by a strong sense of togetherness. On the whole, however, bigness tends to beget diffusiveness rather than cohesion; it also tends to beget impersonality but not necessarily unfriendliness.

If the organizational counterpart of "practicality" was the bureaucracy, perhaps the counterpart to "community" is the family.

- Scale 3. Awareness. The items in this scale seem to reflect a concern and emphasis upon three sorts of meaning -- personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggest the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, etc., suggest the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and future condition of man suggest the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness, an awareness of self, of society, and of esthetic stimuli.

Perhaps in another sense, these features of a college atmosphere can be seen as a push toward expansion and enrichment -- of personality, of societal horizons, and of expressiveness.

- Scale 4. Propriety. The items in this scale suggest an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. On the negative side, one can describe propriety as the absence of demonstrative, assertive, rebellious, risk-taking, inconsiderate, convention-flouting behavior.

Conventionality, in the sense of generally accepting and abiding by group standards, is in some respects a good term for the items in this scale, although so-called rebellious groups, beatniks for example, have strong conventions to distinguish them from what they think is conventional in others. Perhaps, then, propriety is a better term than conventionality.

In any event, the atmosphere on some campuses is more mannerly, considerate, and proper than it is on others.

Scale 5. Scholarship. The items in this scale describe an academic scholarly environment. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, an interest in ideas as ideas, knowledge for its own sake, and intellectual discipline -- all these are characteristics of the environment.

The percentile rank of Raymond and COP on the normative distribution is found in Table 14.

It can be seen that Raymond ranks near the top of the distribution on both Scholarship and Awareness, moderately high on the measure of Community, and very low on the variables of Propriety and Practicality. In essence, these data tend to reinforce the conclusions drawn from the CCI. Raymond is a college in which students are academically oriented and pummeled by pressures toward personal, esthetic, and socio-political meaning. The moderately high score on Community shows that it is a close community, one in which personal relations are valued but one which lacks in consideration for others, formal or organized activities, friendliness, group spirit, proper social forms, and manners. The relative absence of structure, academically and socially, the concern for individualism, and the impatience with the usual forms of collegiate extra-curricular life, indicated in the low scores of Propriety and Practicality, corroborate the earlier data.

The data also support the earlier finding that Raymond freshmen have high and perhaps unrealistic expectations of the school. They do recognize the major value configurations in Raymond, indicating that they have relatively differentiated views of what to expect, but in every instance they expect more than the student body says is actually found.

The COP data again reveal relatively little distinctiveness except by its fairly uniform low scores on all five variables. Since this scoring of CUES relies on a sharp cut-off point at 66% agreement on each item, any unreliability

around that point will produce considerable variation in the scores of an institution. It might be revealing to see how COP would score if its cut-off point were lowered to 60%. Although it is not fair to compare it to institutions scored by the "66-plus method," it might give a better idea of the school's flavor. On that basis COP would rank at the 63rd percentile on Practicality, 69th on Community, 12th on Awareness, 29th on Propriety, and 18th on Scholarship. This re-scoring indicates that the chief qualities of the college are its emphasis on procedures, personal status via doing what is expected, order and supervision in academic matters, and good fun, school spirit, and an abundance of outside of class social activities in a congenial, pleasant, friendly campus. Even by this scoring adjustment the school still ranks near the bottom of the distribution on Awareness, Propriety, and Scholarship. In general, these data confirm the main findings about COP derived from the CCI.

4. Activities Index (Raymond College Results)

The Activities Index is a companion instrument to the CCI; the latter measures perceptions of students, and the former is a personality test of their needs or desires. If the CCI provides an indication of what a person thinks his environment is like, the AI indicates what his "in-vironment" is like. As with the CCI, the AI may be analyzed by examining the individual items, scales and factors. Because of obvious personality differences, the AI is scored separately for men and women; this fact makes it difficult to compare AI data from one sex with that of the other, as will be especially evident when scale and factor results are discussed.

There was considerably less consensus among the Raymond students on the AI items than on the CCI; their personalities appear more diverse than their perceptions of the school. Still there were 69 items which

received a consensus of at least 80% of the men, and 77 items which were answered in the same way by 80% or more of the women. Since there was considerable overlap between these two groups, the 50 questions on which both men and women agreed will be presented first. These items will be placed in some impressionistic categories by the author to emphasize their main thrusts. Following each item will be the percentage of men and the percentage of women who say they like each activity.

First, students report liking intellectual activities of a personalized sort, often involving intense effort and concentration which can be inferred from these items.

	<u>Percentage Liking</u>	
	Men	Women
Learning about the causes of some of our social and political problems	97	99
Understanding themselves better	100	97
Discussing with younger people what they like to do and how they feel about things	82	83
Spending their time thinking about and discussing complex problems	83	87
Comparing the problem's and conditions of today with those of various times in the past	80	82
Trying to figure out why the people they know behave the way they do	93	89
Seeking to explain the behavior of people who are emotionally disturbed	82	87
Losing themselves in hard thought	83	97
Reading stories that try to show what people really think and feel inside themselves	92	97
Engaging in mental activity	95	97
Avoiding things that require intense concentration	2	1

A second common personality trait is an attraction to sensuous and

esthetic activities. Most like:

	<u>Percentage Liking</u>	
	Men	Women
Holding something very soft and warm against their skin	87	96
Listening to the rain fall on the roof, or the wind blow through the trees	93	100
Walking along a dark street in the rain	88	82
Talking about music, theater or other art forms with people who are interested in them	88	95

They enjoy a free and spontaneous kind of existence in which order, compulsive attention to details, rigid schedules, routines, and habits are unattractive. These items indicate that value.

Doing whatever they are in the mood to do	88	99
Doing things on the spur of the moment	92	99
Getting up and going to bed at the same time each day	17	17
Leading a well-ordered life with regular hours and an established routine	13	13
Going to a party where all of the activities are planned	8	11
Keeping to a regular schedule, even if this sometimes means working when they don't feel like it	13	13

A fourth common personality trait is a need for independence, including at times unconventionality, anti-deference, and even elements of aggression.

The following percentages form a consensus concerning these activities:

Going to the park or beach only at times when no one else is likely to be there	80	84
Questioning the decisions of people who are supposed to be authorities	80	80
Working for someone who always tells them exactly what to do and how to do it	8	7
Crossing streets only at the corner and with the light	13	13

Despite having an independent spirit, most confessed that:

	<u>Percentage Liking</u>	
	Men	Women
They like having others offer their opinions when they have to make a decision	92	88

As expected of any educated population, Raymond students are generally as inferred from the following percentages, persons who like:

Going ahead with something important even though they have just accidentally walked under a ladder, broken a mirror, etc.	95	91
Taking special precautions on Friday the 13th	3	8
Waiting for a falling star, white horse, or some other sign of success before they make an important decision	3	4
Being especially careful the rest of the day if a black cat should cross their path	2	1
Carrying a good luck charm like a rabbit's foot or a four-leaf clover	0	14
Finding out which days are lucky for them, so they can hold off important things to do until then	0	4
Going to a fortune-teller, palm reader, or astrologer for advice on something important	3	12

Most are energetic, active, and adventuresome as they like:

Exerting themselves to the utmost for something unusually important or enjoyable	93	99
Living a life which is adventurous and dramatic	88	87
Giving all of their energy to whatever they happen to be doing	88	91

Seventh, a few items reflect a rejection of romantic love as portrayed by Hollywood. Few enjoy:

Daydreaming about being in love with a particular movie star or entertainer	8	14
Pretending they are a famous movie star	13	11

	<u>Percentage Liking</u>	
	Men	Women
Reading about the love affairs of movie stars and other famous people	8	11

Finally there are several items which are difficult to categorize. These include:

Doing something very different in order to prove they can do it	85	83
Striving for precision and clarity in their speech and writing	90	82
Being careful to wear a raincoat and rubbers when it rains	7	8
Thinking about ways of changing their names to make them sound striking or different	18	17
Shining their shoes and brushing their clothes every day	13	3
Thinking about winning recognition and acclaim as a brilliant military figure	17	0
Admitting defeat	12	15

In addition to the above items on which both men and women agreed, there are 19 more items which resulted in agreement among 80% or more of the men but not of the women at Raymond. They are largely items consonant with the above; because any grouping of them would be redundant, they will merely be listed. The following percentages say they like these activities.

Setting difficult goals for themselves	87	74
Picking out some hard tasks for themselves and doing them	80	71
Staying up all night when they are doing something that interests them	87	79
Doing things that are fun but require lots of physical exertion	80	78

	<u>Percentage Liking</u>	
	Men	Women
Listening to TV or radio programs about political or social problems	82	74
Knowing an older person who likes to give them guidance and direction	83	76
Talking someone into doing something they think ought to be done	85	79
Skiing on steep slopes, climbing high mountains, or exploring narrow underground caves	83	63
Speaking or acting spontaneously	83	79
Reading scientific theories about the origin of the earth and other planets	80	75
Crying at a funeral, wedding, graduation, or similar ceremony	3	21
Arranging their clothes neatly before going to bed	29	22
Being the only couple on the dance floor when everyone is watching	15	26
Eating so much they can't take another bite	13	22
Trying out different ways of writing their names to make them look unusual	18	29

Also, there are 27 items which resulted in a consensus of 80% or more of the women but not of the men. They also constitute an elaboration of the above categories. The following percentages of women like:

Turning over the leadership of a group to someone who is better for the job than they	75	82
Feeding a stray cat or dog	68	84
Comforting someone who is feeling low	77	91
Talking over personal problems with someone who is feeling unhappy	72	86
Studying the music of a particular composer such as Bach, Beethoven, etc.	58	84

	<u>Percentage Liking</u>	
	Men	Women
Learning more about the work of different painters and sculptors	70	91
Studying the development of English or American literature	77	86
Reading editorials or feature articles on major social issues	75	86
Acting impulsively just to blow off steam	70	87
Finding the meaning of unusual or rarely used words	75	82
Rearranging the furniture in the place where they live	65	84
Letting loose and having a good cry sometimes	38	87
Going to a party or dance with a lively crowd	70	83
Doing things according to their mood, without following any plan	73	89
Being romantic with someone they love	72	80
Concentrating so hard on a work of art, or music, that they don't know what's going on around them	68	86
Seeing someone make fun of a person who deserves it	42	20
Toughening themselves going without an overcoat, seeing how long they can go without food, sleep, etc.	27	18
Thinking about how to become the richest and cleverest financial genius in the world	27	16
Being generally consistent and unchanging in their behavior	30	20
Staying in the same circle of friends all the time	22	12
Avoiding excitement or emotional tension	22	9
Being with people who seem always to be calm, unshooked, or placid	33	16
Avoiding things that might bring bad luck	22	14
Limiting their pleasures so that they can spend all of their times usefully	23	17

Attitudinal Index Scale Standard Score	Percentage Liking	
	Men	Women
Fighting for something they want rather than trying to get it by asking	33	17

The AI is constructed to measure the same 30 variables contained in the CCI (defined in Appendix B); the strength of each personality need is inferred from answers to 10 different questions. An individual's score on one of these scales may be computed by counting the number of items to which he responds in the direction of the scale, and the score for a group of individuals may be calculated by averaging the scores obtained from all the individuals in the group. In order to facilitate comparisons between groups other than those tested directly, normative data obtained from juniors and seniors in 21 colleges are available.³ The data presented here will be in terms of standard scores; that is, the men will be compared with all the other men in the normative group, and the women will be compared with all the women of the normative group. The mean standard scale scores for the Raymond along with those for the COP men and Raymond entering freshmen samples are contained in Table 15, and similar data for the women are found in Table 16. These data will be discussed and interpreted following the presentation of the factorial data.

The AI has been subjected to a factor analysis to determine which scales cluster together, and it was re-analyzed to yield clusters of factors. The four second order factors and their component first order factors are defined below by Stern (1963, pp. 13-17).

I. Intellectual Orientation

This dimension consists of five factors. Two of these involve, as might be expected, intellectual interests and achievement motivation. Two others

³ The list of colleges and universities whose students compose the normative group for the AI is contained in Appendix A.

Table 15. Activities Index Scale Standard Score Means for Men¹

Scale	Raymond N=60	COP N=35	Raymond Entering Freshmen N=16
6. Change-Sameness	5.47	1.02**	5.79
12. Emotionality-Placidity	5.26	4.24*	8.96**
18. Impulsiveness-Deliberation	3.85	1.82**	2.56*
5. Aggression-Blame Avoidance	3.19	2.50	4.00*
17. Humanities, Social Science	2.82	-1.41**	-.16**
27. Sensuality-Puritanism	2.65	1.14**	1.07**
21. Objectivity-Projectivity	.83	-.32**	-.66**
25. Reflectiveness	.75	1.24	1.04
11. Ego Achievement	.40	-.63*	2.23**
13. Energy-Passivity	.39	-3.15**	1.94**
2. Achievement	.05	-1.30**	-1.94**
30. Understanding	-.12	-.79	.69
15. Fantasied Achievement	-.17	3.14**	2.26**
20. Nurturance-Rejection	-.23	-1.60**	-1.19
14. Exhibitionism- Inferiority Avoidance	-.24	.92**	2.11**
23. Play-Work	-.38	1.86**	2.77**
3. Adaptability-Defensiveness	-.58	1.67**	-.43
19. Narcissism	-.74	1.97**	2.69**
29. Supplication-Autonomy	-1.00	.99**	-3.96**
10. Dominance-Tolerance	-1.14	.06**	1.10**
26. Science	-1.23	-.22*	-2.07
1. Abasement-Assurance	-1.52	.91**	-4.58**
8. Counteraction- Inferiority Avoidance	-2.40	-.59**	-3.01
28. Sexuality-Prudishness	-2.98	4.64**	2.30
7. Conjunctivity-Disjunctivity	-3.40	-1.74**	-2.72
16. Harm Avoidance-Risktaking	-3.60	-1.67**	-3.89
22. Order-Disorder	-3.69	-.55**	-3.04
24. Practicalness-Impracticalness	-3.79	-1.91**	-1.56**
9. Deference-Restiveness	-4.03	.17**	-3.20
4. Affiliation-Rejection	-4.84	-.84**	-2.94**

¹This standard score scale has a mean of 0 and a standard deviation of 2. Norms are based upon results of 558 junior and senior men in 21 colleges.

* Statistically significant difference from Raymond Sample using t-test and .05 level of confidence.

**Statistically significant difference from Raymond Sample using t-test and .01 level of confidence.

Table 16. Activities Index Scale Standard Score Means for Women¹

Scale	Raymond N=76	COP N=60	Raymond Entering Freshmen N=26
6. Change-Sameness	4.77	.35**	2.62**
27. Sensuality-Puritanism	4.54	.19**	4.52
5. Aggression-Blame Avoidance	4.09	1.92**	2.14**
12. Emotionality-Placidity	3.70	1.28**	1.16**
25. Reflectiveness	2.78	.52**	3.31
18. Impulsiveness-Deliberation	2.65	-.26**	.12**
26. Science	2.22	-.06**	3.02**
17. Humanities, Social Science	2.15	-.70**	2.06
15. Fantasied Achievement	1.85	.89**	2.14
30. Understanding	1.64	-1.30**	2.33
3. Adaptability-Defensiveness	1.19	-.66**	-.39**
11. Ego Achievement	.88	.28	.06
8. Counteraction- Inferiority Avoidance	.07	-.83*	2.15
20. Nurturance-Rejection	-.20	.62*	.66
2. Achievement	-.25	-.03	.64
23. Play-Work	-.28	1.28**	-.70
13. Energy-Passivity	-.31	-.97	1.06
14. Exhibitionism- Inferiority Avoidance	-.54	-.02	1.24**
10. Dominance-Tolerance	-1.04	.26**	-2.21*
29. Supplication-Autonomy	-1.41	.87**	-.03**
1. Abasement-Assurance	-1.51	-1.17	1.41**
21. Objectivity-Projectivity	-1.55	-2.45*	-4.45**
28. Sexuality-Prudishness	-2.40	1.07**	-.90**
19. Narcissism	-2.42	.22**	1.55**
24. Practicalness-Impracticalness	-3.14	-.83**	2.27**
16. Harm Avoidance-Risktaking	-3.41	.15**	-.53**
4. Affiliation-Rejection	-3.90	-.67**	1.46**
7. Conjunctivity-Disjunctivity	-3.91	.14**	-2.03**
9. Deference-Restiveness	-4.28	-.62**	-1.73**
22. Order-Disorder	-4.76	.25**	-1.64**

¹This standard score scale has a mean of 0 and a standard deviation of 2. Norms are based upon results of 518 junior and senior women in 21 colleges.

* Statistically significant difference from Raymond sample using t-test and .05 level of confidence.

**Statistically significant difference from Raymond sample using t-test and .01 level of confidence.

are concerned with the maintenance of a high level of intellectual and social aggressiveness, suggesting that intellectuality is partially a function of ego strength. The last of these five factors is based primarily on items reflecting an interest in the development of useful, applied skills.

Factor 1. Self-Assertion. This factor reflects a need to achieve personal power and socio-political recognition. It is based on items which emphasize political action, directing or controlling other people, and the acceptance of roles involving considerable group attention (From scales of Ego Achievement, Dominance, Exhibitionism, Fantasied Achievement).

Factor 2. Audacity-Timidity. The second factor is more personally than socially oriented. The emphasis here is on aggressiveness in both physical activities and in interpersonal relationships. It is of interest that this personal aggressiveness should also be associated with a high level of interest in science (From scales of Risktaking, Fantasied Achievement, Aggression, Science).

Factor 3. Intellectual Interests. The factors with the highest loadings in this dimension are based on items involving various forms of intellectual activities. These include interests in the arts as well as the sciences, both abstract and empirical (From scales of Reflectiveness, Humanities-Social Sciences, Understanding, Science).

Factor 4. Motivation. This factor, like 1 and 2 above, represents another form in which need achievement may be expressed. Here, however, are the more conventional forms of striving most recognizable among students, involving elements of competitiveness and perseverance as well as of intellectual aspiration (From scales of Achievement, Counteraction, Understanding, and Energy).

Factor 5. Applied Interests. A high score on this factor suggests an interest in achieving success in concrete, tangible, socially acceptable activities. The items involve orderly and conventional applications in business and science (From scales of Practicalness, Science, Order).

II. Dependency Needs

This dimension is based on seven factors. It starts with the orderly aspects of Applied Interests, carries these to a more explicitly compulsive level of personal organization, and then shades off into Submissiveness. This in turn, when shorn of its more self-abrasive qualities, becomes reconstituted in the last factor of this dimension as emotional closeness. A high score suggests a generally high level of dependent, submissive, socially-controlled behavior.

A low score represents the inverse of this: autonomy, ascendance, and non-conformity.

Factor 5. Applied Interests. See Factor above.

Factor 11. Constraint-Expressiveness. This is the inverse of Factor 11 in Factor III below. Moderately high scores suggest guardedness and emotional constriction. Extreme scores are likely to be associated with high levels of inhibition, defensiveness, and rigidity (From scales of Deliberation, Inferiority Avoidance, Placidity, Prudishness).

Factor 12. Diffidence-Egoism. Reversed scores on Factor 12 (see Factor III below) reflect a lack of preoccupation with the self as a source of gratification. This implies good contact and reality testing, although very high scores may perhaps be associated with a tenuous, under-developed ego structure and a vague or obscurely defined self-concept (From scales of Narcissism, Fantasied Achievement, Objectivity).

Factor 6. Orderliness. People with high scores on this factor have indicated a marked interest in activities stressing personal organization and deliberativeness. Although some of the items are concerned with long range planning and relatively high level time perspective, the major emphasis here is on the maintenance of ritual and routine and the avoidance of impulsive behavior (From scales of Conjunction, Sameness, Order and Deliberation).

