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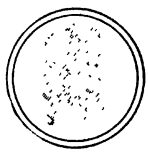
LOGIC FOR LIVING

LOGIC FOR LIVING

LECTURES OF 1921-22

BY
HENRY HORACE WILLIAMS
University of North Carolina

Edited By
JANE ROSS HAMMER



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FOREWORD

A teacher can have few higher satisfactions than to be remembered by his students in some useful and enduring way. Professor Williams taught greatly for a half century at Chapel Hill, lived simply, and left generously all his savings of almost $50,000 for the provision of fellowships for students in philosophy. Professor Henry Horace Williams in his years of teaching at the University of North Carolina taught thousands of young men and women who developed a respect for the value and use of the human mind. It would be a source of great joy to that remarkable teacher to know that two of his most devoted students, Dr. O. B. Ross, father, 1905, and Jane Ross Hammer, daughter, 1936, are taking the lead in commemorating their favorite teacher in a personal and durable form. The father was one of the founders of the Horace Williams Philosophical Society which, through the Philosophical Library, is making available these lectures and class discussions.

This book is a treasury of examples of individual teaching; of Professor Williams' stimulation of the use of the youthful mind as an instrument of intelligence, reason, and logic; and of the primacy of the individual human being as the chief concern of education, politics, economics, and religion.

His emphasis on and a misinterpretation of individualism by some of his followers may have caused a resistance to some of the needed social reforms of the times

and progress of the times. On the other hand, his teaching of the paramount values of the individual and the responsibility for leadership and moral courage of individuals in a democracy, along with the stand of President W. L. Poteat of Wake Forest College, President H. W. Chase of the University of North Carolina, Walter Murphy, E. D. Broadhurst, Charles W. Tillett and others of his students all over the state, helped decisively to prevent North Carolina from adopting a law against the teaching of evolution.

This is a timely publication in its emphasis on the significance of the individual in a day of pressure groups and mass power. It is refreshing in these years of the exigence of mass education to see a teacher and a student sitting, talking and reasoning together at two ends of the log. There is a reminiscent reassurance to hear a robust individual talk for the freedom of the human mind in the face of the drifts of an age of mass hysteria and the dictatorship of the police state. It is good to hear the overtones of the self-reliant mind of him who would still inspire individuals to think for themselves; to stand, if necessary, alone for the right, as God gives to each individual, in his consciousness of the universal, to see the right. His study was his sanctuary. His classroom was in the stream of life. It was his teaching to generations of youth to place reason above prejudice, conscience above position and power, leadership above price, idealism above mechanisms, and religion and the most precious things of the human spirit beyond science and the things of the world.

FRANK PORTER GRAHAM

PREFACE BY THE EDITOR

This work is unique in modern philosophic literature for one main reason: the unique character and contribution of the author. Henry Horace Williams was a teacher first and always. Philosophy was to him the bone and marrow of life. More popularly known as the "Old Man" to his students, he left the indelible mark of his work upon the lives of his students, his university, and his state.

Thomas Wolfe called Horace Williams the "Hegel of the cottonpatch". In itself the nomenclature reveals the unusual combination which he possessed of systematic thought and earthy realism. Born and raised on the edge of the Dismal Swamp, this eldest son of a poor country doctor-farmer managed not only to get an education at his own state university, but also to go on to Yale Theological School and the postgraduate schools of Harvard and Heidelberg, Germany. He was grounded in the idealism of his day and yet developed to an unusual extent the capacity of translating the most sweeping concepts into the mood and language of the young men and women of a raw Southern state. Whether or not he succeeded in attaining the philosopher's dream of clothing Hegel in simple garb, there is abundant testimony to the fact that the cottonmills and the tobacco markets

of North Carolina are better and more prosperous because of a half century of his efforts.

It was natural that Horace Williams' vision of a school of thought in the South should have come out of this marriage of scholarly insight and practical grasp. Out of the cottonpatches were to come, as he saw, lawyers, doctors, preachers, business men, and statesmen who could build a better region with the tools of thought, not plows. Like Socrates, he was sure that knowledge is the only way; unlike most academicians he was undeceived by the capacity of any one technique to achieve so broad a goal—even so comprehensive a technique as philosophy itself. So even the concept of a school of thought was understood by Horace Williams to mean, not an erudite following, but the creation of independent, progressive leaders. "My boys", as he always called his students, were to make and remake the life of the commonwealth in every field of endeavor.