Factor 7. Submissiveness. The preceding factor suggests a strong defensive system, based on rigid internal controls, for guarding against the expression of impulses. The Submissiveness factor also implies a high level of control, but one which is based on social conformity and other-directedness. The items emphasize humility, deference, getting along with others, keeping one's place, etc. It is of interest that the Nurturance scale items should appear in this context, suggesting that the submissive individual's interest in supportive activities is based to a considerable extent on his own unexpressed need for such help (From scales of Adaptability, Abasement, Nurturance, Deference).

Factor 2. Timidity-Audacity. This is the inverse of Factor 2 described previously under Intellectual Orientation. In its reversed form it suggests a concern with any risk of danger to the self, whether physical, psychological, or social. These people avoid sports, social activities, and even fantasies which might conceivably incur harm to blame (From scales of Harm Avoidance, Fantasied Achievement, Aggression, Science).

Factor 8. Closeness. This factor is closely related to Factor 7, with which it shares both the Nurturance and Deference scales. However, the abrasive and self-denying qualities implicit in Factor 7 are absent here. In their place is an acceptance of items which recognize one's needs for warmth and emotional supportiveness (From scales of Supplication, Sexuality, Nurturance, Deference).

III. Emotional Expression

This dimension shares the Closeness factor with the preceding area, but the remaining five factors with loadings on this dimension stress much higher levels of social participation and emotional spontaneity. The last one of this group, Self-Assertion, is shared with the intellectual area.

Factor 8. Closeness. See area II above.

Factor 9. Sensuousness. The thirty items associated with this factor are concerned with activities of a sensual character. The items suggest a measure of self-indulgence along with a delight in the gratifications which may be obtained through the senses (From scales of Sensuality, Narcissism, Sexuality).

Factor 10. Friendliness. Persons with high scores on this factor are indicating an interest in playful, friendly relationships with other people. These interests involve simple and uncomplicated forms of amusement enjoyed in a group setting (From scales of Affiliation, Play).

Factor 11. Expressiveness-Constraint. This factor stresses emotional lability and freedom from self-imposed controls. Individuals with high scores on this factor are outgoing, spontaneous, impulsive, and uninhibited (From scales of Emotionality, Impulsiveness, Exhibitionism, Sexuality).

Factor 12. Egoism-Diffidence. This factor reflects an extreme pre-occupation with self. The items are concerned with appearance and comfort, as well as with fantasies in which the self obtains unusually high levels of gratification. The responses to other items in this group suggests that reality itself is interpreted in egocentric terms, but this may be not so much a matter of autistic distortions as of narcissistic egoism (From scales of Narcissism, Fantasied achievement, Projectivity).

Factor 1. Self Assertion. See area I above.

IV. Educability

There is a fourth dimension to be extracted in this second-order space of considerably less magnitude than the preceding three. It is of intrinsic interest to the educator, however, insofar as it combines elements of both intellectuality and submissiveness. It excludes the more self assertive aspects of Intellectual Orientation on the one hand, and the most self-denying, inhibited aspects of Dependency Needs. Insofar as scores on this dimension reflect a

strong interest in intellectual activities, coupled with orderliness and conformity, it seems likely that this factor is specifically associated with academic achievement. A score for this dimension may be obtained by summing the values for Factors (3) Intellectual Interests, (4) Motivation, (5) Applied Interests, (6) Orderliness, and (7) Submissiveness.

The mean scores for the men of Raymond, COP, and Raymond entering freshmen samples on these factors are contained in Table 17. Comparable information concerning the women in these three groups can be found in Table 18.

The most striking quality about these data is the emotional vitality and liveliness of the Raymond students. By inspecting the scale data in Tables 15 and 16 it can be seen that of the highest six scores at the positive end of the distribution, men and women share five; and they have the same six at the bottom of their distributions. All eleven of these variables have to do with emotionality.

A closer reading of the scales indicates that this general liveliness has four different dimensions. First, there is a preference for sensory and emotional experience as inferred from Emotionality and Sensuality. They seem to be captivated by the wonders and thrills of their own bodies and seem to search out sensory stimulation. Unlike some adolescents who responded to their own emotions with fear and denial, these persons respond with delight and awareness. Second, they like to express their emotions, to act out their impulses, as seen from the high scores on Emotionality, Impulsiveness, Aggression, and Risktaking. The newly experienced emotions are not to be inhibited or repressed; they are to be expressed openly, freely, and spontaneously. Third, students enjoy new and different experiences; they are easily bored with routine, habit and order. The high

Table 17. Activities Index Factor Standard Score Means for Men¹

Factor	Raymond N=60	COP N=35	Raymond Entering Freshmen N=16
I. Intellectual Orientation	- .94	- .06*	- .31
1. Self-Assertion	- .47	1.26**	3.30**
2. Audacity-Timidity	1.51	2.49**	2.12
3. Intellectual Interests ^x	.45	- .47*	- .61
4. Motivation ^x	- .78	-1.64*	-1.12
5. Applied Interests ^x	-3.64	-1.02**	-3.04
II. Dependency Needs	-5.76	-2.81**	-6.94
5. Applied Interests	-3.64	-1.02**	-3.04
-11. Constraint-Expressiveness	-3.29	-5.66**	-7.92**
-12. Diffidence-Egoism	.74	-2.59**	-2.67**
6. Orderliness ^x	-4.56	-1.36**	-3.93
7. 7. Submissiveness ^x	-2.21	.07**	-3.00
-2. Timidity-Audacity	-1.51	-2.49**	-2.12
8. Closeness	-2.73	.67**	-2.45
III. Emotional Expression	-3.18	5.57**	4.61**
8. Closeness	-2.73	.67**	-2.45
9. Sensuousness	- .14	3.48**	2.96**
10. Friendliness	-3.96	.26**	- .93**
11. Expressiveness-Constraint	3.29	5.66**	7.92**
12. Egoism-Diffidence	- .74	2.59**	2.67**
1. Self-Assertion	- .47	1.26**	3.30**
IV. Educability ²	-3.86	-1.51**	-4.15

¹This standard score scale has a mean of 0 and a standard deviation of 2. Norms are based upon results of 558 junior and senior men in 21 colleges.

²The fourth second-order factor of Educability combines the first-order factors marked with "x".

* Statistically significant difference from Raymond sample using t-test and .05 level of confidence.

**Statistically significant difference from Raymond sample using t-test and .01 level of confidence.

Table 18. Activities Index Factor Standard Score Means for Women¹

Factor	Raymond N=76	COP N=60	Raymond Entering Freshmen N=26
I. Intellectual Orientation	1.74	-.27**	2.90**
1. Self-Assertion	.16	.37	.23
2. Audacity-Timidity	3.80	.68**	2.60**
3. Intellectual Interests ^x	2.44	-.57**	2.95
4. Motivation ^x	.59	-.96**	1.87**
5. Applied Interests ^x	-3.08	-.21**	1.85**
II. Dependency Needs	-4.58	-.43**	-1.77**
5. Applied Interests	-3.08	-.21**	1.85**
-11. Constraint-Expressiveness	-.80	-.70	-.36*
-12. Diffidence-Egoism	.28	-1.34**	-3.44**
6. Orderliness ^x	-4.56	.09**	-1.81**
7. Submissiveness ^x	-1.65	-.45**	-.08**
-2. Timidity-Audacity	-3.80	-.68**	-2.60**
8. Closeness	-2.50	.67**	-.61**
III. Emotional Expression	-1.59	1.01**	.50**
8. Closeness	-2.50	.67**	-.61**
9. Sensuousness	-.91	.71**	1.38**
10. Friendliness	-2.50	.11**	-1.18**
11. Expressiveness-Constraint	.80	.70	.36
12. Egoism-Diffidence	-.28	1.34**	3.44**
1. Self-Assertion	.16	.37	.23
IV. Educability ²	-1.69	-.66**	1.40**

¹This standard score scale has a mean of 0 and a standard deviation of 2. Norms are based upon results of 518 junior and senior women in 21 colleges.

²The fourth second-order factor of Educability combines the first-order factors marked with "x".

*Statistically significant difference from Raymond sample using t-test and .05 level of confidence.

**Statistically significant difference from Raymond sample using t-test and .01 level of confidence.

scores on Change, Disorder, and Disjunctivity document this trait. Finally, students have a strong need for independence and an aversion to external control by persons in any position of authority, as can be seen in the high scores of Aggression and Restiveness. This same heightened sensitivity to control and confinement probably leads them to reject Affiliation and to renounce close, friendly, intimate relationships with others.

The factor data in Tables 17 and 18 confirm these inferences. Both men and women score fairly high on Audacity and Expressiveness, but very low on Orderliness, Submissiveness, Closeness, and Friendliness. They score low on the third major factor of Emotional Expression because it includes common forms of adolescent expression, close and friendly activities, which are strongly rejected by these students.

These four interrelated thrusts of emotional experience, emotional expression, change and independence point to a marked preference for a personalized and privatized existence.

These students show a very distinct intellectual style. Part of that style is a preference for intellectuality of a very personal sort, used presumably to heighten awareness of the self. Among the men this personalized investigation is associated with a disregard for, even a rejection of, abstract, impersonal intellection; compared with the normative sample of men, they score low on Science (where the emphasis is upon not only impersonal knowledge but where knowledge rests on the authority of external criteria of truth), moderate on Understanding (where several items reflect more abstract mental activities) and Reflectiveness (including some mystical but personally irrelevant activities), and high on Humanities-Social Science (where many items reflect an interest in the deeper recesses of the human spirit). The women likewise show an interest in personalized inquiry, but

unlike the men, they do not reject the more purely intellectual and abstract activities. Compared with the other women in the normative group they have more and broader intellectual interests, including high scores in Science, and in general a more intellectual orientation.

Not only is the intellectual style of these students personalized, it is also independent and aggressive. Looking at the Educability factor, it can be seen that both men and women score very low. The men score moderately on the Intellectual Interest and Motivation components, and very low on the Applied Interests, Orderliness, and Submissiveness dimensions of that factor, suggesting that their range of interests is restricted to what is personally meaningful and that they pursue those interests with an independence and assertiveness which makes it difficult for them to learn from others, especially from teachers who might be perceived to be in positions of authority. The women also score low on Educability, but their broader interests and greater social acquiescence as seen in Submissiveness makes them somewhat more docile and teachable.

Concerning achievement motivation, both men and women rank in the middle ranges of those scales, but again the women score somewhat higher on their distributions than do the men on theirs. In any case the measures of Achievement and Ego Achievement are close to the mean for both groups, and on Fantasied Achievement men score in the same area while the women are about a standard deviation above. Examining the items on these scales, one sees three reasons for an apparently low aspiration level. Most students reject conventional criteria of success; they renounce ambitions to become wealthy, to attain social status, and to achieve in practical or business affairs. Second, most have little interest in becoming leaders in formal organizations, probably because they prefer to escape the personal limita-

tions associated with the responsibility to organize, plan, and execute necessary business. Also, probably because they are jealous of their own freedom, they dislike a leader's structuring the lives of other people. And third, they reject interpersonal competition with others as a valid goal. However, both sexes do seem to have very high aspirations of an individualized sort. They enjoy setting high personal goals for themselves and strive energetically to achieve them. Though they do not like to impose their values on others, they do show a desire to play the role of an advisor to others.

In addition, the Raymond students show a high level of self-consciousness, which has two different components. Their aversion to social groups, found in the Dominance and Exhibition scales, seems to be more than merely a preference for person-to-person contacts; it seems also to suggest a shyness, an uncertainty, a felt social disability when in the presence of a large or formal group. Perhaps this reflects they simply have not learned how to behave in such a situation. Second, especially in the male data, there is a suggestion of inferiority feelings and a preference to escape the pain of social inferiority or personal failures by avoiding situations rather than by overcoming their limitations, as may be inferred from the low Counteraction and Dominance scores.

These four previous emphases suggest a mass quest for a stable self-identity. Referring to the adolescent identity crisis Erik Erikson (1958, p. 14) has said,

...it occurs in that period of the life cycle when each youth must forge for himself some central perspective and direction, some working unity, out of the effective remnants of his childhood and the hopes of his anticipated adulthood; he must detect some meaningful resemblance between what he has come to see in himself and what his sharpened awareness tells him others judge and expect him to be.

The intensity of the almost agonizing introspection which appears throughout

the data suggests that students are experiencing the identity crisis and suggests that most are on the necessarily private search for who they are and where they are heading. Unfortunately these data can not reveal the extent to which the search has been successful.

Finally, this personality information reveals a very sensitive and tender inner core of "the Raymond student" which is scarcely visible through his hard exterior shell of independence, defiance, and rejection. The brash, aggressive, anti-authoritarian crust apparently serves both to gain the freedom for self-exploration and protect that fragile self during the search. Individuals who have little contact with this type of student may regard him as hard and offensive, but if they would get to know him better, his soft psychological interior will soon be evident.

It is now necessary to inquire into the relation between these personality dispositions and the perceived characteristics of the environment as measured by the CCI. The environment was characterized by three main press, intellectuality, emotionality, and high aspirations. The AI data shows preferences for emotionality, personalized and independent intellectuality, high but individualized aspirations, intense self-consciousness, and a search for identity. There is a striking consistency between environmental demands and personal inclinations, both of which are quite consistent with the philosophy and structure of the college. Of course, it is impossible to know whether students with these personality configurations are attracted to Raymond with its similar demands, whether those with dissonant personality traits drop-out, whether Raymond actually changes and shapes the personalities of the students it admits to this insitutional mold, or whether and to what extent all three might be true.

Despite the general consistency, there are several specific discontinuities

between personality needs of individuals and the demands of the Raymond environment. First, the environment puts strong emphasis on rationality, but the students appear to be more captivated by their emotions; apparently they prefer to know by experiencing rather than to know about by thinking. Second, the environment, especially in the form of the heavy academic demands of the core curriculum, emphasizes knowledge about the external world, but the students want primarily to know their inner world and frequently are unconcerned about those parts of the world which do not touch them. Especially for the men it is as though their interest in the world is circumscribed by their own being, a miniscule focus with which to view all of knowledge.

Third, the small community depends on a spirit of interdependence for its very existence, but the students are very independent. While most have overcome an excessive dependence on others, many seem not to have realized that true autonomy occurs within the context of others. Concerning interdependence, a report of a Goddard College study (Beecher, et. al., 1965, p. 71) states,

For college students recognition of interdependence comes with the realization that one cannot dispense with one's parents without continuing pain on both sides; that one cannot comfortably receive continuing support without working for it; that one cannot receive the benefits of a social structure without making some contribution to it; that loving and being loved are necessarily complimentary.

For many Raymond students, this recognition seems not to have occurred, despite (or perhaps because of?) the small and personal nature of the school.

If the ideals of a liberal education include an awareness of one's self, a freedom to experience and experiment, an independence from the tradition of the past or the conventions of the present, and a development toward

autonomy, then it appears that the Raymond students are being liberally educated . And yet this very emotional freedom might weaken the academic content of the liberal arts curriculum if students focus only on their own selves; it might easily reduce the community to an egoistic anarchy, to an academic state of nature if they fail to recognize their social obligations which alone preserve the freedom of all. A delicate balance between the opposite poles of rationality and emotionality, external and internal concerns, community and private interests is so vital to preserve the human values of each pole, and these data suggest that the scales may be tipping toward emotionality, internality, and privatism.

Finally, the climate of freedom which allows and even encourages students to dwell upon their existential selves also serves to protect them from a direct confrontation with the more intransigent "real " world. It may come as a great shock to students to leave such a protective and indulgent environment; they may find that the college has not prepared them adequately to cope with the demands of the external reality. But that is another question which cannot be answered here.

Although valid at a general level of analysis, the above discussion of the personality data from the entire Raymond student body may have masked many important differences. In order to examine possible personality variation within that larger group, several sub-analyses of the AI data were performed between students in different classes, with different academic specializations, and with different levels of achievement; these will be discussed next.

Perhaps the most relevant question to ask of any college is what it does with the students it admits. In order to conclusively answer that question it would be necessary to test a group of students when they enter and retest

the same group of individuals when they leave the school. With a cross sectional design such as is here employed, one can see whether the sample of entering freshmen differs in any appreciable way from the three classes on campus; and when there are differences it is tempting to attribute those differences to changes produced by the school. However, it is entirely possible that the current entering freshman class is not similar in personality to the other classes when they entered. It is also possible that students different from those in the school dropped out, leaving only a select sample of upperclassmen; any difference between the existing student body and the entering freshmen students may reflect a differential retention rather than a personality change. Even with these methodological limitations in mind it is possible to obtain some tentative ideas of the impact of the institution on those students it admits by looking at a cross section of each class.

The factorial data for the various classes are contained in Table 19. Although there are a few sex differences, they reveal that the entering freshmen students differ in a number of ways from those in the student body. The students, especially the men, enter with low needs for Orderliness, Submissiveness, Closeness, and Friendliness; but in each instance the needs of the older students on these variables are lower still. Freshmen enter with high needs of Egoism, and Sensuousness, which are related to peer group expressions and involve an element of narcissistic attention to social impression; and these traits are lower among the older Raymond students. The high male scores on Expressiveness and Self-Assertion reflect an interest in group related activities which is much lower among the upperclassmen. And the higher scores among the entering freshmen females on measures of Motivation, Applied Interests, and Educability indicates that

Table 19. Activities Index Factor Standard Score Means for Raymond Students in Different Classes

Factor	MEN				WOMEN			
	Entering Freshmen N=16	Freshmen N=28	Inter. Senior N=24	Entering Freshmen N=26	Freshmen N=37	Inter. Senior N=38		
I. Intellectual Orientation								
1. Self-Assertion	-.31	-1.29	-.39	2.90	1.77*	1.89**		
2. Audacity-Timidty	3.30	-1.66**	.66	.23	.19	.80		
3. Intellectual Interests ^a	2.12	1.42	1.51	2.60	3.62*	4.30**		
4. Motivation ^a	-.61	.20	.71*	2.95	1.82*	2.83*		
5. Applied Interests ^a	-1.12	-1.32	.74	1.87	1.51	.14		
	-3.04	-3.19	-4.12	1.85	-2.72**	-3.67*		
II. Dependency Needs								
5. Applied Interests	-6.94	-4.63**	-3.33	-1.77	-4.64**	-5.07**		
-11. Constraint-Expressiveness	-3.04	-3.19	-4.12	1.85	-2.72**	-3.67*		
-12. Diffidence-Egoism	-7.92	-4.77**	-1.40	.36	-1.27	.31*		
6. Orderliness ^a	-2.67	1.65**	1.15**	-3.44	-.02**	-.50**		
7. Submissiveness ^a	-3.93	-4.02	-5.20*	-1.81	-4.10**	-4.94**		
-2. Timidity-Audacity	-3.00	-1.10**	-2.56*	.08	-2.08**	-2.13**		
8. Closeness	-2.12	-1.42	-1.51	-2.60	-3.62*	-4.30**		
	-2.45	-1.48	-4.11	.61	-2.75**	-3.02**		
III. Emotional Expression								
8. Closeness	4.61	-2.02**	-5.91	.50	-1.34**	-2.02**		
9. Sensuousness	-2.45	-1.48	-4.11	.61	-2.75**	-3.02**		
10. Friendliness	2.96	.35**	-1.83	1.38	.39**	-1.79		
11. Expressiveness-Constraint	-.93	-2.65*	-6.00	-1.18	-2.46*	-2.48*		
12. Egoism-Diffidence	7.92	4.77**	1.40	.36	1.27	.31*		
1. Self-Assertion	2.67	-1.65**	-1.15	3.44	.02**	.50**		
	3.30	-1.66	.66	.23	.19	.80		
IV. Educability ¹								
	-4.15	-3.38	-3.91	1.40	-1.54**	-2.15**		

¹The fourth second-order factor of Educability combines the first-order factors marked with "a".

* Significant difference from Entering Freshmen using t-test and .05 level of confidence.