Horace Williams did possess unusual characteristics which could attract and inspire young people. Beyond a keen and fearless mind, he had also a sense of timing and imagery that approached the dramatic. His classes were for decades the most discussed on the campus, in spite of his known rule of giving A's only in most exceptional cases. His sense of humor was sharp and his tongue often merciless when aimed at shallowness of thought, either in general or in particular individuals. His frankness made bitter enemies as well as ardent friends. However, his eccentricities seemed to emphasize to the student that only two things were really important: The task of education is to know yourself, and knowledge, like life, is a process of development.

Judge Robert W. Winston, in his able biography,

Horace Williams, Gadfly of Chapel Hill, published by the University of North Carolina Press in 1942, calls Professor Williams a mystic. In a significant, though unusual sense of the word, he was. Intuition as an intellectual process of insight into unity he regarded as vital. Analysis, he saw, could not reveal relation, which is implied by synthesis. And without understanding of relation, thought is partial and contradictory. Certainty comes only with insight into wholes, and certainty was the mark of Horace Williams' thought and actions. This certainty was the despair of his opponents and the delight of his advocates. In a scientific era he, like the quality itself, became a target for criticism. But in no other sense was he a mystic. The source of his process was his own mind. Logic was his method, and logic was to him a two-way movement, from whole to part and back to whole again.

Logic to Horace Williams means what may be called applied logic, as distinguished from formal logic. Thinking, to him, is always relevant to concrete objects and situations, not merely an exercise in abstract words or symbols. Both types of logic have currency in modern philosophy, the first stemming from Hegel and numbering among its advocates such diverse thinkers as H.W.B. Joseph, F.C.S. Schiller and John Dewey (contemporary of Horace Williams at Harvard); and the latter owing its origin to Aristotle but its more recent elaboration to Frege, Peirce, and Schroder, and its culmination in the *Principia Mathematica* of Whitehead and Russell. The Hegelian contribution was the dialectic method, which goes beyond the so-called law of contradiction into the principle of synthesis of opposites.

Perhaps it is not ironic that the vitality of this con-

ception has been demonstrated most vividly in the field of social and political philosophy, notably by Karl Marx, who adapted the dialectic to suit his own purposes. But the communist solution was not the only social application of the Hegelian method. Objective idealism flowed into the stream of Anglo-American democracy through T. H. Green, Josiah Royce, Charles Everett, and W. E. Hocking, as well as Horace Williams. It did so insisting on the attainment of social unity only through free and equal (and therefore individually different) pursuit of truth and justice.

That the communist formula is neither exclusively nor authentically "Hegelian" is best summed up by a remark recently made in Rome by George Santayana, also a Harvard contemporary of Horace Williams, to one of Horace's students: "You can easily understand Stalin and the Russians if you remember the Hegelian formula of thesis, antithesis, synthesis ends (only to begin again) in synthesis. The strategy of the communists is to keep the rest of the world in a state of antithesis."

True to its principles, Professor Williams' logic reached beyond the classroom into the activities on the campus. The most significant of these was the student government which had been since reconstruction days an outstanding feature of the University of North Carolina. Here there was and is complete self-government, to train young people in the practice of democracy. The framework which has made it effective and meaningful is the remarkable Honor System, which Horace Williams championed, often against odds, in the faculty and in the student debating societies. This Honor System is a code of action whereby students are expected to produce their own work in examinations without being proctored,

and they are expected to report on fellow members who do not do their own work. Punishment of violators is deliberated and carried out by the students themselves. The faculty consults and advises but refrains from direct participation.

The debating societies, the Dialectic Society and the Philanthropic Assembly, were in the early nineteen hundreds the core of the extra-curricular intellectual life of the students. There topics of all kinds were discussed and debated. Inter-collegiate debating teams from the university achieved prominence, many of them led by Williams' boys who applied the logical methods of their teacher.

While attaining a reputation throughout the state for his teaching, Horace Williams' fame was restricted because of his ineptness as a writer. The books which he published, *Evolution of Logic, Modern Logic,* and *Education of Horace Williams,* were not read because of the difficult manner of his expression in written language. Moreover, at North Carolina University as elsewhere, the rising popularity of pragmatism and of formal logic led to a partial eclipse of the idealism which for half a century had had a dominant influence upon American philosophy.

In the belief that the work of a man who as teacher had taught students to think for themselves and as philosopher had reinterpreted old truths and creatively applied them deserves to be more widely known, "the boys" have given me the task of editing these lectures. I have tried to preserve both the logical development and the teaching techniques of Horace Williams. Any failure to do full justice to either is my own.

Acknowledgments are due to the members of the

Horace Williams Philosophical Society and especially to my father, Dr. Otho B. Ross of Charlotte, N. C., whose foresight in having the stenographic notes of the lectures made, and whose diligent efforts as Society Secretary throughout several years have made this work possible. Much encouragement and help have been given by: Mr. Agnew Bahnson Sr., textile manufacturer, Mr. Kemp D. Battle, lawyer and member of Board of Trustees of U. N. C., Senator Frank P. Graham, former President of the University of North Carolina; Rev. Ralph Harper; Chancellor Robert House, of the University of North Carolina at Chapel Hill; Dr. Anna Forbes Liddell. Professor of Philosophy at Florida State College for Women; Mr. Nathan Mobley, President of U.S. Guaranty Co., New York City; Mr. Edward McDonald, YMCA Secretary and Real Estate, Youngstown, Ohio; Judge John J. Parker; Rev. Sidney Robbins; Mr. Charles Phillips Russell, author and Professor of Journalism at the University of North Carolina; Mr. and Mrs. Charles Tillett, lawyer and leading National Democratic Committeewoman respectively; Mr. A. Lee M. Wiggins, former Undersecretary of the Treasury and Chairman of the Boards of the Atlantic Coast Line and the Louisville and Nashville Railroad; and Mr. Frank E. Winslow, lawyer. Members of the Logic class of 1921-22 whose names appear most frequently are: Mr. Otto Boettcher, Mr. B. C. Brown, Dr. F. F. Bradshaw, Mr. A. F. Denham, Mr. A. Frank Essie, Mr. Paul Green (widely known as Pulizer prize winner and playwright), Mr. Herbert C. Heffner, Miss Maybelle Penn, Mr. Garland B. Porter, Mr. W. W. Stout, Dr. Calvert R. Toy, Mr. J. P. Trotter, and Miss Mary Yellott.

Former students and associates to whom Professor

Williams referred include: Mr. Albert Coates, director of the Institute of Government at Chapel Hill; Mr. Josephus Daniels, late U. S. Secretary of the Navy and Ambassador to Mexico; Mr. E. K. Graham, late President of the University of North Carolina; Mr. Graham Kenan, business leader and philanthropist; "Parson" Moss of Chapel Hill; Dr. Howard Rondthaler, Bishop of the Moravian Church, Winston-Salem, N. C., and former President of Salem College; Judge Watt Stacy; Mr. David Pony Stern, attorney of Greensboro, N. C.; and Thomas Wolfe, noted author.

JANE ROSS HAMMER

Atlanta, Georgia

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PART I

WHAT THINKING IS

CHAPTER I

LOGIC

MOMENTOUS *events happen to every individual. One of the most vivid of such experiences in my life took place on a beautiful September day.**

My heart was beating faster than usual, for I knew adventure waited at the end of the gleaming white sand path. My surroundings were strange—Chapel Hill, I was told, was the name of the place. It was a lovely old Southern town, one of the few really charming spots where tradition meant, not the arresting of time, but the real duration of time, molding, Bergsonian-like, its future out of its past. Here peace was pregnant with change, not repose. Here men grew, feasting upon beauty, goodness, and truth that seemed almost tangible.

The secret of Chapel Hill was and is the university she shelters. I had grown from earliest childhood to realize that the life-renewing blood of North Carolina and of the South pulsed from this, our state university. I knew that here the forces that would reshape the South were being born. More than that, I knew of one heart

*The descriptions of the campus and of Williams are intended by the editor to restore the actual scene and the principal character. The purpose of all inserts, which appear between the lectures, is both topical and editorial. They are intended to throw additional light on the philosophical ideas of Williams and to enhance the classroom drama.

whose beat caused that blood to flow—a teacher who had devoted his life to the stimulation of young men to think and to lead. This man had been a legend in my life, for my father's generation had known him as a young and forceful thinker. No wonder I was excited that eventful day—I was going to meet him.