**Significant difference from Entering Freshmen using t-test and .01 level of confidence.

x Significant difference from Freshmen using t-test and .05 level of confidence.

xxSignificant difference from Freshmen using t-test and .01 level of confidence.

they are more conventionally motivated and docile than the women of the student body. Whether these several differences are due to selective retention or personality change, the Raymond student body certainly contains individuals with considerably different personalities than those who enter.

In addition, the sharpest break occurs in the first year; there is a greater gap between the personality profiles of the entering students and the freshmen than between the freshmen and the upperclassmen. This indicates the importance of the first year of college either as a producer of personality change or as a personality filter through which a student must pass in order to remain in the institution.

Finally, there is some evidence that the sexes may develop differentially at Raymond. Elizabeth Douvan (1957) has discovered that in this culture boys arrive at the crisis in independence or autonomy somewhat earlier than do girls, making the men more aggressive and expressive during the earlier college years when the women are likely to be more subservient. The implication is that men will be resolving their problems of independence and identity later in their college years when the women are just beginning to shed their inhibitions and concern for social impression and becoming more independent and assertive. Though it is not entirely clear, there is some evidence that this is what is happening at Raymond. The upperclass men score higher than the freshmen on Constraint, socially oriented Self-Assertion, and Motivation -- they seem to have made some peace with themselves and their social surroundings. The upperclass women, on the other hand, show less conventional Motivation and fewer Applied Interests than the freshmen, suggesting they are still in the throes of a personal rebellion they may have been unable to begin until they came to a protective residential college. If this finding, based on admittedly fragmentary evidence, proves to be

correct, it would suggest that a three year education may be more defensible for the emotional development of men than for women who might need a longer moratorium from society's restrictions to develop a personally satisfying and socially useful self.

Or the same data may reflect that the closer the women are to graduation, the more acutely they realize most choices available to a liberally educated college woman are not very appealing. The ideas of settling down as a wife and mother, taking a second rate position in the business world, accepting one of the typically "feminine vocations" such as teaching, or even entering the still predominantly masculine world of graduate or professional school are not very promising to most of these young women, and they may react by rejecting the world which they expect to reject or limit them. There is some impressionistic evidence that the senior women are especially bothered by what they perceive to be a lack of opportunity to pursue their interests and to utilize their training in a vocation which they regard as personally meaningful.

Despite the fact that most Raymond students are interested in a broad general education, and despite the fact that all students must take a heavy core curriculum, it was thought that there might be personality differences between those who think of themselves as concentrating in different academic areas. As can be seen in Table 20, there are numerous differences among students who specialize in the three major divisions of the curriculum.

As might be expected, the mathematics and natural science students, though small in number, stand in considerable contrast to those in social science or humanities. These men have a higher intellectual orientation largely because of their greater interest in science, more conventional motivation, and more tangible, concrete interests. They are more inhibited,

Table 20. Activities Index Factor Standard Score Means for Raymond Students with Different Academic Specializations

Factor	MEN				WOMEN				
	Social Science N=14	Natural Science N=12	Humanities N=24	Social Science N=27	Natural Science N=6	Humanities N=39	Social Science N=27	Natural Science N=6	Humanities N=39
I. Intellectual Orientation	-2.19	2.07xx	-1.74	3.22	.38**	1.13**	3.44	.38**	1.13**
1. Self-Assertion	.43	-2.66xx	.49xx	3.44	-3.34**	-1.02x	4.80	.43**	4.05xx
2. Audacity-Timidty	1.92	3.87x	.02xx	4.80	.83**	1.98*	3.23	.83**	1.98*
3. Intellectual Interests ^a	.20	1.65	.01x	.80	3.65**	.19xx	.80	3.65**	.19xx
4. Motivations ^a	-2.87	3.05xx	.59xx	.80	3.65**	.19xx	.80	3.65**	.19xx
5. Applied Interests ^a	-6.53	1.03xx	-4.60xx	-3.28	-1.60	-3.53x	-3.28	-1.60	-3.53x
II. Dependency Needs	-8.31	-1.20xx	-6.10xx	-5.19	-3.48	-4.89	-5.19	-3.48	-4.89
5. Applied Interests	-6.53	1.03xx	-4.60xx	-3.28	-1.60	-3.53x	-3.28	-1.60	-3.53x
-11. Constraint-Expressiveness	-2.00	2.85xx	-6.49xx	-2.05	.09*	.12**	-2.05	.09*	.12**
-12. Diffidence-Egoism	.76	1.61	1.87	.48	4.40	.05xx	.48	4.40	.05xx
6. Orderliness ^a	-5.37	-2.45xx	-5.47xx	-5.08	-5.16	-4.12	-5.08	-5.16	-4.12
7. Submissiveness ^a	-4.03	.48xx	-1.55xx	-1.51	-1.96	-2.43	-1.51	-1.96	-2.43
-2. Timidity-Audacity	-1.92	-3.87x	-.02xx	-4.80	-.43**	-4.05xx	-4.80	-.43**	-4.05xx
8. Closeness	-4.71	-1.01xx	-2.42**	-1.99	-4.04*	-3.42xx	-1.99	-4.04*	-3.42xx
III. Emotional Expression	-4.72	-4.95	-3.40x	.37	-4.57**	-2.89x*	.37	-4.57**	-2.89x*
8. Closeness	-4.71	-1.01xx	-2.42**	-1.99	-4.04*	-3.42xx	-1.99	-4.04*	-3.42xx
9. Sensuousness	-.28	-1.25	-.45	-1.06	-3.27*	-.99*	-1.06	-3.27*	-.99*
10. Friendliness	-4.42	-1.58xx	-6.17xx	.77	-2.03	-4.06x*	.77	-2.03	-4.06x*
11. Expressiveness-Constraint	2.00	-2.85xx	6.49xx	2.05	-.09*	.12**	2.05	-.09*	.12**
12. Egoism-Diffidence	.76	-1.61	-1.87	.48	-4.40**	.09xx	.48	-4.40**	.09xx
1. Self-Assertion	.43	-2.66xx	.49xx	3.44	-3.34**	-1.02x	3.44	-3.34**	-1.02x
IV. Educability ¹	-6.34	.88xx	-4.52xx	-1.50	-1.52	-2.12	-1.50	-1.52	-2.12

¹The fourth second-order factor of Educability combines the first-order factors marked with "a".

* Significant difference from Social Science using t-test and .05 level of confidence.

** Significant difference from Social Science using t-test and .01 level of confidence.

x Significant difference from Natural Science using t-test and .05 level of confidence.

xx Significant difference from Natural Science using t-test and .01 level of confidence.

orderly, attentive to details, submissive, friendly, and educable. This greater self-control, acceptance of authority, and attention to social impression marks them off dramatically from the rest of the Raymond students.

Among the few women concentrating in mathematics and science, there are fewer intellectual interests; for some reason they seem to have limited interests in the other areas. But they are like the men in their relatively greater interest in conventional motivation, applied interests, and timidity. From these data it appears that a science student, despite the fact that he lives in the same environment and takes the same core courses, is able to escape the very personalized and introspective impact of Raymond better than others. Or perhaps he merely enters with a lesser proclivity to emotionality and introspection, and remains at a lower level relative to his peers throughout his career. How and why this difference is found can only remain unanswered.

The differences between the social science and humanities students, though many, seem to form no recognizable pattern; and the patterns which seem to emerge for the men are different than those of the women. Accordingly, any further analysis will have to be made by the reader.

A final analysis of personality differences within the Raymond sample was made on the basis of those who ranked themselves in the top 10% of their class and those who ranked themselves in the bottom half. The factorial data for those two groups can be found in Table 21.

There are more differences between the two groups of women than men. It can be seen that the higher academics had, as would be expected, higher intellectual interest scores and higher motivation. Though there are some sex differences, the stronger students showed more assertive, independent, and audacious needs and disliked being submissive, diffident, and orderly. The

Table 21. Activities Index Factor Standard Score Means for Raymond High and Low Academics

Factor	MEN		WOMEN	
	High Academics N=9	Low Academics N=7	High Academics N=9	Low Academics N=17
I. Intellectual Orientation	2.60	.60	6.88	-.10**
1. Self-Assertion	2.43	2.96	8.28	-1.60**
2. Audacity-Timidity	5.73	3.57*	6.51	2.62**
3. Intellectual Interests ^x	2.74	.62	4.44	1.66**
4. Motivation ^x	3.69	.60**	4.33	-1.30**
5. Applied Interests ^x	-3.80	-2.99	-.96	-4.07**
II. Dependency Needs	-8.58	-6.49	-5.75	-3.86*
5. Applied Interests	-3.80	-2.99	-.96	-4.07**
-11. Constraint-Expressiveness	-4.86	-1.99*	-2.86	-1.04*
-12. Diffidence-Egoism	-.06	-1.28	-3.86	.20**
6. Orderliness ^x	-5.96	.03**	-3.35	-4.31
7. Submissiveness ^x	-2.77	-3.43	-3.00	-.39**
-2. Timidity-Audacity	-5.73	-3.57*	-6.51	-2.62**
8. Closeness	-4.10	-4.30	-2.14	-1.56
III. Emotional Expression	-1.51	-2.84	-2.76	-1.24
8. Closeness	-4.10	-4.30	-2.14	-1.56
9. Sensuousness	1.70	-2.90**	1.14	.20
10. Friendliness	-5.13	-3.58	-2.32	-2.29
11. Expressiveness-Constraint	4.86	1.99*	2.86	1.04*
12. Egoism-Diffidence	.06	1.28	3.86	-.20**
1. Self-Assertion	2.43	2.96	8.28	-1.60**
IV. Educability ¹	-2.62	-3.30	.82	-2.35**

¹The fourth second-order factor of Educability combines the first-order factors marked with "x".

* Significant difference from High Academics using t-test and .05 level of confidence.

**Significant difference from High Academics using t-test and .01 level of confidence.

suggestion from these data is that the higher achieving students have personality patterns which might lead them to respond better to the relative lack of structure and freedom at Raymond. Conversely, the poorer students seem to prefer greater structure; whether they would learn any more under a different, more structured arrangement is another matter of conjecture.

Activities Index (College of the Pacific Results)

Again the matter of the non-random sample of COP students must be raised in order to intelligibly understand its implications for the interpretation of these data. Unlike the CCI, where each person was asked to be a reporter of conditions on his campus, the AI requires each person to describe himself. If one could put considerable trust in the common reports of a non-random sample and generalize from the small group studied to the whole population, it is not legitimate to assume the self-reports of a select sample of respondents is typical of the student body as a whole. Because of this inherent limitation of the data, no attempt will be made to identify the AI results from the COP sample with the student population as a whole.

However, because numerous educational decisions are made on the basis of mere assumptions and assertions of student motivation, it might be somewhat instructive to look at this personality data derived from a rather large sample of that population. It is only because this information may be much more valid than any other currently available -- not because it is the best possible data -- that it is being presented at all. As before, the results will be discussed separately for both men and women and separately according to items, scales, and factors.

The items on which there was a high degree of agreement among the COP sample have a considerable overlap with the preferences of the Raymond

sample. For this reason the item analysis will not be included in the text but can be found in Appendix E.

The performance of the COP sample in relation to the normative distribution on each of the 30 scales can be seen in Tables 22 and 23. The scale definitions are in Appendix B.

The factorial data for the COP as well as the other samples of this study are contained in Tables 17 and 18 on pages 112 and 113. The factors were previously defined on pages 105, 108-111.

The COP women included in this non-random sample are extraordinarily typical and undistinctive as a group, whatever that may mean. On only seven of the thirty scales did they score more than half a standard deviation on either side of the mean; on only one were they more than one standard deviation away from the mean. The men are more distinctive in relation to their normative group.

Both men and women display a fair degree of emotional liveliness. The relatively high scores on the scales of Sexuality, Emotionality, and Aggression suggests that both men and women are aware of their impulses and that they enjoy expressing them rather than inhibiting them and denying them,

These emotions are perhaps best expressed through peer group collegiate activities, as judged from the high scores of both sexes on the scales of Play and Sexuality (which includes items referring to typical college social life and dating patterns). The men scored quite high on Emotional Expression and the sub-factors of Sensuousness, Expressiveness, and Egoism, all suggesting a group centered mode of expression and containing many items emphasizing social impression.

Both men and women have moderate to low intellectual needs, and the pattern of these needs tends to conform to the traditional sex roles. That is

Table 22. Activities Index Scale Standard Score Means for Men¹

Scale	COP N=35	Raymond N=60
28. Sexuality-Prudishness	4.64	-2.98**
12. Emotionality-Placidity	4.24	5.26*
15. Fantasied Achievement	3.14	-.17**
5. Aggression-Blame Avoidance	2.50	3.19
19. Narcissism	1.97	-.74**
23. Play-Work	1.86	-.38**
18. Impulsiveness-Deliberation	1.82	3.85**
3. Adaptability-Defensiveness	1.67	-.58**
25. Reflectiveness	1.24	.75
27. Sensuality-Puritanism	1.14	2.65**
6. Change-Sameness	1.02	5.47**
29. Supplication-Autonomy	.99	-1.00**
14. Exhibitionism-Inferiority Avoidance	.92	-.24**
1. Abasement-Assurance	.91	-1.52**
9. Deference-Restiveness	.17	-4.03**
10. Dominance-Tolerance	.06	-1.14**
26. Science	-.22	-1.23*
21. Objectivity-Projectivity	-.32	.83**
22. Order-Disorder	-.55	-3.69**
8. Counteraction-Inferiority Avoidance	-.59	-2.40**
11. Ego Achievement	-.63	.40*
30. Understanding	-.79	-.12
4. Affiliation-Rejection	-.84	-4.84**
2. Achievement	-1.30	.05**
17. Humanities, Social Science	-1.41	2.82**
20. Nurturance-Rejection	-1.60	-.23**
16. Harm Avoidance-Risktaking	-1.67	-3.60**
7. Conjunctivity-Disjunctivity	-1.74	-3.40**
24. Practicalness-Impracticalness	-1.91	-3.79**
13. Energy-Passivity	-3.15	.39**

¹This standard score scale has a mean of 0 and a standard deviation of 2. Norms are based upon results of 558 junior and senior men in 21 colleges.

* Statistically significant difference from COP sample using t-test and .05 level of confidence.

**Statistically significant difference from COP sample using t-test and .01 level of confidence.

Table 23. Activities Index Scale Standard Score Means for Women¹

Scale	COP N=60	Raymond N=76
5. Aggression-Blame Avoidance	1.92	4.09**
12. Emotionality-Placidity	1.28	3.70**
23. Play-Work	1.28	-.28**
28. Sexuality-Prudishness	1.07	-2.40**
15. Fantasied Achievement	.89	1.85**
29. Supplication-Autonomy	.87	-1.41**
20. Nurturance-Rejection	.62	-.20*
25. Reflectiveness	.52	2.78**
6. Change-Sameness	.35	4.77**
11. Ego Achievement	.28	.88
10. Dominance-Tolerance	.26	-1.04**
22. Order-Disorder	.25	-4.76**
19. Narcissism	.22	-2.42**
27. Sensuality-Puritanism	.19	4.54**
16. Harm Avoidance-Risktaking	.15	-3.41**
7. Conjunctivity-Disjunctivity	.14	-3.91**
14. Exhibitionism-Inferiority Avoidance	-.02	-.54
2. Achievement	-.03	-.25
26. Science	-.06	2.22**
18. Impulsiveness-Deliberation	-.26	2.65**
9. Deference-Restiveness	-.62	-4.28**
3. Adaptability-Defensiveness	-.66	1.19**
4. Affiliation-Rejection	-.67	-3.90**
17. Humanities, Social Science	-.70	2.15**
8. Counteraction-Inferiority Avoidance	-.83	.07*
24. Practicalness-Impracticalness	-.83	-3.14**
13. Energy-Passivity	-.97	-.31
1. Abasement-Assurance	-1.17	-1.51
30. Understanding	-1.30	1.64**
21. Objectivity-Projectivity	-2.45	-1.55*

¹This standard score scale has a mean of 0 and a standard deviation of 2. Norms are based upon results of 518 junior and senior women in 21 colleges.

* Statistically significant difference from COP sample at .05 level of confidence.

**Statistically significant difference from COP sample at .01 level of confidence.

the men score low on Humanities-Social Science, average on Understanding (involving more abstract and impersonal intellection) and moderate on Humanities-Social Science, Science, and Reflectiveness.

It appears that the men are further along in their task of developing autonomy and independence from the control of others than are the women. The relatively low scores on the factors of Dependency Needs and the sub-factors of Constraint, Diffidence, Orderliness, and Timidity suggest that the men are well on their way toward forging their own personal style of life.

Finally, both men and women are fairly passive, finding it hard to become intensely excited about anything and to pursue their interests with great intensity, perhaps because the peer culture enforces a dictum to "play it cool," perhaps because it is their own low pressure style of life.

How do these personal inclinations of the sample relate to the press of COP? There is general consistency between the low environmental press of intellectuality and the moderate to low intellectual needs. The emphasis on emotional experience and expression channeled through collegiate playful activities is also consistent with the CCI data. The fact that the emotional development and intellectual interests of each sex is relatively consistent with the demands of the sex roles in the society further suggests that the students are personally changed very little by their education, that they are not personally challenged by their new knowledge to become different kinds of individuals from what is socially sanctioned. In essence, these data tend to confirm that COP is more effective in the conservative arts than the liberating arts; the only unusual personal struggle engaging the students on the sample appears to be that of the men for their independence, a socially structured crisis of long standing in the American tradition.

However, there is one major discontinuity between these data and the CCI data. Whereas the school is seen to emphasize order, structure, authority, and discipline, the students, and especially the men, emphasize a high level of emotional needs. They dislike inhibiting and controlling their emotions; they dislike having their lives structured for them; they dislike the authority of teachers and administrators above them. The high scores on Aggression indicates that they enjoy sniping at the so-called superiors who have the audacity to impose their wills on the students. But because the students are also attentive to social impression, and because they want to be liked and do not enjoy being independent and assertive, there is little likelihood that they will be able to express this irritation to those in power. They dislike being subservient, but they dislike confrontation with authorities even more. Apparently the peer group is the safety valve which drains off this suppressed hostility and which allows students to gain a sense of dignity and approval.

In addition to this general analysis of the COP data, two analyses were conducted to determine whether there were significant personality differences between students in different classes or with different levels of achievement. Because of the small number of individuals, the freshmen and sophomores were grouped together as were the juniors and seniors, and the analysis was made between these two combined groups. These data appear in Table 24.

If one wants to see what happens to students as a function of their COP experience, the limitations on these data are severe. They are obtained from a non-random sample; the underclassmen may not be like the upperclassmen when they entered; and the upperclassmen may score differently either because of personality change or selective retention. With these limitations in mind, it can be seen that the data are quite different for the two sexes. The upperclass men are less dependent on others for support, less submissive,

Table 24. Activities Index Factor Standard Score Means for COP Students in Different Classes

	MEN		WOMEN	
	Freshman-Sophomore N=16	Junior-Senior N=19	Freshman-Sophomore N=29	Junior-Senior N=31
I. Intellectual Orientation	-.65	-.02	-.28	.01
1. Self-Assertion	2.11	-.25**	.28	.83
2. Audacity-Timidity	1.98	2.54	1.58	.00**
3. Intellectual Interests ^x	-2.09	.50**	-.34	-.56
4. Motivation ^x	-2.22	-.96	-2.02	-.07**
5. Applied Interests ^x	-.58	-1.67	-.41	.27
II. Dependency Needs	-2.00	-3.55*	-1.36	.45**
5. Applied Interests	-.58	-1.67	-.41	.27
-11. Constraint-Expressiveness	-8.20	-3.76**	.17	-1.48**
-12. Diffidence-Egoism	-2.76	-2.11	-.50	-2.42**
6. Orderliness ^x	-.56	-1.72	-1.17	1.08**
7. Submissiveness ^x	.71	-.86*	-1.04	.37**
-2. Timidity-Audacity	-1.98	-2.54	-1.58	.00**
8. Closeness	1.88	-.66**	-.59	1.98**
III. Emotional Expression	9.27	1.77**	-.48	2.58**
8. Closeness	1.88	-.66**	-.59	1.98**
9. Sensuousness	4.70	1.74**	.03	1.42**
10. Friendliness	2.52	-1.48**	-1.33	1.39**
11. Expressiveness-Constraint	8.20	3.76**	-.17	1.48**
12. Egoism-Diffidence	2.76	2.11	.50	2.42**
1. Self-Assertion	2.11	-.25**	.28	.83
IV. Educability ¹	-1.66	-1.58	-1.60	.33**

¹The fourth second-order factor of Educability combines the first-order factors marked with "x".

* Significant difference from Freshman-Sophomore group using t-test and .05 level of confidence.

**Significant Difference from Freshman-Sophomore group using t-test and .01 level of confidence.

less interested in close, friendly, social relations, and less group oriented; they are more intellectual and individualistic than the underclassmen. The women upperclassmen are the reverse; they are more dependent, diffident, orderly, submissive, and more motivated by close, friendly relationships. Perhaps the women respond to the environmental pressures toward structure, order, and sociability by becoming more docile and feminine in the conventional sense. The men, on the other hand, may use that structure and order as an object from which to push off; they may develop more independence as a reaction against the environmental press. For this sample of students, the data suggest that COP may provide more of a liberating experience for the men than for the women. Why this reversal should be found is not at all clear.

Those who ranked themselves in the top 10% and the lower 50% of their classes were also compared. The results of this analysis are found in Table 25.

Although a very small number of cases were studied, these purposely select groups may nonetheless give some insight into the motivations of the strongest and the weakest students. Again there is a curious sex difference. The women high academics are more educable, having higher intellectual interests and motivation than the lows, but also they are more passive, obedient, submissive, and diffident. Apparently they excel by virtue of their dutiful, almost compulsive desire to do exactly what the teacher wants. The high male academics, on the other hand, are more assertive, audacious, and emotionally expressive than the lows; unlike the women, they seem to have diverted their energies into classroom combat than into classroom acquiescence. And unlike the low academics, they seem to have channeled their struggle for independence into intellectual and academic

Table 25. Activities Index Factor Standard Score Means for COP High and Low Academics

	<u>MEN</u>		<u>WOMEN</u>	
	High Academic N=6	Low Academic N=7	High Academic N=9	Low Academic N=14
I. Intellectual Orientation	2.31	.10*	.88	-1.15*
1. Self-Assertion	3.99	3.01	-1.99	-1.45
2. Audacity-Timidity	5.80	2.07**	-.33	-.18
3. Intellectual Interests ^x	1.68	.24	.97	-1.47**
4. Motivation ^x	6.18	2.98*	3.06	-2.11**
5. Applied Interests ^x	.48	-1.24	1.08	2.70
II. Dependency Needs	-4.93	-4.13	2.47	1.41
5. Applied Interests	.48	-1.24	1.08	2.70
-11. Constraint-Expressiveness	-11.77	-3.75**	2.07	-.51**
-12. Diffidence-Egoism	-2.13	-4.22	2.53	-1.41**
6. Orderliness ^x	-1.58	-.57	2.85	.88*
7. Submissiveness ^x	-.32	-1.51	4.56	1.19**
-2. Timidity-Audacity	-5.80	-2.07**	.33	.18
8. Closeness	.09	-1.81	.57	1.94
III. Emotional Expression	6.36	4.50	-3.52	1.94**
8. Closeness	.09	-1.81	.57	1.94
9. Sensuousness	1.51	4.07*	-2.72	2.27**
10. Friendliness	-1.83	1.17*	-5.21	2.48**
11. Expressiveness-Constraint	11.77	3.75**	-2.07	.51**
12. Egoism-Diffidence	2.13	4.22	-2.53	1.41**
1. Self-Assertion	3.99	3.01	-1.99	-1.45
IV. Educability ¹	1.59	-1.72*	2.83	-.07**

¹The fourth second-order factor of Educability combines the first-order factors marked with "x".

* Significant difference from High Academics using t-test and .01 level of confidence.

**Significant difference from High Academics using t-test and .05 level of confidence.

matters rather than into campus social life.

If these personality differences between sub-groups of students within the COP sample are at all representative of the student body, they suggest that different types of students respond to the very same environmental press in radically different ways. To explore these individual differences via a better sample could lead to fascinating future study.

5. Gaff Questionnaire

The final questionnaire used in this study was an omnibus instrument devised by the author. Since it has been administered only to the groups at the University of the Pacific, no normative data are available; comparisons can only be made between these samples. Because of the COP sampling problem, most of these findings cannot be interpreted as necessarily reflecting true similarities or differences between the schools; but because of their advantage over any other available data, they will be reported. A previous multi-college study involving COP and Raymond was conducted in 1963 by Parker Palmer and the findings interpreted by the author (Gaff, 1965); since some of the questions on the GQ were purposely borrowed from Palmer's questionnaire, it is possible to use that independent data to supplement the results of this limited COP sample and thereby to draw conclusions about the whole of the student body. When appropriate, Palmer's study will be used for this purpose. The various findings from the GQ will be presented in sections referring to campus activities, personal characteristics, and educational philosophies and practices.

a. Campus Activities

The Raymond and COP samples did not differ in the amount of time spent studying material unrelated to class requirements; most of each group reported spending 1-3 hours weekly in this fashion. Most of each sample read 1-3

newspapers, magazines, or periodicals regularly; there was no difference here. But there was a significant difference in the amount of time spent studying for class-related purposes.

From Table 26 it can be seen that Raymond students report spending considerably more time in academic study; their median is 31-35 hours versus a median of 20-21 hours for the COP sample. Since this finding is approximately the same for both groups as reported in the Palmer study, it is likely that this result represents a true difference between the two schools. The difference probably reflects the higher academic demands on the Raymond students as well as their greater intellectual motivation.

Surprisingly, students in the two groups do not differ in a statistically significant way in their reported participation in "organized extracurricular activities;" about 80% of each group were active in some organization. More COP students did say that they held elective offices; nearly a third of them held two or more such positions.

In the matter of dating there was a significant difference. More Raymond students reported having up to five dates per month, but more COP students had over six per month. There was no difference in the frequency of informal dating (coke dates, studying together, conversing, etc.) nor in the degree of satisfaction with the frequency of dating. Although nearly a quarter of each group were dissatisfied with the number of their dates (probably women), most were satisfied.

It appears from these data that despite the strong social thrust of COP, a fair proportion of the students from this sample are excluded from the social whirl. And despite the intellectual preferences of the Raymond students and their disdain for organized social life, it appears that approximately as many participate in those activities as do those from COP. However, judging from

Table 26. Average Number of Hours Reportedly Spent Studying for Classes Each Week by Raymond and COP Samples

	Raymond Percent	COP Percent
Under 10 Hours	1	10
11 - 15 Hours	5	19
16 - 20 Hours	6	21
21 - 25 Hours	9	12
26 - 30 Hours	18	9
31 - 35 Hours	22	10
36 - 40 Hours	16	6
41 - 45 Hours	15	7
46 - 50 Hours	4	2
Over 50 Hours	4	3

Holmogorov-Smirnov D-statistic = .40, significant at .01 level of confidence.

the fewer offices held and the fewer number of students dating often, the Raymond students do not seem to spend as much time in these activities nor get so deeply involved as do those sampled from COP.

b. Personal Characteristics

Raymond students have more liberal attitudes concerning economic, political, social, religious, and sexual matters than do the COP students. In the economic realm they are less opposed to government planning and spending, less concerned about reducing the federal debt, and more in favor of providing economic aid to poorer nations. Politically Raymond students are less concerned about an internal threat from a communist conspiracy, more willing to allow communists to teach in college, more supportive of freedom of speech even when criticism is directed against the government, and more likely to prefer the Democratic party.

In social philosophy more of the Raymond group believe major social institutions of the nation should be altered, and fewer agreed with these statements: "Above all, children should be taught to respect and obey their parents," "The War on Poverty will fail because poor people don't want to help themselves," "The courts should crack down on criminals by giving them harsher sentences," and "The most rewarding thing a woman can do is to be a totally dedicated wife and mother."

In the area of religion fewer Raymond students think it is wrong to question one's religious beliefs, and fewer think the United States needs a national religious awakening. They are more tolerant of premarital sexual relations between loving partners, and they believe society should be less punitive toward homosexuals and prostitutes.

All of these above differences are not only statistically significant but also similar to the findings of Palmer; thus, it is safe to conclude that Raymond

students have more liberal attitudes in these several areas than do the COP students. Taken as a whole these data suggest that the Raymond students are less authoritarian than their COP colleagues, at least as that term is defined by the original studies of the authoritarian personality (Adorno, et.al., 1950). Sanford (1956, 1962a) has provided a theoretical analysis which states that during the college years students tend to become less authoritarian, and he has both gathered and cited evidence to support his theory. If one accepts his notion that authoritarianism is an adolescent stage of development which can and should be overcome during the college years, and if one accepts the previous evidence concerning the ways these types of attitudes are integrated into the rest of the personality, it would appear that the Raymond students have achieved a higher level of personal development than the COP students. Of course, it is impossible to know whether the program of either school is responsible for this condition or whether the differences exist in the students each admits.

An inspection of the attitudes of the entering freshmen shows that they generally are between the extremes of the Raymond and COP samples, suggesting that some of the differences may be due to initial differences. However, Raymond is precisely the kind of environment which has been shown in previous studies (Jacob, 1967, Newcomb, 1966) to be effective in changing attitudes; that is it is small, homogeneous, and relatively isolated from opposing norms. Thus, one could argue the differential attraction or the personality change interpretations with equal cogency. Although the question cannot be definitively answered, probably both interpretations are partially correct.

An attempt was made to assess the major sources of distress to the students. There were very few statistically significant differences between

the Raymond and COP samples on these items. Surprisingly few students reported "fearing the outbreak of a thermonuclear war," or "believing in your own infinitesimal significance yet believing in nothing beyond man," and the men were only moderately concerned about "being drafted." Either these supposedly major concerns of the "post-modern" generation are not felt on the UOP campus, or these items did not tap them. Students were likewise unconcerned about the "typical" problems of youth, i.e., "being unappealing to the opposite sex," "having no prospects for marriage," "having too little money," or "having quarrels and misunderstandings with your parents." On the other hand, most were quite concerned with what might be called self-actualization. Specifically they were worried about "not learning as much as you should and could," "not taking full advantage of the opportunities at college for personal growth," "not fulfilling yourself," and "being uncertain as to your identity and purpose in life." There were no significant differences between the Raymond and the COP samples on any of these items. Apparently all of these young adults are more interested in taking advantage of the increasing opportunities of the 20th century than with the frightening possibilities of the new epoch; and they seem less concerned about the age old problems of youth, i.e., relations with the opposite sex and parental conflict than about realizing their innate potentialities.

Only four items were answered in a statistically different way by the two groups. More Raymond students were worried about "being lonely," "having few really meaningful friendships," "finding it impossible to totally communicate with another person," and "having too much course work that you can't develop deeper personal relationships." These four items suggest either that Raymond students may be striving for deeper relations which are by definition hard to achieve, or that the academic and psychic tensions may be taking a

quiet personal toll among the students. While Raymond is small and does foster intimate contacts in many respects, a larger percentage of students than at COP still experience it as a "lonely crowd."

Students were asked to rate nine common sources of satisfactions to persons in our society according to how much enjoyment they expected to receive from each. The results appear in Table 27.

Raymond students are less attracted to the satisfactions derived from family life, religious activities, and participation in local community affairs. On the other hand, they expect greater satisfactions from continued intellectual development, cultural activities, and creative endeavors in the intellectual and cultural spheres. These differences in life satisfactions are fairly consonant with the major qualities of each college and are generally confirmed by the Palmer study.

The fact that Raymond entering freshmen have expectations of attaining satisfaction in intellectual and cultural activities to about the same degree as the student body suggests that Raymond reinforces, but does not change them, in these plans. Their higher expectations of enjoying family relations and religious activities suggests that the institution either changes those aspirations or tends to eliminate students whose values are more dissonant with the majority.

Students were asked to rate a series of nine different characteristics of a career according to how important each was to them. The only difference between the two groups was that only 30% of the Raymond students said that "making an above average income" was either "important" or "very important," while 64% of the COP students chose one of those alternatives. There were no significant differences between the schools on the other alternatives which were "opportunities to be original and creative, opportunities

Table 27. Degree of Expected Satisfaction from Various Sources for Raymond and COP Samples

Source of Satisfaction	Degree of Expected Satisfaction					Raymond COP Statist. Diff.
	High 1	2	3	4	Low 5	
1. "Career or Occupation"						
Raymond	38	42	15	2	2	N.S.
COP	43	42	8	5	1	
Raymond Entering Freshmen	57	32	5	2	5	
2. "Family Relationships"						
Raymond	50	26	22	6	5	.05
COP	72	15	3	4	4	
Raymond Entering Freshmen	70	9	11	5	5	
3. "Religious Practices and Activities"						
Raymond	9	7	16	15	51	.01
COP	13	26	22	20	20	
Raymond Entering Freshmen	23	18	25	9	23	
4. "Citizen Participation in Local Community Activities"						
Raymond	4	12	37	30	15	.05
COP	9	27	38	19	6	
Raymond Entering Freshmen	16	16	34	25	9	
5. "Citizen Participation in Activities Leading to National and International Betterment"						
Raymond	8	20	29	28	14	N.S.
COP	6	16	33	31	13	
Raymond Entering Freshmen	11	30	20	27	11	
6. "Reading and Continued Intellectual Development"						
Raymond	55	33	8	1	2	.05
COP	34	39	15	10	1	
Raymond Entering Freshmen	48	39	9	5	-	
7. "Fostering and Furthering Meaningful Friendships"						
Raymond	52	34	7	4	1	N.S.
COP	56	32	5	3	3	
Raymond Entering Freshmen	45	30	18	5	2	
8. "Attending or Participating in Literary, Dramatic, Musical, or Artistic Activities"						
Raymond	31	38	16	11	2	.05
COP	20	29	32	11	8	
Raymond Entering Freshmen	39	30	23	7	2	
9. "Creative Activity in the Intellectual or Cultural Realms"						
Raymond	36	31	20	7	5	.01
COP	21	22	28	21	9	
Raymond Entering Freshmen	34	39	14	11	2	

to be helpful to others or useful to society, avoiding a high pressure job, living and working in the world of ideas, freedom from supervision, expected moderate but steady progress rather than a chance of extreme success or failure, opportunities to work with people rather than things, and opportunities to advance an ideal or cause." It appears that most responded to the social desirability of these items and failed to differentiate among them.

Palmer used the same alternatives but asked the students to choose only the three most important characteristics. Using that approach, he found that Raymond students were not only less concerned with income but also more interested in living and working in the world of ideas and were more desirous of opportunities to be original and creative. Though the differences between these two studies may theoretically reflect a sampling bias or a change in the occupational desires since 1963, a more likely explanation is that the method used here masked the relative importance of these job dimensions. Certainly the intellectual and creative pulls are more consonant with Raymond than with COP students, judging from all the other information contained in this study.

Raymond and COP students prefer quite different types of careers. Forty three percent of the Raymond students prefer an academic career involving teaching or research; 26% expect a professional career as a lawyer, doctor, etc.; and 15% desire to work in the creative arts. Among the COP sample 29% wanted an academic career, 27% a professional career, and 20% expect to be a full-time wife and mother. Only four percent of the Raymond sample, which is composed of a slightly larger proportion of men, chose the latter alternative. It appears that for a substantial portion of the Raymond students intellectual and academic involvement constitutes in effect on-the-job training, for a future vocation. Whether they are attracted to teaching and research

because of their experience in this intellectual environment, or whether this is an intellectual environment partly because they are interested in an academic career cannot be answered.

The samples differ in terms of the highest degree they expect to earn. A total of 93% of the Raymond students report that they expect to obtain an advanced degree; but curiously 84% say they expect only a Masters degree. Only six percent expect to earn a doctorate or its equivalent. Among the COP sample 60% expect to acquire an advanced degree; 39% expect a Masters and 19% a doctorate.

With Raymond having such an academic environment stressing high aspirations and with such a large proportion pointing toward an academic career, the finding that only six percent plan to obtain a doctorate is surprising. Perhaps these students, many of them thinking of themselves as present-oriented existentialists cherishing their own freedom, do not plan more than one academic step ahead; perhaps they imagine the jump from college to a doctorate program will be as difficult to bridge as was the step from high school to college; if so, they may feel discouraged or unqualified for a much more rigorous or strenuous program than they encountered at Raymond. Whatever the reason, this finding is unexpected in light of other evidence presented here. It is even contrary to the announced intentions and eventual actions of considerably more than six percent of the graduating seniors in each of the first three classes; perhaps a quarter to a half of the graduates have actually entered doctoral programs.

c. Educational Philosophies and Practices

Burton Clark and Martin Trow (1966; Clark, 1962; Trow, 1962) have described four types of student subcultures which can be found on most college campuses. The author translated their theoretical descriptions

of these four subcultures into statements of educational philosophies. Each student was asked to rank order these four positions in terms of how accurately they describe his own view of the purposes of a college education, and then to do the same for his closest friends. The four statements along with the label of the subculture from which each was taken are found below. Of course, the identifying label was not found on the student questionnaire.

Vocational. I am interested in education primarily because it will prepare me for a future occupation. I am not particularly interested in the social or purely intellectual phases of campus life, although I don't totally ignore them. I try to obtain generally satisfactory grades, but I study hardest and best when I can see that my efforts will have some direct and practical application to my future job.

Academic. I am in college basically to learn, to acquire knowledge, and to understand the world. I am seriously concerned with the academic side of school; for example, I want to get good grades, do more than the minimal requirements for several of my courses and learn to think. But while my primary interest is to cultivate my intellect, I am also interested in the social and extra-curricular activities which are indeed a meaningful part of my college life. Extracurricular activities help me to develop social skills which will make my intellectual achievements both more valuable to others and more meaningful to me.

Collegiate. What I want most from my education is to become a well-rounded individual. While I don't entirely ignore the academic requirements or intellectual opportunities found on campus, I am really most interested in and satisfied by social activities such as dating, parties, dances, athletics, rewarding friendships, living group events, and other extracurricular activities. I hope not only to learn about the world but to acquire social skills so that I can get along with all kinds of people.

Non-Conformist. I want to learn about life in general, but especially about those things which are directly relevant to my life and myself. I am interested in the world of ideas, study enthusiastically, but often pursue my own intellectual interests to the relative neglect of my more formal course requirements. I eagerly seek new and varied experiences and especially try to cultivate my aesthetic sensitivities. Most organized social life on campus is irrelevant or disagreeable to me, as is much of life in the wider society, because it does not satisfy my need for meaning or purpose in life.

Since the results were almost identical for the self-reports and the reported views of their closest friends, only the data for the students' own philosophies will be presented. Those results are found in Table 28.

Almost all the Raymond students prefer either the Academic or the

Table 28. Rank Order Preferences for Alternative Philosophies of Education Among Raymond and COP Samples

	Vocational	Academic	Collegiate	Non-Conformist
Raymond				
First Choice	7	46	4	42
Second Choice	16	41	17	27
Third Choice	42	7	34	16
Fourth Choice	36	6	45	15
COP				
First Choice	13	43	23	14
Second Choice	35	31	24	10
Third Choice	33	18	29	20
Fourth Choice	16	7	24	55
Statistical Difference Between Raymond and COP				
	D=.27	D=.13	D=.25	D=.44
	.01	N.S.	.01	.01

Non-Conformist statements, with the other two relegated to last place. More of the COP sample say the Academic philosophy is their first choice, the Vocational and Collegiate positions are moderately attractive, and the Non-Conformity is definitely in last place. Raymond and COP students do not differ in their liking of the Academic statement, but the Raymond group is less enthusiastic about the Vocational and Collegiate philosophies, and is much more attracted to the Non-Conformity view.