My path led down a wide street, past deep-set houses that seemed to have matured and flowered and occasionally gone to seed with their foliage. The road turned casually, and at the bend I left it to approach the house I sought. Tall oaks spread wide branches protectingly over a quiet dwelling, of no particular size or style—just a house. It was the Williams' place.

The weather-stained clapboards and sunken porch were so right, I thought, symbolizing as they did the supremacy of the mind of this man over the material. One room dominated the house, and I knew without hesitation it must be the study. I turned away from the center door to knock on the door to this room, and I was rewarded. A soft, slow voice bade me come in.

The character of Horace Williams showed clearly in his features, his frame, and his manner. Although his hair was white and thinned with age, he must have always looked as he appeared to me that day. His face was narrow, tapering from massive crown to determined chin. His eyes were intense, establishing contact as immediate as an electric current. His hand-clasp was strong, and I noticed that his hands were gnarled and weathered like a workman's. His shoulders were wide and his chest large for his height. Here was a man who had developed not only his mind but his body, a man who gave the indelible impression of certainty and power.

Professor Williams' voice as he spoke was gentle.

His drawl belied the quickness of his thought, which leaped and turned, and yet led unerring as an arrow to its goal. That goal was me, the student. I was unknown to him, but before I left his dim study he knew my heart. He knew my interests, my desires, and hopes. Through these he challenged me to begin a journey I had never visualized. He made me want to find out about myself: how my mind worked and how I could bring together my diverse ideas and talents. I went away, not appalled by the eccentric some had depicted, but gripped with the desire to study, not Logic, but Life.

I was to return to that study many times in the course of that year. The mosaic in the wood of the ceiling is printed deep in my memory. The lighted lamp and dark shelves of books bring a nostalgia I can scarcely overcome. I can still hear the creaking of the desk chair and the cadence of the calm voice.

That study was never closed. We students were expected to come with our problems and our despair, to be encouraged and puzzled and encouraged again. Here we chewed the undigested meat of the lecture hours and grew.

The class was to meet at the ten o'clock hour of the morning, and I was there beforetime. The building was old, the stairway broad, and the ceiling high. Tall windows flanked the small blackboard and another window opened to the right as we faced the professor's desk. Giant trees towered out of sight past our second-story eyes, trees which drew our gaze but seldom our thoughts.

I sat down. The class was small as modern standards go, and I was thankful. "Old Horace", as he was affectionately known to his "boys", was there already, standing by the window in the thoughtful pose I was to see

often. As the bell pealed and the last students seated themselves, he turned and began to speak, without preliminaries, simply and directly:

This morning I should like to give you some notion of what we are trying to do in the study of philosophy.

Philosophy, I suspect, will be a little different from anything you have had thus far in the university. Until now every subject you have studied has been something that stood over against you. Every piece of knowledge, whether a page that Caesar wrote or something that Shakespeare thought, has been material given you to absorb. All of your student life has been spent in the accomplishment of tasks, and I take it you have done these tasks well. You have been considered a good student if you could translate just what Caesar said in his letter. That is very important, but it is not philosophy.

The study of philosophy is, as I understand it, the study of yourself. What part of yourself? Your thought processes. I assume you have in your head an intelligence, but what is intelligence? Some think it is the power of memory; some think it is the power of imagination. Some think it is to analyze, which is to sciencize.

In logic the intellect means the capacity to think. Unfortunately many people never think; that is, they do not use their intellect in the best way it can be used. It is all right to memorize, but that is a mirror process at best, and philosophy is not a mirror process. You can be a superlative mirror if you copy Shakespeare, but that is not you. It is true that some of you would be astonished if you looked in the mirror at your own reflection, but that is a poor way to get at yourself.

Suppose you work out a problem in geometry, fol-

lowing Euclidean principles. Have you really done anything, you yourself? I do not see that you have. You have simply done what somebody else said for you to do.

You will never realize what your intellect is until you do a piece of thinking. When you do think, you will find something in you that you did not know was there.

Thinking does give a man great power. Suppose there are fifteen hundred people on the campus. If you let me pick six of that number, the six will control the balance. Watch the next mass meeting and see if it is not a clash between two boys. The crowd divides about equally if the two boys are equally matched, for the meeting is controlled by two intellects.

There was an instance some time ago. After several boys had addressed themselves to the problem before the house, W. R. Edmonds, a law student, arose in the rear of the auditorium and opened up the question to their understanding. When he sat down the discussion was over; the problem was solved.

How did Edmonds do this? As philosophy students it is our business to see how he did it. The best way you can find out is to work at the problem of thinking until next commencement, for you cannot know what a whale is from one lecture on a whale. At the end of the year every one of you will know more about himself than he does today.

Thinking is a Process

The simplest way to understand logic is to do a little logicizing. Logic is a study of that process we call thinking. Nobody can think for you; thinking is your job. Learning to think is just like learning to run. You can

read all the books on physiology; you can see how someone else ran; but you will never be a runner if you stop there. The thing you must do is to run. My whole aim in this course is to give you that experience. I consider anything legitimate that will start the wheel in your head.

Take this problem to work out: What does minus one times minus one equal? My teacher told me that the answer is a plus one. A bright boy in our class wanted to know why two minuses give a plus, but the teacher said ordinary folks could not understand why. If you are interested in mathematics and want to do a little thinking, work that out. The best way I know to begin is to say you do not believe a word of it. The answer has got to be a minus. When you multiply chickens by chickens you do not get hogs. Neither do you get a minus if you multiply a plus by a plus.

Take any question you wish. Say you do not believe a word of it and you will have a great experience. If you will do that you will begin to live what I call an intellectual life. So far you have been a child, but you must, as St. Paul said, put away childish things to become a man.

The first step in thinking is the questioning of authority. Yesterday I asked four professors of history why it was there had never been any Europe. They were astounded at my question, for the history books do not explain why Europe has never been unified. The Roman Empire unified the Mediterranean Basin, and the Roman Catholic Church unified religion. Why could not the nations in Europe get together?

What do you think these professors answered? Nothing. One man said he was going to ask his class.

I really want that information. I do not want the wheel in your head to run the way mine does, but I want it to turn over once during the year. If you will think one time, then your year's work is a success. I will have done for you what I wanted to do. If you do not think, then I have failed to do what I wanted to do. Do not try to remember what I say, for I may not say anything worth remembering. Prove my thinking is wrong if you want to make an A on the course.

Thinking is not Formal

Aristotle said that logic is the study of the forms of thinking. To me logic is not a formal study; it is the most concrete of all studies. There is nothing beyond its interest. We are not so much concerned with the forms as with the thing itself. I hold that if we understand the process the forms will come easy, for of course we will deal with a great many of the forms of thinking. Although thinking is not formal, it expresses itself, and the expression of things is form. You can no more get at the secret of thinking by studying the forms than you can understand your girl by examining her bonnet. You may study her bonnet if you wish, but that is not as good as sitting on the sofa with the girl herself.

The thinking process does not run true to any one person's form. I have never seen two students that walk alike, much less think alike. Not even brothers walk alike.

Once I knew a teacher, a remarkable disciplinarian, who had charge of a boarding school for girls. Whenever a girl would go by the door of the teacher's room after hours, her name would be read out in chapel. It was uncanny. The girls said she was a witch, but she

merely listened to their steps. If people do not walk the same way, how do you expect them to think alike?

It is possible not to think at all. I remember a young summer school student, with whom I chanced to sit at the table one day. Upon finding out that she had been warned not to touch that man Williams, an evil spirit possessed me and I proceeded to corrupt her.

Do you believe everything in the Bible? I asked.

Yes, sir, she said.

Do you mean to say you believe that Jonah swallowed the whale?

Yes, sir.

Well, why could Jonah not swallow the whale? Jonah was not so big, perhaps one hundred and fifty pounds. It would have been a miracle, but she believed it. I admired her courage.

But the question remains: When you do think, what is it you do? I am not sure. Your intellect will not work the way mine does, for it will work the way it wants to.

Thinking is Distinguished from Feeling and Acting

The emotion that enters into your mind is a separating power. Feeling picks out and elevates your mother, whom you love, above other women. To you she is the best woman in the world. To take another illustration: You are in this room because you are interested in philosophy. It is your feeling that brings you here. Each individual in this room will soon pick out chums whom he will enjoy more than the others. Emotion tears things apart, so where you have nothing but emotion you have chaos. Pure feeling, undirected by thought, is prejudiced, partial, and antagonistic.

Doing is, I think, the same sort of process. I heard

a Harvard professor say that truth is the simplest way of doing a thing. Truth is the way you act—that is pragmatism. A little reflection will deliver you from that view.