These data reinforce the earlier conclusions about the personalized intellectual approach adopted by the Raymond students and their relative disinterest in vocational training or typically collegiate amusements. They do provide a new insight into the COP students, however. The very fact that COP students, in this sample at least, regard the Academic position as their first choice suggests that they have a primary desire to obtain a good intellectual education. This desire stands in stark contrast to the environmental press of a low intellectual climate, and it suggests a reservoir of student interest in the classroom activities even though the pull of the anti-intellectual peer group is strong. However, these very same students have apparently not learned that a strong academic orientation necessarily implies exposing and confronting intellectual differences between individuals, even if they be close friends or threatening authorities, engaging in occasional intellectual combat, suffering disquieting personal and social disruptions, and pursuing an ambiguous quest. Without a commitment to these consequences, the acceptance of an academic philosophy is merely the first step toward academic excellence.

A series of 10 questions were asked to determine the extent to which students would openly express their ideas in classroom situations, especially when their own ideas conflict with those expressed by either other students or by the teacher. The responses to those items are summarized in Table 29.

Table 29. Answers Given by Raymond and COP Samples to Items Measuring Openness to Classroom Communication

In a Typical Class Would You:	Raymond		COP		Signif. Diff.
	Yes	No	Yes	No	
1. "Respond to a direct question put to you by the teacher by giving factual or interpretive information contained in the text or other required reading?"	74	25	83	16	N.S.
2. "Respond to a direct question put to you by the teacher by giving your own interpretation or evaluation of the issue under consideration?"	87	12	76	23	N.S.
3. "Volunteer for class consideration factual or interpretive information contained in the required reading?"	68	30	47	53	.05
4. "Volunteer for class consideration your own interpretation or evaluation of the issue under consideration?"	83	15	62	36	.05
5. "Ask probing questions of a fellow student who is not a friend and who has stated a position with which you disagree?"	87	12	56	43	.01
6. "Explicitly criticize the views of a fellow student who is not a friend and who has stated a position with which you disagree?"	58	40	33	65	.01
7. "Ask probing questions of a fellow student who is a friend and who has stated a position with which you disagree?"	88	11	65	32	.05
8. "Explicitly criticize the views of a student who is a friend and who has stated a position with which you disagree?"	66	34	38	61	.01
9. "Ask probing questions of a teacher who has stated a position with which you disagree?"	94	5	64	35	.01
10. "Explicitly criticize the views of a teacher who has stated a position with which you disagree?"	55	45	21	77	.01

It can be seen that while there are no differences in the extent to which students say they would respond to a direct question by the teacher, a larger percentage of Raymond students report they would volunteer information, ask probing questions of both students and teachers with whom they disagree, and explicitly criticize views of students and teachers with whom they disagree. Clearly the Raymond students say they would act in a way more conducive to the educational enhancement of both themselves and others; they appear to be more willing to engage overtly in dialogue and to search for the truth with the other participants in the educational enterprise.

There are several reasons why this should be so. First, the structure of Raymond facilitates more classroom discussion; the small class size, the predominately seminar teaching method, the absence of a threat of grades, and the fact that a teacher is less of a stifling authority figure because of his frequent exposure in many different capacities all combine to encourage student communication.

But there are a number of personality differences as well which might contribute to this finding. The aggressive and personalized approach taken toward intellectual matters and the relative unimportance of affiliation makes Raymond students more likely to pursue an argument to its conclusion. Also the peer group norms at Raymond are more in line with the values of the classroom than is the case at COP. Thus, the academic structure, the personality dispositions of the students and the peer group standards support open dialogue at Raymond, while the classroom structure, student personalities, and the peer group standards militate against openness of communication at COP. Even so, between a third and a half of the Raymond students confess they would not explicitly criticize the views of a student or a teacher if they disagreed; certainly not all of them are equally open to classroom debate or discussion.

Students were provided with a total of 40 different statements about teacher characteristics, and they were asked to rate how accurately each statement described "most teachers in the three divisions of the curriculum." Although the items have not been factor analyzed nor independently validated, and although when grouped into scales they have only face validity, it still might be revealing to examine these results.

In general, most students at each college held quite charitable views of most of the teachers in all three divisions. But there were some specific differences. Perhaps the most striking difference is that the social science and humanities teachers at Raymond were perceived to possess relatively more knowledge of their own disciplines, to convey more enthusiasm for their subjects, to discuss to a greater extent the value relevance of their knowledge for the student and for the society, to be more sociable, and to be less authoritarian in relation to students. These differences may be explained in the obvious way by simply assuming they accurately portray the individuals in these two groups. However accurate this interpretation may be, it is also likely that the Raymond structure of the small school, small classes, seminar instruction, and the living and learning environment may allow teachers to better communicate these qualities to students. The implications of this structural interpretation are that most Raymond social science and humanities teachers if placed in the COP structure might be perceived more like the COP faculty; conversely, most COP faculty placed in a Raymond structure might be perceived in a better light by students.

It is curious that the natural science faculty at Raymond are perceived to be significantly different from their colleagues at COP on many fewer items than is the case for teachers in the other divisions. Compared with their COP counterparts the Raymond natural science faculty are seen as more willing to

discuss value ramifications of their knowledge for the society and as somewhat less authoritarian in their relationship with students. Their being judged as relatively more like those in COP may be due to the nature of the subject matter. Natural science, unlike the other divisions, has been blessed with a cumulative body of knowledge. If obtaining an education in one of these disciplines requires the mastering of much of that knowledge, then teachers in an innovative and personalized college may not be perceived much differently than teachers in a more conventional one. In support of this knowledge-centered approach of the natural sciences, more students in each college seem to believe natural science teachers have somewhat more knowledge of their specialties than do teachers in other divisions. Whatever the reason, it appears that the natural science teachers are perceived to be somewhat out of the mainstream of Raymond, and more like their counterparts at COP than is true for teachers in the other divisions.

Finally, it is curious that there are no differences in the rating of Raymond and COP professors in any division according to their appreciation for interdisciplinary knowledge. Despite Raymond's commitment to general education and interdisciplinary study, it is interesting that its faculty are not perceived to be significantly different from the specialists in a conventional program. Perhaps the disciplinary rhetoric and the attempts to implement those ideals have not filtered down into the classroom; perhaps the interdisciplinary education found at Raymond comes primarily from taking courses in different disciplines rather than from multi-disciplinary study within most courses; or perhaps there is so much interdisciplinary work that the students are not exposed to narrow disciplinarians so that they have a basis of comparison.

A list of six different goals of a college education were presented to students, and they were asked to say how important each goal is to them and the extent

to which they believe they have achieved each goal. The results are found in Table 30.

Raymond and COP students in these samples do not profess significantly different purposes, with the single exception that more COP students are concerned with a vocational application of their knowledge. And there are only two reported differences in the reported attainment of these six goals; more COP students predictably believe they are acquiring vocationally relevant knowledge, and more Raymond students understandably believe they are obtaining a broad general education.

These findings suggest that the Raymond and COP students are more similar in general purposes than much of the earlier data would have suggested. They also suggest that despite the great differences in philosophy, structure, climate, and student personalities, most students at each school believe they are attaining these goals to approximately the same extent. Apparently Raymond and COP are functionally alternative approaches to the perceived attainment of the very same goals. Of course, these data cannot reveal the extent to which these purposes have been achieved in any objective fashion; but it is significant that students think they have equally learned how to get along with others, to develop esthetic appreciation, to acquire a personal identity, and to be an effective citizen.

6. Institutional Data

Two other kinds of information which are necessary to examine in a study of the consequences of the Raymond program have been collected by the college. They deal with information about retention and measures of achievement.

After making a review of the literature on the "drop-out problem," John Summerskill (1962, p. 631) states,

In summary, American colleges lose, on the average, approximately half their students in the four years after matriculation. Some 40% of

Table 30. Importance and Attainment of Various Educational Goals as Reported by Raymond and COP Samples

Goal	Degree of Importance				Sign. Diff.	Degree of Attainment				Stat. Diff.
	Very Imp.	Imp.	Un.	Very Un.		Very Much	Quite a Bit	Some	N.V. Much	
1. "To develop knowledge, skills and techniques which are directly applicable to your career." Raymond COP	18	61	18	2	.01	10	24	42	22	.01
	58	39	2	--		34	36	22	6	
2. "To obtain a broad general intellectual education and an appreciation of ideas." Raymond COP	77	23	--	--	N.S.	64	31	4	1	.01
	68	30	--	1		31	48	16	4	
3. "To develop the ability to get along with different kinds of people." Raymond COP	47	41	8	3	N.S.	25	41	26	8	N.S.
	61	33	4	--		40	34	22	3	
4. "To develop aesthetic appreciation and enjoyment, especially of literature, art and music." Raymond COP	45	47	7	--	N.S.	26	39	28	5	N.S.
	26	55	17	1		16	30	35	16	
5. "To understand yourself, develop a personal identity complete with meanings and values for your own life." Raymond COP	74	21	3	1	N.S.	36	40	18	5	N.S.
	73	23	3	--		27	36	28	7	
6. "To acquire the knowledge and skills which will allow you to contribute effectively as a responsible citizen to the solution of socio-political problems." Raymond COP	17	57	22	4	N.S.	9	36	43	11	N.S.
	21	54	21	3		14	30	33	21	

college students graduate on schedule, and, in addition, approximately 20% graduate at some college, some day. These have been the facts for several decades in American higher education.

Can the innovations of Raymond College make any improvement in this figure?

The relevant data for the first three classes are found in Table 31. It can be seen that a total of 99 students, or 43%, of the 299 admitted in the first three classes have graduated; 39% of these graduated in three years, an additional four percent subsequently succeeded. Although statistics on COP retention apparently are not compiled officially, a study by Clark and Heist (1966) found that 41% of the COP entering class of 1959 graduated in 1963. It appears that both Raymond and COP stand well within the unfortunate national tradition described by Summerskill.

It might be argued that a low retention rate is not necessarily a bad thing; it might reflect a process of natural selection in which the more intellectually able survive and the poor stock becomes extinct. Whatever merit this elitist view might have for explaining the national data, it does not seem to explain the high drop-out rate at Raymond. By using the SAT scores as a measure of intellectual ability and by comparing the scores of the entire entering classes with those of the graduates, one can find very little difference. Although no tests of statistical significance have been made, it seems obvious that on these measures Raymond has not succeeded in retaining the most capable students and eliminating the less able. Indeed, it appears that almost a random selection of all entering students according to this measure of ability complete the Raymond program. Since this is the case, the low retention rate becomes a problem of quality as well as quantity.

While it is important to explain why such a large proportion of students leave most of the nation's colleges, it is especially puzzling why so many students, and so many intellectually qualified ones, leave Raymond where the

Table 31. Entering SAT Scores for Raymond Students Entering, Graduating, and Leaving for Academic Reasons

	First Class	Second Class	Third Class	Total
All Entering				
Number	77	75	77	229
SAT Verbal	585	581	590	
SAT Math	564	547	589	
All Graduating				
Number	40	27	32	99
SAT Verbal	592	576	601	
SAT Math	577	536	614	
All Required to Leave for Academic Reasons				
Number	---	13	12	
SAT Verbal	---	567	564	
SAT Math	---	546	549	

innovations have attempted to create a more personalized and effective school. One important dimension of this problem involves faculty decisions to dismiss from school those students who perform poorly. Though the statistics for the first class are not available, 17% of the second class and 16% of the third class have been asked to leave the college because they have not achieved minimal standards of academic achievement. Clearly many of these students have relatively high SAT scores.

Another part of the answer may be that a large percentage of the Raymond student body is composed of individuals whose personality profiles look very much like those students identified in other studies as highly creative (Heist, 1966). And the evidence (Heist, 1966; Snyder, 1966) indicates that these kinds of students who are highly independent, intellectual, and esthetically motivated are poor risks to complete any college program.

But a larger part of the answer has already been provided by the evidence of this study. The academic, social and personal pressures which bear on Raymond students are intense. The pressures to read and think, to form interpretations about a wide array of subjects, to apply that knowledge to one's self, to feel deeply and experience life, to discover who one really is and who he can become, to have high aspirations and to strive energetically to achieve them, to express ideas when they will surely be exposed to sharp criticisms if they do not measure up to the highest standards, to act authentically on the basis of one's own commitments, to communicate intimately with other beings; in a word, the pressures to be fully human undoubtedly take their silent toll which becomes visible in the retention rate. The very same pressures which produce personal growth are probably the ones which are most responsible for the low retention rate.

All Raymond seniors are required to take the Graduate Record Examination

Area Tests, widely used tests designed to measure breadth of knowledge in the three traditional divisions of the liberal arts curriculum, social science, humanities, and natural science. The performance of the Raymond seniors can be seen in Table 32.

It can be seen that compared with a normative distribution of seniors, the mean Raymond Social Science scores were at the 84th, 88th, and 90th percentiles; and the mean Humanities scores were at the 82nd, 92nd, and 90th percentiles; while the average Natural Science results were at the 79th, 86th and 90th percentiles.

To make an institutional comparison it is necessary to have a distribution of means of colleges in which all seniors are required to take the tests. Such a distribution from 243 schools is available, and on that distribution Raymond ranks at the 99th percentile in both Social Science and Humanities all three years and at the 97th, 98th, and 99th percentiles in the Natural Science section.

In light of the exceptional showing of Raymond seniors on these achievement tests, several cautionary comments are in order. First, the Area Tests are only one measure of achievement -- vast amounts and different types of learning are not tapped by those examinations. And although the normative samples are broad and the scales sophisticated, the normative data are not entirely representative of all seniors or all colleges. Third, since these tests measure breadth of knowledge, the performance of the Raymond seniors may reflect only that they have taken a wider array of courses than most college students.

And yet, although these tests are only one measure, it is a respected and widely used one; although the norms are not necessarily representative of the entire nation, they are based on both large and broad samples. And if this striking performance of the Raymond seniors is because of the core curriculum then it appears to validate that aspect of the program, for a primary avowed

Table 32. Graduate Record Examination Area Tests Means and Percentile Rank for Raymond's First Three Graduating Classes

	Mean Scale Score	Percentile Rank Among Seniors ¹	Percentile Rank Among Colleges ²
Social Science			
First Class	596	84	99
Second Class	622	88	99
Third Class	630	90	99
Humanities			
First Class	596	82	99
Second Class	648	92	99
Third Class	632	90	99
Natural Science			
First Class	577	79	97
Second Class	610	86	98
Third Class	619	89	99

¹Based on norms of 3,035 seniors in 21 colleges in Table 6, the Area Tests in Interpreting GRE Scores: Data for Basic Reference Groups, Educational Testing Service: Princeton, New Jersey, 1966.

²Based on distribution of institutional mean scores of entire senior classes from 243 schools involving 31,544 students in 1962-63. Data from Table 2, Area Tests: Seniors. Distribution of Institutional Means in Robert J. Huyser and Gerald V. Lannholm, Graduate Record Examinations Special Report 64-1, Educational Testing Service: Princeton, New Jersey, April, 1964.

objective of the school is to provide that broad general education. In addition, it must be kept in mind that the Raymond seniors have completed only three years of formal higher education compared with the four years of seniors in the normative sample. Thus, the three-year aspect of the program, perhaps the most radical innovation attempted, receives strong support from these data. Indeed, the evidence shows that Raymond seniors have a broader scope of knowledge after three years than most college students have after four.

IV. RAYMOND INNOVATIONS IN RETROSPECT

The entirety of these data demonstrate the innovations launched by Raymond College have been remarkably successful in terms of both its own purposes and the classic ideals of a liberal education. The high scores on the Intellectual Climate factor of the College Characteristics Index; the high ranking on the Awareness and Scholarship scales of the College and University Environment Scales; the personalized and independent intellectual styles of students and their relatively advanced stage of emotional development as measured by the Activities Index; the liberal attitudes and, by inference, the relatively low level of authoritarianism of the students; their preferences for the Academic and Non-Conformist philosophies of education over the Vocational and Collegiate; the exceptional performance of seniors on the Graduate Record Examination Area Tests -- all of these and other findings coalesce to validate the radically innovative philosophy and program adopted by Raymond.

In order to be perfectly clear about these results, they do not prove that any of the institutional practices adopted at Raymond are necessarily better than those found in more conventional schools. This is so for several reasons. First, Raymond is not altogether successful nor equally successful with all students. Second, since all of the program forms an integrated whole, it is impossible to know with exactitude which dimensions are most responsible for the results obtained. Third, it is logically impossible to draw conclusions about the effectiveness of these institutional practices from a single instance. Any of these several practices which have worked well at Raymond may, in a different context, prove to be ineffective; and if they had been infused with different values or manned by different people, they may not have been effective even at Raymond. Finally, it is quite possible that very different

philosophies of education and the structures they dictate may reach similar ends, and they may conceivably reach those ends more effectively or efficiently.

What can be concluded is this: the combined innovations have been generally effective in producing the kind of environmental conditions and the kinds of students desired. Also, the evidence demonstrates that the traditional goals of a liberal education can be realized with very different academic mechanisms than currently found in most colleges. And, despite the handicap of not knowing exactly what the students were like when they entered the program, they appear in general to be more broadly educated and more emotionally mature than students in all but the choicest colleges in the United States. Finally, these favorable results have been achieved in only five years on the campus of a school never previously noted for its academic achievements; this has been possible only because of the cluster college structure.

While these conclusions are valid, they fail to tell the whole story of the Raymond experience. To be sure, the results have been generally favorable, but the innovations have not been an unqualified success. A full report of the consequences of the Raymond innovations must contain a discussion of these features in the light of its five years of experience. This section contains some views about the Raymond culture gathered by the method of participant-observation; this anthropological method will provide impressions which will supplement the data derived from the statistical survey.

One of the best ways to approach an anthropological assessment of the Raymond program is via the spirit in which the school was established. That spirit can best be labeled utopian. In a study of experimental colleges Goodwin Watson (1964, p. 97) has noted,

Any new experimental school is a kind of utopian project. Its organizers seldom wish to advance a limited reform -- they plan to introduce a new

integrated whole. Each sets out to design the best combinations of the many good features of schools known to the founders. The new school is a dream come true.

So it was at Raymond College. Raymond was a vision of Martin, and it was a vision which lured faculty and students with its cogent criticisms of the status quo, with its contemporary and creative alternatives, and with its promises of offering the best of all possible educational worlds.

In order to use the term "utopian" as an analytic tool to understand the spirit of this new school, a typology will be created. This typology will contain the major features of utopianism, and although it will not accurately describe any single group, it may be useful as an intellectual device for understanding qualities of utopianism wherever it occurs. The concept contains several distinct but interrelated dimensions.

- 1) A utopia is based on widespread and deeply felt criticisms of the contemporary scene; the current social disorders are thought to be so severe that they cannot be overcome by piecemeal adjustments. Those evils necessitate an entirely new and radically altered way of life.
- 2) The new design calls for the solution to the present evils by adopting their logical opposites. Though the innovators have had no experience with their proposed "society of opposition," they assume that the antithesis will necessarily be better than the present system.
- 3) The utopia is at its best a work of art. The various threads of the design are woven tightly together, each strand blending with the rest and each reinforcing the entire fabric. For this reason the new structure is resistant to change, for change in any part may endanger the whole.
- 4) The utopia on paper is an abstract idea of the "perfect order." In its ideal Platonic form the plan tends to assume perfect motivation of all individuals. Naturally, the abstract idea may be expected to suffer some

distortion as it is translated into reality.

5) The new creation, being in opposition to the established order, must not risk contamination; it must be sharply set apart from the corruption around it. All outsiders tend to be viewed with scorn or contempt, occasionally mixed with pity, and they are thought by the loyalists within the protective confines of the isolated colony to be lacking their own purity of heart.

6) In direct proportion to its rejection of those without, the utopia succeeds in uniting those within. The internal cohesiveness is gained in part from its rejection of the out-group.