What is the doing process? When you do anything, you take that thing out of its surroundings. Is that not at best a separating process? You take mail out of a box. When you go to dinner you, not I, eat the dinner. Or you cut up a plank, and when you finish you have made something new. Your life thus far has been primarily that sort of life. You have been separating the sheep from the goats, trying to find out whether you wanted to be this or that. I, too, spent twelve years of my life trying to prove Christ was a Methodist, while my roommate said He was a Baptist, and a friend claimed He was a Democrat.

Wherever you find emotions and action predominant, you will find continual division of things into smaller and more numerous things, and the separation of people into groups. Suppose we did not have anything but the power to feel and the power to do. We would be merely animals, then, inferior to many other animals. Dogs can run faster and smell better than we can, and they have feeling. But animals are hopelessly split up into small groups which fight each other. Similarly, people who never emphasize anything but emotion and action are very narrow and antagonistic. All of us are more or less that way, but we do not like it. I never saw a student yet who boasted of being the narrowest man in the university, and I notice that over at Duke University they are boasting of being liberal. To be liberal is to acknowledge that the other fellow, the other school, has something. Is that not rather risky?

How does a man get to be liberal? Man has a third power, the power to think. The thinking power is a synthesizing power, a unifying power. It heals the work of emotion and action.

Thinking is Unifying

To think is to bring together. That is the first definition I am going to give. The world first comes to your consciousness as objects, and these objects are not related. To see the relations of these objects to each other and to the self is the work of the intelligence.

The body of knowledge about nature that is produced by the intelligence is called science. So we may say that nature is one great sphere or unit in which thought moves. Man himself is the object of thought, so human nature and the history of man's development form another unit for study. The third unit with which I am going to deal is the inner life. Some call this life the spiritual life.

Every individual's thinking moves in these three fields. All men are curious about the world, the kingdom of science; all are interested in humanity, in history, civilization; and all are trying to show that the individual himself has unity.

Where do men get these unities? I do not expect an answer to that question. If you examine your own experience, you will not find a single instance of any of them there. The world comes into our consciousness in parts, separate and magnified, and yet we have this other deep awareness of the unity of reality.

Why are there not four units instead of three? Why am I a trinitarian? Because there are only three units: nature, man, God. I never saw a man who did not func-

tion in the realms of science, society, and religion. I never saw a man who functioned in a fourth.

It is very difficult to tell what is meant by any one of these unities. Last year a man told me that he could look out on the Blue Ridge Mountains and see God.

Do you? I asked.

Don't I? he replied.

What you see is trees and rocks, I said.

The Old Testament is very much deeper than this student. The Old Testament says you cannot look on God and live.

How do we form the conceptions of nature, of man, and of God? We are trying to find this out, for logic is a study of these three units. Nature, man, and God are the three great syntheses that come from thinking. Animals do not have that unity man calls nature. Animals can see food and shelter; they have some feeling; and they can understand a little bit. But I have never seen the slightest indication that anything but a man could think, that is, unify.

These three syntheses—nature, man, and God—are the illustrations and the achievements of thinking. It is going to be our business to trace the development of these three units.

That, as I understand it, is logic.

PART II

WHAT MAN THINKS ABOUT

CHAPTER II

NATURE

WILLIAMS: To me a logic course is like going up stairs. We ought to try to take a step every day. Sometimes we stumble and it is necessary to go back and see why we did, but ordinarily we try to go ahead one step at a time.

We have been trying to get a start. I have said that logic has to do with thinking. Our business is to get a pretty clear line on the process of thinking, so we will hold it before ourselves all the time. Then I said that you will find that thinking is unifying. The thinking breaks down when the process of unifying gives out. There comes a time when you reach something that you cannot think out, that you cannot put into your system. For instance, suppose you start to study division. When you reach the point where you are to divide a five by a three, your process breaks down. You can say it is too much for you, and leave it, or you can go on the best you can.

At one time we did not understand nature. We thought that nature was dead, and that it did not move at all. We abandoned that view when we saw that nature did move, but we thought that the moving force was outside of nature. When a star appeared to move we said it was the work of an angel.

Another view was that nature was wicked, and a great many people hold that view still. St. Paul was re-

sponsible for a good bit of that. He said, "When I would do good, evil was present with me." One's natural self is his enemy. Many people share the view of St. Paul that everything in nature is produced by the devil. There is also the view that one part of nature is good and another part bad.