7) The high moral purposes of the new organization generate the motivation needed to achieve them; the new faith welds its members together and directs their common efforts toward the realization of their common goals. Vast amounts of potential energy are released, and the utopians can achieve results under their heightened motivation even they had not thought possible.

8) Since the purposes are widely shared, the participants tend to live in the world of institutional ideals. These ideals condition their perceptions of the in-group, of the out-group, and even of their individual selves. The abstract image of outsiders as evil becomes so overwhelming that little differentiation is made between types and qualities of out-groups; the in-group members are likewise by definition morally good in a relatively undifferentiated fashion; and the self is seen as a perfect embodiment of the communal ideals.

9) Because they live in an ideal world, utopians fail to notice facts which might tend to disconfirm their beliefs. When those deviations within the group become so gross as to command attention, the evils are attributed to weaknesses of individuals rather than to any deficiency of the system. Because the unfaithful represent a threat to the entire community, they are treated harshly and often banished from the circle of the elect.

10) In a utopia individuals are not inclined to question their purposes. Nor is there any need to obtain knowledge about the consequences of those purposes or of the structures which they dictate. Those purposes and practices are self-justifying -- they are matters to be accepted on faith. To question those bases of the moral order or to insist on obtaining empirical knowledge about them constitutes heresy.

Because the original design cannot be implemented exactly as conceived, because even the best plan fails to account for every contingency, because there are unanticipated consequences (some of them antithetical to the original purposes), and because they are hostile to empirical knowledge, preferring rather to solve their problems simply by re-proclaiming their principles, the history of utopian settlements has not been a happy one.

Deferring for a moment the application of this analytic typology to Raymond, it must be pointed out that utopian thinking abounds in the literature on higher education. Statements like the one by the Berkeley FSM student previously quoted on page 4, books by outspoken critics like Paul Goodman (1964), articles by competent researchers like Joseph Katz and Nevitt Sanford (1965), and even government publications by thoughtful men like Winslow Hatch (1960) all document a growing list of evils in the present educational machinery and make numerous proposals, practically all untried by them, to overhaul the existing equipment. These national utopians tend to assume that all will be well in higher education if only their entirely reasonable proposals calling for a new grading system, more student freedom, more independent study, less emphasis on collegiate fun-type activities, a greater emphasis on the interrelatedness of knowledge, smaller educational units, more teacher-student contact, and the like would be implemented. Because American higher education is so often cut out of the same mold, few have had any substantial

experience with these new proposals; since they lack detailed knowledge about their most reasonable alternative plans, even the most rational of men may be made into utopians. Their proposals are often advanced with grandiose hopes and sometimes with a fervor which reveals their idealism. In the wake of this burgeoning national discussion concerning the state of higher education, Martin was able to draw upon many of these largely untried proposals, blend them together, and design a whole college in which these abstract proposals could be given a full and fair trial.

While it is possible to agree with Watson that "any new experimental school is a kind of utopian project," its position as a cluster college allowed Raymond to become more utopian than most. Because it was a semi-autonomous college located on the campus of an established and conventional school, the Raymond pioneers not only fought against the abstract problems of the conventional system but could concretize those problems by pointing them out at the rest of the university. Reference was earlier made to Erikson's concept of an identity crisis, and although he meant that term to apply only to individuals, it offers utility to describe this institutional phenomenon. Raymond as a fledgling school was concerned with creating an institutional identity. One of the ways a positive identity can be created according to Erikson is to first form a negative identity, that is, an image of what one would not like to be under any circumstance. Thus, Raymond could establish its own identity by creating an image of inadequate undergraduate education, by assuming it abounds at colleges throughout the country, and by concretizing that symbolic evil in COP. After making COP a specific negative identity, Raymond could strengthen its positive institutional identity, advance its own ideals, and mobilize its members simply by criticizing its neighbor. Whatever influence this phenomenon had on the relations between the two schools, and

they will be explored later, Raymond's reformism within the structure of a cluster college on a traditional campus did contribute to its utopianism.

A brief recounting of life during Raymond's formative years will illustrate this utopian mentality. The purposes of the college were expounded repeatedly by Martin in speeches which blended the style of Protestant evangelism with the contents of sound educational philosophy. These ideals, echoed by many, were a call to arms. The faculty responded by devoting great attention to creative structuring of their courses and to filling them with relevant content. Their frequent and enthusiastic contact with students in a variety of academic and non-academic situations, their involvement in independent study projects, and their frequent, lengthy, and often intense faculty meetings in which they conscientiously endeavored to make Raymond a Great College were visible indices of their commitment. Indeed, their involvement did not cease at the edge of the campus; they often met socially as well, and more often than not, their conversations centered on the new school.

Students too responded to the clarion call. The promise of being a better human being and somehow better educated than students in other colleges motivated them to accept the challenge of the core curriculum, to endure daily classes with the added burden of seminar participation, to pursue the heavy reading and writing assignments, and to tolerate the virtually unbroken 10-month academic year. Almost unmercifully they structured, factored and restructured their minds and their selves in a never ending cycle as they encountered new knowledge and new people and as they searched for its relevance for their personal lives.

The entire community was brought together weekly by the collective ritual of the Wednesday all-college dinner and program. In addition, there were periodic formal gatherings of the entire community as in the annual faculty

research lecture and the yearly awards banquet. Informally there were frequent town-meetings of most of the group to thrash out common problems and an occasional off-campus retreat in which significant portions of both faculty and students discussed matters of concern to the school.

During the time the utopian mentality pervaded, Raymond faculty and students tended to see themselves, in the words of Professor Wise, "as rebels against an imagined monolithic status quo." Most were not cognizant of the historic innovations of Gilman at Johns Hopkins, Eliot at Harvard, Meikeljohn at Wisconsin, or Hutchins at Chicago; the more recent efforts at Reed, Antioch, or Sarah Lawrence; or the contemporary experiments at schools like Monteith, the New Colleges at Hofstra or Sarasota, Nasson, and many others. This relative isolation from the historical developments, from the contemporary reform movements, and from the life on "the other side of the campus" produced a collegio-centric view. Raymond and Raymond alone was engaged in a pioneering struggle against might odds to overcome the inertia of tradition, to rejuvenate the local campus, and to renew the increasingly important institution of higher education throughout the land.

This utopian spirit had definite utility; to a considerable extent it functioned as a "self-fulfilling prophesy." Other things being equal, Raymond's initial success as evidenced in the statistical portion of this study was directly proportional to the degree of its utopian mentality, i.e., to its commitment to a positive identity and to its rejection of a negative identity.

Despite the fact that participants of a utopian colony prefer to live in their faith world, the real world eventually presses upon them. Inevitably they gain experience, both good and bad, expected and unexpected, with the consequences of their creation. Knowledge of the effects of their venture destroys the previous myths, and it can turn the group into a true experimental

society, in which conditions are varied and results are seen for what they are rather than for what they must be according to the preconceived "party line." Currently Raymond is entering the post-utopian phase of its history. This study is itself evidence that the utopian mentality may be giving way to an experimental mentality, and the knowledge contained herein promises to further that trend. From the most unusual vantage point of having attempted in practice what most contemporary writers can only envision in theory, from its post-utopian position, Raymond may now make a more sober and realistic appraisal of the strengths of the conventional system and the weaknesses of its own innovations -- unpleasant truths for every would-be reformer.

What is the truth about the Raymond innovations in retrospect, after five years of experience with them and after having obtained the evidence contained in this study? In general, all of the innovations are viewed with more ambiguity now than before; while they have been generally successful and are still very much a part of "the Raymond way," they pose some problems as well. No exhaustive analysis of these problems will be made, but a few observations of student and faculty reactions to the several innovations will indicate some of the main difficulties encountered.

The three-term calendar has produced relatively long periods of uninterrupted study, and in that respect it has improved on both the semester and quarter system. The evidence contained in this report indicates that the students have a broader scope of knowledge than most college graduates and that they are more emotionally mature than most; hence, the three-year aspect appears to be validated. The fact that 93% of the students plan to earn an advanced degree confirms the conviction that Raymond can specialize in providing a broad general education as a base upon which specialized training from other schools can and will be built.

But there have been difficulties. The 7 to 10 day breaks between terms are all too brief for students who have spent days and nights during the last weeks of the previous term writing long term papers and who are expected to start the new term with vigor on the first day. The students have found that though they take only three courses, none of them can be slighted as can a few "slough" courses when one takes five or six different subjects at once. The three-year program is needed from the student point of view, for with all the pressures created by the academic demands, social constriction, and self-development far more would drop out if they were required to spend four years at Raymond.

From the faculty side the problems are similar. The between-terms breaks are spent in correcting papers, writing term letters, and making plans for the next term's classes; little time is available for physical or mental recuperation. The summer vacation does provide for both students and faculty an adequate rest, a chance to do some thinking, reading, and traveling, but it scarcely gives the teacher-scholars an opportunity to do substantial research or writing. The fact that most faculty teach only two courses each term does give them adequate preparation time and probably makes their classes more effective. The three-year feature is favored by the faculty largely because a four-year program would automatically require them to provide specialization, which means more faculty diversity in each discipline, which suggests departmentalism, and which would doubtless undermine the Raymond ideal, if not the program itself. Certainly a school of 250 students cannot begin to provide comprehensive specialized education in an economically feasible way, and at the present time there is little confidence that more than a few students can take a profitable specialization from the departments at COP. Accordingly, the three-course, three-term, three-year features are, despite

their combined intensity, accepted as structural foundations of the college.

Apart from an occasional student's prior difficulty with a particular subject such as language, math, or science, and with the exception of an occasional "personality conflict," students have not objected to the 23-course requirement of the core curriculum. The core has helped students gain a broad intellectual education. The introductory courses generally have been taught in sufficient depth to make each a significant introduction into the thought-ways of some people in each discipline, and students apparently have taken their lessons to heart and grown personally as a function of this experience.

However, it is also true that just as the core has liberated the minds of students from their earlier bias and ignorance, so has it made it difficult for them to focus their efforts on a specific and limited concern. To be sure many do find a focus of a discipline, problem, or theme, but many find themselves going in every direction and thus in no direction at all. For all its faults, the disciplinary major does provide a focus for the student.

A related matter is that since no students have had previous college level work in any of the core courses, none can have any advantage by virtue of previous study over any other student. Thus, the confidence which comes to a student who, having already taken upper divisional work in his "major," as he competes in the same class with the "non-majors" is absent in Raymond's core curriculum. Without the focus and the security it provides, and with the expectation to engage in dialogue about several new and unfamiliar areas, most students are placed in a precarious, even threatening position which may increase their anxiety and perhaps even reduce the amount of learning.

It is curious that neither faculty nor students have collectively talked much about this independent study aspect of the program. Perhaps this relative

silence indicates that all are satisfied; perhaps it means that independent study is not as valuable, or perhaps just not as visible as the core.

Still some things are clear. Few faculty and students are committed to "independent" study -- most prefer "cooperative" study. The typical Raymond student often wants or needs guidance, and usually he wants to share his developing ideas with the teacher. The professors tend to feel, with some justification, that if the student is not supervised periodically throughout the term, he may neglect his work or waste time following unproductive paths of investigation.

Also, students choose to study with a non-random group of teachers. For example, in the spring of 1967 eight faculty members supervised 112 student courses, 9 supervised 25, and four had no independent study load at all.

Third, independent study, because it was not originally thought to be "cooperative" study, has never been made a part of the formal teaching load. No teacher receives any compensation or "release time" because of his efforts in independent study. For these reasons this innovation has proved to be more burdensome than originally anticipated.

The seminar teaching method widely used throughout the curriculum has encouraged nearly all students to participate actively in their education; it has probably motivated them to study more than they might otherwise; and it has helped them to personalize the knowledge gained.

But here too the results are ambiguous. It must be stated in all candor that while practically every course save one has been organized around the seminar, the most influential course probably has been that single lecture course! It was Introduction to the Modern World, an interdisciplinary, team-taught course given in the first term to all new freshmen, which had three or four lectures plus a discussion section weekly. The most striking features of the course

were its immediate and concerted intellectual attack on conventional socio-political and religious beliefs, and its outlining of the basic ground rules of intellectual investigation in particular and of college life in general. Incidentally, team-teaching may impede this impact; it has been found that a student may "tune in" when the teacher with his own biases appears and "drop out" when one with opposing ideas speaks.

In several ways the seminar is not a panacea. In the first place most teachers have not been trained to conduct a group discussion, and the seminar is a very difficult device to manage. Indeed, a seminar probably can be ruined in more ways than nearly any other technique. When the discussion is unfocused, it may give no one an integrated sense of what has been discussed; when it is too tightly focused, the students may feel like they are simply giving the answers desired by the instructor. When the leader is open to student reflection, it may easily degenerate into a "bull session"; when he is closed, it may become simply another setting for a lecture. Raymond undoubtedly has had its share of poor seminars as well as some excellent ones.

Student reaction to the seminar is mixed. Some withdraw from discussions because they fear exposure, because they are unprepared, because of personality conflicts, and for numerous other reasons. Other students come to think that merely because they are encouraged to share their ideas, they should say something about everything and that everything they say is important. While the teacher at one end of the log and the student at the other may be an appropriate model for some kinds of teaching by some teachers for some students at some times, it is not necessarily the best for all at all times.

The elimination of letter grades has led to intrinsic study motivation; it has not destroyed the initiative of students so long reared on grades; it has almost entirely eliminated cheating; and students have little difficulty being accepted

into even the best graduate schools without a grade point average.

But educational problems have not disappeared; they have simply changed their form. In one sense a term letter is much more personal and relevant to the student than a letter grade as he tries to assess his performance in a course, but it is extremely vague in another sense. He may learn that he showed superb understanding of a particular book, needs to be less critical of authors and more appreciative of their strengths, needs to take some position more seriously, and so on, but he cannot grasp either his achievements or his evaluation with definiteness. Letter grades, for all their faults, are naively definite. A Raymond student can have neither the security of knowing exactly where he stands, the confidence of being better than his classmates in some of his courses as verified by an objective grade, or a precise sense of his overall evaluation by teachers who may be of great personal importance to him.

Most interesting, however, is that the elimination of grades has not done away with competition, as the nationally known utopians loudly proclaim will surely happen. There is still competition among students for the respect of their colleagues and for the favorable reaction of teachers, respect which comes from making insightful and relevant contributions to the class; they compete not for an extrinsic grade, but for the very real intrinsic reward of being judged more intelligent by authorities, by their peers, and by themselves. Sigmund Freud long ago observed that the demands made by one's own conscience are much more severe than those imposed by others. Thus, as the Raymond students become intrinsically motivated, they set their own personal standards at a high level and ruthlessly drive themselves to attain them. The competition has been removed from a superficial level of a social game, but it has been transformed into a more vicious intrapsychic struggle. When this occurs, there is no way for them to rationalize failure by saying academic

grading is only a game; in the psychic realm evaluation of one's self is not a game but the essence of life.

The faculty too have had their problems with the new evaluation scheme. The term letters, because they are so individualized, make it virtually impossible to obtain an objective comparison between students. When they must select honors candidates or members for all-University honorary societies, or when considering students in academic difficulty, the faculty finds itself embroiled in lengthy discussions about the relative merits of students. Letter grades with all their defects are at least an objective measure of some kinds of achievement, and as such, they permit the bureaucratic handling of students so that faculty are freed to do more teaching or research. In addition, the term letters require a considerable investment of time to compose, even for groups as small as say 30 students; inevitably this work must be done during the short and treasured "vacation" periods.

The residential college and all the devices to bring the faculty and students together have produced the homogeneous, integrated, and personalized environment desired.

Yet these very strengths have produced some of Raymond's most pressing problems. The school is structured to maximize social contact, but it almost totally fails to provide for privacy, the single most important problem at the student level. Because they have so little opportunity to closet themselves from the omnipresent Other, to reflect upon and recoup from one encounter and to prepare for the next, many of these young adults acquire social masks and play stereotyped roles to protect themselves from each other; several find it difficult to relax and to be themselves even with their closest friends. Facing enforced public exposure, many students turn inward in search not only of self but also of an inner freedom unspoiled by others; they become introspective

(sometimes morbidly so) and spurn social activities. In these ways the attempts to create a community have passed the point of diminishing returns and actually have destroyed the very community they were designed to foster. Undoubtedly the oppressive closeness of the social climate is one of the major reasons for a retention rate not as high as anticipated.

In addition, students quickly spotted the marked contrast between substantial academic freedom and integrity -- often bureaucratic -- and the restrictions on their non-academic life. The requirements that all must live in dormitories during all three years, that they may not have alcohol in their rooms, that they may not entertain members of the opposite sex in their rooms (except at a few specified times and under special conditions), and that girls' dormitories must be locked at a designated hour are perceived by students to be inconsistent with the academic practices. These strongly independent students chafe under the school's conventional social restrictions. In this situation, the social rules, unlike the academic rules, are accepted only by a minority, and there are few student norms supporting them. The fact that Raymond students have more social freedom than their colleagues at COP, i. e., minimal regulations on dress, later women's hours, and a limited inter-dormitory visitation plan, matters little to them. The existence of these regulations are perceived to be entirely inconsistent with the freedom found throughout the rest of the school, a confession of a basic mistrust of them, a restriction on their treasured freedom of movement, and a further blockade of their attempts to gain privacy.

The faculty find the constant contact with students fulfilling but often draining. When faculty are on campus, it is difficult for them to turn away students in favor of their own personal work; their professional advancement is made difficult. Being so accessible, teachers frequently find themselves

discussing with a student his deepest problems in a quasi-psychiatric fashion; this is a role for which none are trained and some are not interested in, however effectively they may perform that function. Familiarity may at times breed contempt, and overexposure may actually limit the impact a teacher may have on a student. And of course, this personal involvement produces additional psychic and physical fatigue which seems to culminate near the end of each term and especially at the end of the long academic year.

Because the Raymond population has learned from the crucible of experience into which their innovations were placed, they have tempered their original enthusiasm. The first five years produced results generally desired, but it also led to consequences which were neither intended nor expected; and some of these have tended to subvert its conscious purposes. Perhaps the Raymond experiment might instruct the utopians of the national scene, who because of their lack of experience with their proposals, pander them as miraculous cures of the educational sores. To be sure new ideas are needed in higher education; but what is needed most at Raymond and throughout the country at this time is accurate and perceptive ideas about the consequences of a variety of educational philosophies and practices; more knowledge is required to evaluate the promises contained in a variety of educational programs.

Raymond has eaten of the tree of knowledge; it is entering its post-utopian stage of development, a stage crucial to its future. It is no secret that many experimental colleges have collapsed after their utopian adventure spent itself. New College at Columbia, Black Mountain, and the Experimental College at Wisconsin all lasted about seven years; they fell during their post-utopian period after making an excellent record in their early years. Some of the reasons for the short life span of schools following periods of radical innovation can be discerned by looking at the stresses created during the utopian phase, for the

chief task of the post-utopian stage is to correct the excesses of the early years in the light of knowledge about their consequences. Again an ideal-type of post-utopian stage of development will serve to indicate the general nature of these tensions, and a few observations will show how these tensions affect the current life at Raymond.

1) One of the most pressing problems for the new venture is to maintain continuity in the face of a turn-over of participants. Watson (1966, p. 5) notes,

A typical formation in the experimental college faculty is a core group consisting of the Founding Father (or Fathers) surrounded by an inner circle of close admirers and collaborators. Further from this core are numerous additions and newcomers needed for institutional operation, but to whom the original vision has not been well communicated.

This formation mentioned by Watson poses two problems of continuity -- the replacement of the leader and the addition or replacement of faculty.

The community is placed under considerable stress when their prophet takes his charisma and leaves their midst. He symbolizes the new venture, and they have come to be dependent upon him in numerous often unrecognized ways for psychological support; his departure leaves a void and considerable insecurity within the group. And of course, it is always impossible to find an entirely suitable replacement for a prophet; his successor inevitably pales from the contrast for a period of time. One of the reasons the successor has difficulty succeeding the leader is that he is usually a quite different kind of person; he is a manager of an established enterprise and not a visionary.

The followers too pose a problem of continuity. As the college expands or as some of the original cast are replaced, the newer additions may be less committed to the kind of school they find. The ideals may not be so well communicated, the purposes can never have the same driving power, and the rationale behind some of the practices is never entirely clear to the newcomers. And the new faculty will certainly have ideas of their own which

they would like to impose upon the school; though these new ideas are to be expected and though they may be actual improvements, they may pose threats to the veterans of the school. In this situation the original faculty, the wild-eyed radicals of the recent past, are suddenly transformed into beleaguered conservatives, vigorous defenders of their own status quo.

2) The purposes of the college increasingly lack their previous motivational power. The new leader, having a more administrative bent, is less inclined to espouse the ideals and to use them as a call to arms. The faculty, like the barnyard creatures of Animal Farm, find it increasingly difficult to recall exactly what the first principles were; under the reasonable questioning of the new faculty members and students, they may be hard put to justify some practices. When the ideals are mentioned, they lack their original motivational power. Because both faculty and students have had some experience with these purposes, they lack the moral purity they possessed when they were first sounded. Some participants even may think that those who proclaim institutional purposes are hypocritical; for them the resounding purposes actually turn them against the school. Others become cynical; their idealism goes sour.

3) The community is slowly transformed from a sparkling new order to a continuing organization. The thrill of creating a new society cannot be matched by the effort of managing the not-quite-so-new system. Here the excesses of the earlier era, especially the heavy work load of the faculty, become serious. While the faculty could willingly endure the pressures of student-oriented teaching during the utopian period, they certainly will not do so in the post-utopian realism. Their professional sacrifices, though tolerable during an earlier era, are less and less defensible. The institution learns that its innovations, if they are to work the way they were envisioned, will be costly, more costly than imagined during the hey-days of the revolution.

4) The illusions of the earlier day lead to a certain amount of disillusionment. The original hopes could never have been entirely fulfilled; the new venture could never be so radically different from all other institutions as the founders dared to dream. Inevitably, the day of reckoning must come. As evidence shows that the new school is only partially successful in realizing their hopes, and as the school is seen to be more like other colleges, and as its innovations become institutions, the faculty members will ask, "Was it all worth it?" The answer can only be, "partially," for the utopian dreams are never entirely within reach. Often this realistic assessment leads to an element of self-pity for the personal sacrifices the utopians had made earlier and perhaps even some resentment over their previous folly.

5) The group becomes more fragmented. The failure of the ideals to unify the group, the increased feeling that the group is not so radically different as it has once imagined, the retreat into greater privatism by the previously over-involved faculty, and the modification of the original vision as a result of knowledge gained, all tend to destroy the intense cohesiveness of the earlier period. This very fragmentation may, if extensive and prolonged, accelerate a decline from the earlier society and create a vicious circle which may reduce the college to the very traditionalism against which it originally rebelled.

6) The society may lose support from the outside. If the experiment occurs within a larger institution, that parent institution may tend to devote both attention and financial aid to the new program for a period of time until it can stand on its own. The university administration may see evidence during the utopian phase that the college has established itself and may attempt to reduce financial and other types of support at precisely the time it is most needed, i. e., when the psychic rewards of the utopian period no longer suffice. By this action the university may unwittingly weaken the school at the peak of

its achievement.

Also, the more powerful elements of the university may have absorbed all of the criticism from the upstart school they could tolerate, and those factions may find the college in the post-utopian stage more vulnerable internally and less staunchly defended by the administration. Hence, they may be able to bring their power to bear to further intensify the pressures on the small college at a critical stage in its history .

The problems of the college in the post-utopian stage of development are largely those of correcting the excesses of the utopian phase. While the utopian spirit fosters the successful creation of a radically innovative college, it creates the basic problems of the succeeding historical stage. Utopianism may help establish a college, but as other schools have learned, it may be harmful to its longevity.

This analytic typology of a post-utopian experimental college is not intended to be an accurate description of Raymond College as it operates today. It is a logically interrelated series of statements of a fairly extreme nature which can be used to highlight some of the tensions which are found in any post-utopian college.

When the typology is imposed upon the current Raymond College, it does give the tenor of changes which have occurred in recent months. While many of the characteristics mentioned in this typology have begun to appear at Raymond, they are mostly recent in origin, low in intensity, and uncertain as to outcome. Generally the spirit of Raymond at this time could be best described as a relaxation from the extremism of its utopian stage. For example, the new provost, Berndt L. Kolker, has taken up the reins dropped by the resignation of his predecessor. His more moderate style, his more quiet and less aggressive dedication to the school, have slowed the hectic pace of life. Very few

faculty have left Raymond, making replacement problems slight. The purposes, though less vocalized and lacking their previous motivational power, still seem relatively powerful. While the community is less cohesive than at first, it is still quite unified as colleges go. The illusions of the earlier days have been largely abandoned, and in their place is not disillusionment but a more rational assessment of the results of the program. Although support from the university administration seems to be diminishing, and in some crucial areas, as it directs its resources to other cluster colleges and newer acquisitions, it has certainly not abandoned Raymond.

In sum, the post-utopian period at Raymond can best be described as a relaxation rather than as a decline; it has had a sobering rather than a disillusioning effect; it has produced realistic appraisals of the strengths and weaknesses instead of wholesale dissatisfaction; it has led to a readjustment of the faculty's institutional commitments and personal commitments rather than a full-scale retreat into privatism; it has made the faculty more willing to modify the program to the needs of students and made them less insistent on the absoluteness of the original ideology.

While post-utopianism may bring with it a fading of the earlier commitment to the new system, this seems not to have occurred much at Raymond. Rather, the participants seem to have shed their previous naive attitudes of simply thrusting off against the current educational world or searching holistically for the apocalypse and have become more attuned to their experiment so that they may better apply their creative dedication.

Probably the main reasons why the post-utopian period has thus far been mild at Raymond is because the knowledge of the initial results has been so gratifying and because Raymond still enjoys the protection and support

³ It is interesting to note that the problems of a small school, post-utopian discoveries, were recently discussed by Martin (1967), the primary articulator of Raymond's utopian ideals.

from the university administration by virtue of the special cluster college structure.

As the first of several cluster colleges planned for the university, Raymond has had a significant impact upon the university. The evidence demonstrates that Raymond has fulfilled its original purpose of providing a liberal arts undergraduate education for students who are interested in the liberal arts. The university has become a leading member among the ranks of the nation's liberal arts colleges. It is difficult to imagine how Raymond could have been more successful.

And yet, the same evidence which demonstrates the success of Raymond as a liberal arts undergraduate institution also demonstrates the weakness of COP. Here there are two radically different schools, probably two types of traditionally opposed schools, in one campus and under the same administration. This anywhere else in the United States. According to the original idea of the cluster college plan, each of the two units would develop a distinctive and distinctive thrust. The resulting pattern would be one of complementary diversity would occur, and a viable learning environment in the field of this diversity and competition, several thought the entire university would experience what John Gardner calls "self-renewal." Now that it is clear that Raymond has established both a distinctive and a successful tradition, we must ask about its effects on the rest of the university. Has the cluster college plan with its diversity provided creative tensions? Is it a mechanism by which the existing institutions may be brought into the present?

Naturally, the entire story of the cluster college plan at UCP cannot be written yet. Raymond is only the first of the cluster colleges. A second one is Ebert Cornell College, which was established in 1963. Under the direction of Arthur J. Celler, it offers complete instruction in the Spanish language to a

V. RAYMOND'S EFFECT ON THE UNIVERSITY OF THE PACIFIC

As the first of several cluster colleges planned for the university, Raymond has had a significant impact upon that university. All the evidence demonstrates that Raymond has established a college radically different from the historical COP, and a college which from all indications has become a leading newcomer among the ranks of the nation's highest quality liberal arts colleges. It is difficult to imagine how Raymond could have been more successful.

And yet, the same evidence which demonstrates the success of Raymond as a liberal arts undergraduate institution documents the weaknesses of COP. Here then are two radically different schools; probably two more diametrically opposed schools do not exist on the same campus and under the same administration anywhere else in the United States. According to the original idea of the cluster college plan, each of the new units would create a different, each with a distinctive thrust. The resulting pattern would be one of competing units, diversity would occur, and creative tensions might develop. In the midst of this diversity and competition, several thought the entire university would experience what John Gardner calls "self-renewal." Now that it is obvious that Raymond has established both a distinctive and a successful school, one must ask about its effects on the rest of the university. Has the cluster college plan with its diversity provided creative tensions? Is it a mechanism by which the existing institution may be renewed from its periphery?

Naturally, the entire story of the cluster college plan at UOP cannot be written yet. Raymond is only the first of the cluster colleges. A second one is Elbert Covell College, which was established in 1963. Under the direction of Arthur J. Cullen, it offers complete instruction in the Spanish language to a

student body made up of about two-thirds Latin Americans and about one-third from the United States. The third one is Callison College, which under the leadership of Larry A. Jackson will open its doors in the fall of 1967 and will offer a four-year liberal arts education with a special emphasis on international understanding, especially in the underdeveloped countries. Thus, the whole cluster college development is still very much in an early stage. And yet, a few consequences have unfolded.

In order to inquire into the effects of Raymond on COP, it is necessary to review some of the relations between the two schools. It has already been mentioned that Raymond strengthened its own identity by making COP into a negative identity and by criticizing the kind of education offered there. This phenomenon was paralleled by a similar development within COP which can be briefly chronicled. When the cluster college plan was announced, Raymond's program was being planned and it was first enacted, most in COP were curious and many were overtly proud of the new venture; for some it was almost the pride a parent feels for his new born baby. Undoubtedly this curiosity, overt pride, and good wishes covered a covert apprehension about the status of the old COP in the context of an expansion plan that devoted so many of the limited resources to the periphery of the university. Soon the curiosity and pride turned into less constructive emotions as many of the faculty at COP progressively came to realize what the new college was to mean to them. The pride turned to fear, a fear that their own programs would be severely damaged at the expense of Raymond. That curiosity and pride also turned into envy. Some COP faculty attempted unsuccessfully to join the staff of Raymond, and even many who did not want to make that jump longed for the smaller classes, newer facilities, brighter students, and greater attention from both local and national educators which came the way of

Raymond and which could have been well used at COP. Then the fear and envy found a common denominator in hostility; the new school was often perceived as evil. It threatened to stagnate or destroy COP; it drained the university of its limited financial resources, and it relegated them, the faithful of the past, to the position of second-class citizens on the campus. To add insult to injury, the upstarts were seemingly not appreciative. Instead of expressing their appreciation to those at COP who made sacrifices, Raymond had the audacity to criticize them for operating a poor and outmoded program.

To make a long story short, Raymond did cause tensions on the campus. But tensions themselves cannot be classified as either creative or destructive; the way they are resolved determines whether they have had a creative or a destructive impact. It is to the credit of President Burns that he was able to see that creativity emerges from tensions and that he has taken extraordinary steps to institutionalize those strains. But there have been times when the administration has reacted to the tensions it fostered by putting out the fires and by attempting to gloss over conflict rather than channeling those conflicts creatively to effect change throughout the university. The ideals of the cluster college plan are high, and occasionally they have not been realized.

In point of fact, the cluster college provided an inter-group conflict situation in which emotions sometimes ran too high for creativity to occur. Stereotypes, rumors, and allegations abounded on both sides of the campus, and conflicts often produced much heat if not much light. Perhaps the peak of excitement occurred at a memorable all-university faculty meeting in the spring of 1965 when the COP faculty in a fit of near-passion denounced a sabbatical plan for Raymond as discriminatory against the rest of the university and violently rejected it, thereby venting their mounting hostility

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at the entire Raymond program.

But such strong emotions cannot be sustained for long, and the intensity of feelings has now subsided. Yet among those who experienced the quarrels of the past, these emotions probably lie very near the surface. After five years, each school seems to have made an uneasy peace with the other.

Thus far Raymond has caught the brunt of the criticisms of the COP faculty toward the cluster college plan. Covell, because it is a Latin American subculture, is far more isolated from the rest of the university and is less directly competitive with COP than is Raymond; for those reasons it has not received the reproaches of the COP faculty as has Raymond. With Callison entering the campus scene soon, the COP faculty may be less intensely anti-Raymond that was true in the past.

While this has been a valid general picture of the relations between Raymond and COP, it is overly simplified. Many of the faculty of COP, especially those dissatisfied with the type of education offered there, have welcomed Raymond. They see in it the possibility of eventually renovating and upgrading the older parts of the university. These types have been interested, supportive, and some closely associated with the faculty and the life of Raymond. Their numbers have been few, but their influence not insignificant.

As of yet, however, one cannot say that the cluster college effort has produced any significant specific change in COP. A university wide faculty council has recently been created to give faculty greater representation and power in making decisions affecting the life of the university; faculty salaries have risen; and students have started a formal evaluation of their courses and teachers. These developments are all traceable in part to the influence of Raymond, but they are limited reforms on a university level, and their influence has not yet been fully felt anywhere.

The lack of apparent improvement in the education offered at COP during the past five years may be attributable to two chief factors. First, the dominant psychology among those at COP has been defensive; they have preferred to protect and rationalize their own institutional arrangements rather than to revise and enhance them. No doubt this defensiveness is attributable in part to the entire psychology of the cluster college structure previously described. But until leadership of a more detached and objective mentality can be achieved, until leaders are willing to admit some defects in the face of overwhelming evidence, and until they are willing to work to upgrade their programs, significant improvements within COP will be unlikely. Second, the tendency thus far has been to allow the "natural forces of competition" to work their results. That is, the highest university administration has preferred to concentrate their attention on the cluster colleges and to wait for creative innovation to occur in other segments of the university. Until they are willing to devote additional time, effort, and money to solving the problems of COP, this central core of the university will likely continue to struggle at its past level,

Despite the fact that significant and specific reforms have not come to COP, the effects of the cluster college program and of Raymond in particular on the university have been considerable. Indeed, it is inconceivable that some 22 faculty and 200 students could have had such an impact on the existing school in any way other than via the cluster college arrangement. The most profound consequence of Raymond's existence is that the university has suffered a deep institutional identity crisis. The old COP was known by a number of images which defined at least its identity and image, if not the reality. It has long been associated with the Methodist church, and has retained the image of a church-related college even though those ties are

weakening. Decades ago it thought of itself as a national football power under Amos Alonzo Stagg; and while it has since de-emphasized football, this image still lingers. Among the students up and down the west coast Pacific has meant a playboy school where with a little bit of academic effort a good time could be had by all. Perhaps the image with the greatest recent appeal, especially internally, has been the family. A small, close, friendly campus where everyone knows everyone else, where the key decisions would be made by a paternalistic administration and where students could be somewhat protected from the evils of the world -- this used to be the identity of COP.

But the cluster college and Raymond have changed all that. When COP was content with its traditionalism, conventionalism, regionalism, and modest achievements, Raymond had the audacity to declare that the emperor had no clothes. While COP detested disharmony within the "family," Raymond proceeded to raise a storm. While COP preferred pleasant social relations, Raymond raised unpleasant questions, pointed to contradictions between goals and achievements, and clung tenaciously to some stubborn and unpleasant facts. The campus simply has not been pacific since Raymond was established!

The new University of the Pacific is too large and too heterogeneous to be saddled with any of the old images; it is now a pluralistic institution. When a university has a core liberal arts college, and closely associated colleges of education, engineering, music and pharmacy, when it creates three semi-autonomous cluster colleges, when it operates a modest graduate program, and when it acquires off-campus law and medical schools, it simply cannot be contained within the procrustean beds of any of those earlier images or institutional practices. A pluralistic institution requires differentiation of

structure and specialization of function, and the images of the university must reflect that reality or they will limit the effectiveness of the various parts. Diversity rather than uniformity is the hallmark of the new university. It will take some time for the significance of these changes to be assimilated by persons associated with the COP of old. While Raymond has not alone caused the institutional identity crisis, it has probably more than any other factor been responsible for making the implications of the pluralization of the university clear to those within the university.

This identity confusion is most pronounced within the liberal arts college of COP, which finds itself displaced from its previous position at the core of the institution. It has increasingly had to provide services for the professional schools, and will doubtless have to service some of the specialization needs of the cluster colleges. The evidence indicates that COP already receives fewer bright students than does Raymond, and it may conceivably suffer more of a "brain drain" to Callison and subsequent schools. It is quite conceivable that the more structured and authority-ridden education found at COP may actually be better for weaker students than the freer system at Raymond. But unless COP improves its program to accommodate the intellectual interests and abilities of the more able, it may be relegated to teaching the more socially oriented and academically weaker students of the university, and the cluster colleges will be elevated to the informal position of "honors colleges" within the university. The brighter students would not only tend to prefer Raymond and other similar schools but would actually have a better chance of obtaining the kinds of intellectual challenges which alone will hold them at the university. There is a very real need to educate students with moderate ability and motivation, and the liberal arts component within COP could certainly satisfy that need with pride; but the point is that it will be condemned to doing just that unless it

resolves its identity crisis and decides on exactly what its role should be within the context of a changing University of the Pacific.

A second major consequence of Raymond's existence on the rest of the university is what may be called an educational one. That is, merely because a college like Raymond with all its pretensions was formed on the campus of an academically undistinguished school, it found itself performing an educational function not only to its students but also to administrators and faculty who previously had been satisfied. There had been little long range educational planning at the school; financial considerations often dictated academic policy; a vision of what constitutes a great university was lacking; administrators had in the past repressed faculty pressures for improvements, dismissing some concerned faculty as "Young Turks." As these and other practices touched on the Raymond program, they have been criticized. It has been necessary to destroy these old ideas in the minds of administrators up and down the hierarchy; an attempt was made to substitute in their place a vision of excellence and fresh alternatives. Though this endeavor has not been entirely successful, Raymond has taken the lead to show the university community the path to a better system.

In all of these efforts Raymond has played the role of the loyal opposition. Ideally the loyal opposition criticizes not to destroy but to build; it attacks the present problems in order to make a better future. At its best, the loyal opposition offers a vision of excellence toward which the institution may progress, and it insists that knowledge and a full discussion of its implications are better than ignorance and silence. The loyal opposition, like medicine, may be difficult to swallow at the time it is most needed, but it is the surest cure for educational sicknesses.

Because Raymond has made a major breakthrough in conceiving and

implementing a dramatically contemporary liberal arts college which from all evidence has placed it among the ranks of the leading colleges in the country, because this phenomenon occurred in a cluster college structure on the campus of a traditional college, because this development has produced an institutional identity crisis, and because it has played the difficult role of the loyal opposition, Raymond has laid the foundation for change at the new University of the Pacific. The challenge of the future is to build on that foundation.

Already significant strides have been taken. At the very least the University of the Pacific has provided a notable exception to the dismal generalization made by Harold Howe II (1965, p. 77), United States Commissioner of Education, who wrote,

The colleges which have been most active in redesigning their program... and in trying to set up a system of education that is designed to carry the student on from where the high school has left him, have been those institutions which already had the highest standards, the greatest flexibility, and the largest percentages of extremely able students... Less prestigious institutions with a good deal less to protect have been much less adventurous.

At least one university is attempting to pull itself up by its own bootstraps via an imaginative mechanism of the cluster college. And the evidence available at this time suggests that it is well on its way to succeeding in this admirable effort.

Appendix A. List of Institutions Providing Normative Data for the
College Characteristics Index and Activities Index

Antioch College (Ohio)
Bennington College (Vt.)
Buffalo, Univ. of (N.Y.)
Cincinnati, Univ. of (Ohio)
Denison Univ. (Ohio)
Eastern Mennonite College (Va.)
Emory Univ. (Ga.)
Florida State Univ.*
Georgia Institute of Technology*
Heidelberg College (Ohio)*
Kentucky, Univ. of*
Marian College (Wisc.)
Miami Univ. (Ohio)*
Michigan, Univ. of
Minnesota, Univ. of
Northeastern Univ. (Mass.)
Northwest Christian College (Ore.)
Oberlin College (Ohio)
Ohio State Univ.
Purdue Univ. (Ind.)
Randolph-Macon Woman's College (Va.)
Rhode Island, Univ. of
Rice Institute (Texas)
St. Cloud State College (Minn.)
Sarah Lawrence College (N.Y.)
Seton Hill College (Pa.)
Shimer College (Ill.)
State Univ. of N.Y., College of Education at Buffalo
Sweet Briar College (Va.)*
Wayne State Univ. (Mich.)*
Wesleyan Univ. (Conn.)*
West Virginia Wesleyan College*

* Included only in the College Characteristics Index normative group.

Appendix B. Definitions of Scales Contained on the College Characteristics Index and Activities Index

These definitions are taken from an undated paper by George G. Stern, "Development of the Activities Index." Definitions of Assurance, Restiveness, Tolerance, Disorder, Impracticalness, and Puritanism are provided by the author in absence of a definition by Stern.

1. Abasement-Assurance. Self-depreciation and devaluation as reflected in the ready acknowledgment of inadequacy, ineptitude, or inferiority, acceptance of humiliation, and other forms of degradation versus confident assertion and mutuality in interpersonal relationships.
2. Achievement. Surmounting obstacles and attaining a successful conclusion in order to prove personal worth.
3. Adaptability-Defensiveness. Accepting criticism or advice publicly versus resistance and concealment, or justification, of failure and humiliation.
4. Affiliation-Rejection. Close friendly, reciprocal associations with others versus disassociation from others, withholding friendship and support.
5. Aggression-Blame Avoidance. Indifference or disregard for feelings of others as manifested in overt, covert, direct, or indirect aggression versus the denial or inhibition of such impulses.
6. Change-Sameness. Variable or flexible behavior versus repetition and routine.
7. Conjunctivity-Disjunctivity. Organized, purposeful, planned activity patterns versus uncoordinated, diffuse, or self-indulgent behavior.
8. Counteraction-Inferiority Avoidance. Persistent striving to overcome difficult, frustrating, humiliating, or embarrassing experiences and failures versus avoidance, withdrawal or protective measures in situations which might result in such outcomes.
9. Deference-Restiveness. Sycophantic submission to the opinions and preferences of others perceived as superior versus rebellious thoughts and assertive behavior in response to authority figures.
10. Dominance-Tolerance. Ascendancy over others by means of assertive or manipulative control versus acquiescence to the control of others and the ready acceptance of "fate."
11. Ego Achievement. Self-dramatizing, idealistic social action; active or fantasied achievement oriented in terms of dominance or influence.

12. Emotionality-Placidity. Intense, open emotional display versus calm, serene, or restrained response.
13. Energy-Passivity. Intense, sustained, vigorous effort versus sluggish inertia.
14. Exhibitionism-Inferiority Avoidance. Self-display and attention-seeking versus avoidance, withdrawal, or protective measures in situations which might result in attention from others.
15. Fantasied Achievement. Daydreams of success in achieving extraordinary public recognition; narcissistic aspirations for personal distinction and power.
16. Harm Avoidance-Risktaking. Avoidance, withdrawal, or protective measures in situations which might result in physical pain, injury, illness, or death versus indifference to danger; challenging or provocative disregard for personal safety; thrill-seeking.
17. Humanities, Social Science. Interests in the humanities and social sciences; the symbolic manipulation of social objects or artifacts through empirical analysis, reflection, discussion, and criticism.
18. Impulsiveness-Deliberation. Impulsive, spontaneous or impetuous behavior versus careful, cautious, considered reflectiveness.
19. Narcissism. Preoccupation with self; erotic feelings associated with one's own body or personality.
20. Nurturance-Rejection. Supporting others by providing love, assistance, or protection versus disassociation from others, withholding support and friendship.
21. Objectivity-Projectivity. Detached, nonmagical, unprejudiced, impersonal thinking versus superstitious, autistic, irrational, paranoid, or otherwise egocentric perceptions and beliefs.
22. Order-Disorder. Compulsive organization of the immediate physical environment, manifested in a preoccupation with neatness, orderliness, arrangement, and meticulous attention to detail versus disregard for details; carelessness; spontaneity.
23. Play-Work. Pursuit of amusement and entertainment versus persistently purposeful, serious, task-oriented behavior.
24. Practicalness-Impracticalness. Useful, tangibly productive, non-theoretical applications of skill or experience, in manual arts, social affairs, or commercial activities versus not immediately useful, theoretical orientation; little interest in mechanical gadgets.
25. Reflectiveness. Intracreative activities; introspective preoccupation with private psychological, spiritual, esthetic, or metaphysical experience.

26. Science. The symbolic manipulation of physical objects through empirical analysis, reflection, discussion, and criticism.
27. Sensuality-Puritanism. Indulgent, voluptuous sensory stimulation and gratification versus a disinterested or inhibited attitude toward sensory and esthetic experiences.
28. Sexuality-Prudishness. Erotic heterosexual interest or activity versus the denial or inhibition of such impulses.
29. Supplication-Autonomy. Dependence on others for love, assistance, and protection versus the denial or inhibition of such impulses.
30. Understanding. Detached intellectualization; problem-solving, analysis, theorizing or abstraction as ends in themselves.

Appendix C. An Item Comparison Between the Raymond Entering Freshmen and the Student Body on the College Characteristics Index

There were 73 CCI items on which answers given by the entering freshmen differed by 20% or more from those given by the general student body. These items will be grouped into a few large categories, and the percentage of each group agreeing that each item is an accurate description of their school will be presented.

First, the following items indicate in which ways the entering freshmen expect the school to be more intellectual than the upperclassmen report it is.

	<u>Percentage Agreeing</u>	
	<u>Entering</u> Freshmen	<u>Student</u> Body
Books dealing with psychological problems or personal values are widely read and discussed	90	70
It is fairly easy to pass most courses without working very hard	7	25
The school offers many opportunities for students to understand and criticize important works in art, music and drama.	83	58
The school is outstanding for the emphasis and support it gives to pure scholarship and basic research	71	48
A lecture by an outstanding scientist would be poorly attended	7	37
Personality, pull, and bluff get students through many courses	5	45
Few students are planning careers in science	31	57
The student newspaper rarely carries articles intended to stimulate discussion of philosophical or ethical matters	19	70
There are no favorites at this school — everyone gets treated alike	79	31

	<u>Percentage Agreeing</u>	
	<u>Entering</u>	<u>Student</u>
	<u>Freshmen</u>	<u>Body</u>
Some of the professors react to questions in class as if the students were criticizing them personally	10	37
Anyone who knows the right people in the faculty or administration gets a better break here	5	33
Humanities courses are often elected by students majoring in other areas	62	83
The academic atmosphere is practical, emphasizing efficiency and usefulness	62	35
Students are expected to work out details of their own program in their own way	38	63
It is easy to take clear notes in most courses	71	41
Concerts and art exhibits always draw big crowds of students	88	46

Despite believing the school to be more academically demanding, fewer entering students expect as much emphasis on graduate school preparation as the student body reports. Only 43% agreed that "there is a lot of emphasis on preparing for graduate work," as opposed to 79% of the older students.

Second, another large grouping of items suggest the ways the freshmen have unrealistic views of the social side of Raymond.

	<u>Percentage Agreeing</u>	
	<u>Entering</u>	<u>Student</u>
	<u>Freshmen</u>	<u>Body</u>
Student pep rallies, parades, dances, carnivals or demonstrations occur very rarely	50	91
Students really get excited at an athletic contest	43	9
There is a lot of group spirit	88	41
Most people here seem to be especially considerate of others	86	29
Student elections generate a lot of intense campaigning and strong feeling	60	11

Percentage Agreeing
 Entering Student
 Freshmen Body

Students put a lot of energy into everything they do -- in class or out	93	71
Students take a great deal of pride in their personal appearance	29	4
The big college events draw a lot of student enthusiasm and support	57	12
Student gathering places are typically active and noisy	68	46
There are many opportunities for students to get together in extra-curricular activities	57	37
Students have many opportunities to develop skill in organizing and directing the work of others	60	38
There are lots of dances, parties and social activities	24	1
Boy-girl relationships in this atmosphere tend to be practical and uninvolved, rarely becoming intensely emotional or romantic	45	19
Most students here would not like to dress up for a fancy ball or masquerade	43	76
Most students here enjoy such activities as dancing, skating, diving, gymnastics	81	35
The school helps everyone get acquainted	93	70
There are practically no student organizations actively involved in campus or community affairs	7	30
It is easy to obtain students speakers for clubs or meetings	81	40
When students get together they seldom talk about trends in art, music or the theater	21	41
Everyone has a lot of fun at this school	71	29
Many students enjoy working with their hands and are pretty efficient about making or repairing things	76	49
There are several popular spots where a crowd of boys and girls can always be found	88	41

	<u>Percentage Agreeing</u>	
	<u>Entering</u>	<u>Student</u>
	<u>Freshmen</u>	<u>Body</u>
Graduation is a pretty matter-of-fact, unemotional event	31	71
There is a lot of fanfare and pageantry in many of the college events	29	5
It's easy to get a group together for card games, singing, going to the movies, etc.	86	43
Students frequently go away for football games, skiing weekends, etc.	40	61
Students exert considerable pressure on one another to live up to the expected codes of conduct	62	32
Student parties are colorful and lively	86	55
Students think about dressing appropriately and interestingly for different occasions -- classes, social events, sports, and other affairs	55	10
Many church and social organizations are especially interested in charities and community services	60	22
There isn't much to do here except go to classes and study	40	68
This school has a reputation for being very friendly	52	27
Every year there are carnivals, parades, and other festive events on the campus	57	14

Only one item resulted in 20% more of the student body answering in the collegiate direction than the freshmen. It is "Students frequently go away for football games, skiing weekends, etc." on which 40% of the freshmen and 61% of the student body agree. The purposes of this weekend travel are probably better contained in the "etc." than in the references to football and skiing, especially when one considers that 81% of the student body versus 24% of the entering freshmen students believe "students have little or no personal privacy."

Third, in the following few items there is a divergence in answers of the two groups concerning the facilities of the school.

	Percentage Agreeing	
	Entering Freshmen	Student Body
There is a student loan fund which is very helpful for minor emergencies	50	24
Laboratory facilities in the natural sciences are excellent	38	8
The library has paintings and phonograph records which circulate widely among students	40	13
The library is exceptionally well equipped with journals, periodicals, and books in the social sciences	63	12
Campus buildings are clearly marked by signs and directions	50	29
Counseling and guidance services are really personal, patient and extensive	88	67

Another grouping of items provides an insight into the ways the entering students carry their high school expectations into college and of their lower stage of psychological development.

	Percentage Agreeing	
	Entering Freshmen	Student Body
Students are conscientious about taking good care of school property	81	23
Many upperclassmen play an active role in helping new students adjust to campus life	93	60
On nice days many classes meet outdoors on the lawn	52	92
Students often help one another with their lessons	71	86
Most students show a good deal of caution and self-control in their behavior	38	27
The person who is always trying to "help out" is likely to be regarded as a nuisance	5	42
The faculty and administration are often joked about or criticized in student conversations	60	83

	Percentage Agreeing	
	Entering Freshmen	Student Body
Activities in most student organizations are carefully and clearly planned	24	8
Personal rivalries are fairly common	17	41
Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others	33	73
Education here tends to make students more practical and realistic	55	32
Students who are not properly groomed are likely to have this called to their attention	26	9
When students dislike a faculty member they make it evident to him	36	67
Professors seem to enjoy breaking down myths and illusions about famous people	55	70
There always seems to be a lot of little quarrels going on	14	40
Students here can be wildly happy one minute and hopelessly depressed the next	79	97
Students rarely get drunk and disorderly	36	12
Some of the most popular students have a knack for making witty, subtle remarks with a slightly sexy tinge	40	71
Students pay little attention to rules and regulations	45	75
The future goals for most students emphasize job security, family happiness, and good citizenship	36	9
Few students bother with rubbers, hats, or other special protection against the weather	67	86
Chapel services on or near the campus are well attended	50	15
Finally, some additional variety is anticipated by the new students.		
The students here represent a great variety in nationality, religion, and social status	81	31
Religious worship here stresses service to God and obedience to His laws	29	4

	<u>Percentage Agreeing</u>	
	<u>Entering</u>	<u>Student</u>
	<u>Freshmen</u>	<u>Body</u>
There are many foreign students on the campus	43	4
The campus religious program tends to emphasize the importance of acting on personal conviction rather than on the acceptance of tradition	93	65

Appendix D. List of Institutions Providing Normative Data for the College and University Environment Scales

Index

- Ball State
- Bennington
- Boston Univ.
- Brigham Young
- Bryn Mawr
- Buffalo Univ.
- Cincinnati
- Cornell
- Dartmouth
- Denison
- DePauw
- Detroit
- Eastern Mennonite
- Emory
- Fayetteville
- Florida State
- Georgia Tech.
- Heidelberg
- Hunter
- Illinois
- Iowa
- Kentucky
- Miami Univ.
- Michigan
- Minnesota

- Mississippi
- Nasson
- Northeastern
- Oberlin
- Ohio State
- Purdue
- Queens
- Randolph-Macon
- Reed
- Rice
- Rhode Island
- San Francisco State
- San Jose State
- Seton Hill
- Shimer
- Southern Methodist
- State, Buffalo
- St. Cloud State
- Syracuse
- UCLA
- Vassar
- Wayne
- Wesleyan
- Wesleyan Univ.
- Western State
- West Virginia

Appendix E. An Item Analysis of the COP Sample on the Activities Index

There was considerably less consensus among the COP sample on the AI items than on the CCI; like most groups, their personalities are more diverse than their perceptions of the school. Yet, there were 61 items which were answered in the same way by 80% or more of the men and 64 items answered in the same way by the women. Because of the overlap of these two groups, the 40 items on which both men and women agreed will be presented first. They will be placed into impressionistic categories to summarize their main dimensions. Following each item will be the percentage of men and the percentage of women from the sample who formed the consensus.

First, students reported liking intellectual activities of a personalized sort, often involving intense effort and concentration. Specifically they like:

	Percentage Liking	
	Men	Women
Learning about the causes of some of our social and political problems	89	93
Understanding themselves better	94	97
Discussing with younger people what they like to do and how they feel about things	80	85
Listening to a successful person tell about his experiences	86	87
Trying to figure out why the people they know behave the way they do	80	88
Losing themselves in hard thought	83	83
Engaging in mental activity	91	87

Second, they enjoy activities which are physical, active, and adventurous. These numbers obtain satisfactions from:

	Percentage Liking	
	Men	Women
Exerting themselves to the utmost for something unusually important or enjoyable	97	98
Living a life which is adventurous and dramatic	89	82
Doing something very difficult in order to prove they can do it	86	82
Yelling with excitement at a ball game, horse race, or other public event	83	87
Giving all of their energy to whatever they happen to be doing	83	82
Setting myself tasks to strengthen their mind, body, and will power	83	80
Toughening themselves, going without an overcoat, seeing how long they can go without food or sleep, etc.	17	10

They are unsuperstitious; these percentages prefer:

Going ahead with something important even though they've just accidentally walked under a ladder, broken a mirror, etc.	91	92
Taking special precautions on Friday, the 13th	6	5
Waiting for a falling star, white horse, or some other sign of success before they make an important decision	3	7
Being especially careful the rest of the day if a black cat should cross their path	3	3
Carrying a good luck charm like a rabbit's foot or a four leaf clover	6	13
Finding out which days are lucky for them, so they can hold off important things to do until then	0	3
Going to a fortune-teller, palm reader or astrologer for advice on something important	6	7

Fourth, most enjoy being practical, efficient, and good at the manual skills. Most report they like:

Being good at typewriting, knitting, carpentry, or other practical skills	83	83
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	Percentage Liking	
	Men	Women
Being efficient and successful in practical affairs	97	92
Organizing their work in order to use time efficiently	83	82

The group seems to have a tendency toward self-denial and deference to others; this tendency can be inferred from these items:

Suffering for a good cause or for someone they love	83	90
Apologizing when they've done something wrong	83	85
Knowing an older person who likes to give them guidance and direction	89	82
Having others offer their opinions when they have to make a decision	89	88

Still few like:

Working for someone who always tells them what to do and how to do it	14	7
---	----	---

The COP sample showed a tendency toward impulsive and impetuous behavior as inferred from their attraction to:

Doing something crazy occasionally, just for the fun of it	86	93
Doing whatever they're in the mood to do	94	92
Doing things on the spur of the moment	83	90

Most students report they like being romantic with someone they love, 91%, 95%, but they reject Hollywood romanticism.

Daydreaming about being in love with a particular movie star or entertainer	80	82
Pretending they are a famous movie star	83	87

Finally, several items defy categorization. The following percentages report they enjoy:

Holding something very soft and warm against their skin	89	96
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	Percentage Liking	
	Men	Women
Listening to the rain fall on the roof, or the wind blow through the trees	80	90
Going to a party or dance with a lively crowd	80	82
Talking someone into doing something they think ought to be done	91	85
Telling others about mistakes they have made and the sins they have committed	20	17
Being a lone wolf, free of family and friends	20	17

In addition to these items, there are 21 more which were answered in the same way by 80% or more of the males in the COP sample but not by the females. Because they generally elaborate the above categories, they will be listed in an ungrouped fashion.

Persuading a group to do something their way	80	68
Taking up a very active outdoor sport	80	78
Being in a situation that requires quick decisions and action	80	70
Flirting	80	68
Reading articles which tell about new scientific developments, discoveries, or inventions	86	68
Turning over the leadership of a group to someone who is better for the job than they	80	75
Going to scientific exhibits	83	53
Doing something over again just to get it right	89	72
Reading scientific theories about the origin of the earth and other planets	83	53
Doing things that are fun but require lots of physical exertion	86	65
Taking the blame for something done by someone they like	20	22
Crying at a funeral, wedding, graduation, or similar ceremony	17	37

	Percentage Liking	
	Men	Women
Thinking about ways of changing their names to make them sound striking or different	20	23
Avoiding things that might bring bad luck	17	35
Taking examinations	20	27
Going on an emotional binge	17	28
Having people laugh at their mistakes	17	30
Letting loose and having a good cry sometimes	20	80
Quitting a project that seems too difficult for them	17	22
Shining their shoes and brushing their clothes every day	14	23

Finally, there were 24 items which attained a consensus of 80% or more of the women but not of the men in the COP sample. These ungrouped items are:

Feeding a stray dog or cat	77	87
Working for someone who will accept nothing less than the best that's in them	71	87
Rearranging the furniture in the place where they live	63	85
Meeting a lot of people	77	80
Comforting someone who is feeling low	71	97
Having people come to them with their problems	69	87
Letting loose and having a good cry sometimes	20	80
Talking about music, theater or other art forms with people who are interested in them	71	82
Seeking to explain the behavior of people who are emotionally disturbed	71	82
Dressing carefully, being sure that the colors match and the various details are exactly right	57	80
Reading stories that try to show what people really think and feel inside themselves	77	92

Percentage Liking

	Men	Women
--	-----	-------

Talking over personal problems with someone who is feeling unhappy	74	82
Striving for precision and clarity in their speech and writing	78	80
Seeing someone make fun of a person who deserves it	43	20
Being an important political figure in a time of crises	57	20
Working until they're exhausted, to see how much they can take	34	17
Studying wind conditions and changes in atmospheric pressure in order to better understand and predict the weather	37	17
Imagining themselves president of the United States	34	12
Chewing on pencils, rubber bands, or paper clips	26	14
Thinking about winning recognition and acclaim as a brilliant military figure	29	5
Annoying people they don't like, just to see what they will do	40	17
Organizing a protest meeting.	34	13
Playing rough games in which someone might get hurt	49	12
Thinking about how to become the richest and cleverest financial genius in the world	69	12

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