What is Nature?

There is no sort of agreement as to what nature is. One scientist will say that nature is everything you can see, touch, and smell; another defines nature as a great kingdom of law—exactly what you cannot smell. Science is the history of the exploration of nature by intelligence, yet the great scientists do not agree about it.

To me the process of nature is an illustration of thinking. But how is thinking related to nature?

The variety of the explanations of the relation between the nature process and the thinking process is astonishing. The Christian Scientist says there is nothing to the nature process. You are not sick unless you think so. Then there is the materialistic view, that the nature process includes everything. Nature is unintelligible; it is a blind expression of force. And there are all sorts of half way views.

The question of the relation of the nature process to the thinking process is one no student of philosophy can avoid. There is no agreement about it; you must exercise your own choice, bringing in your own intelligence. The nature process is not a thinking process, nor is the thinking process a nature process. Then how can logic be a study of the nature process, if logic is the study of thinking, and if thinking is different from the nature process?

It is this way. Everybody will agree that the child process is not the man process. What is the relation of the child process to the man process? I do not know, but I am quite sure that the two processes are different. I am certain that the man process can not be explained in terms of the child process, and I am equally sure that the child process *can* be explained in terms of the man process. The nature process is not a thinking process, but there is no dynamic, evolutionary nature process that does not yield itself to the thinking process.

Science has explored the whole field of nature, down to the microscopic, and what is the result? They have reported knowledge of every bit of it, knowledge that is reliable and genuine. So I say that the history of science proves that the nature process yields to the thinking process, just as every child, if you let him live and fill out his life, becomes a man. It never goes the other way. The development of man is a natural process, so the child process finds its explanation in the man process. There is nothing in nature that is beyond the penetration of the intelligence.

Is there any question? You can always ask questions in this class.

Green:* How far are you going to go to decide that there is nothing in the nature process that cannot be explained in terms of the thinking process?

Williams: I am not going far. I am going to illustrate.

*All names of students used throughout the class discussions are actual names of members of the class in 1921-22. The use of the names, however, is fictional where the transcribed lecture notes of B. C. Brown fail to identify the speaker, especially in the early chapters. One exception must be noted: the student Ross is a fictional character whose questions are interpolations by the editor.

Green: What warrant have you for reaching this conclusion?

Williams: The history of science. It has explored every bit of nature, has it not?

Ross: But scientists are continually making new discoveries.

Williams: Yes, the process of analysis is inexhaustible, so the body of scientific knowledge is always being enlarged. But the point is that nature is through and through intelligible.

Now I do not mean by that that nature is a product of intelligence, nor that intelligence is a product of nature. The nature process finds its significance in the thinking process, but it is not the same as the thinking process. If a man has colic he can keep from having it any more by not eating the cabbage that causes the colic. But knowledge will never abolish that particular colic.

Nature may be said to be an immature, undeveloped thinking process. There is first the blade, then the ear, then the full corn. The process of development is in every case a unifying process, though it reaches self-consciousness only in man. In so far as the nature process is part of the thinking process it can be studied and understood, and you can relate yourself to it. Nature cannot relate itself to you; you relate yourself to nature through intelligence. If you know enough, you can bring the electricity into your room. If you do not know enough, it will burn you up.

Science is an Organized Body of Knowledge

Nature is intelligible in what we call the body of science. The whole mass of scientific knowledge is a unity. You will find that no one who lacks intelligence

has made any contribution to that body of knowledge. Science is indebted to the master student of nature in every case. The stupid man has not done a thing; the weak mind has not made any contribution.

Porter: Scientists get that knowledge through analysis, though. For example, they get the law of falling bodies through analysis.

Williams: Primarily, I say yes.

Porter: But what is it they analyze?

Williams: Well, you might say that insight into the law was not achieved through analysis alone.

Porter: That is what I am trying to get at.

Williams: How is a man going to get knowledge of a cat without killing the cat? Contrariwise, how does he get truth about a live cat from a dead one?

Porter: That is the trouble. You seem to have a contradiction. You say that scientific knowledge comes on the basis of analysis. Now you say that all thinking is unity, or a unifying process.

Williams: Analysis is a separating process; it tears things to pieces. You catch a cat and kill it to find its backbone. You discover the second cat has a backbone one-tenth of an inch longer than the first cat, and that the backbone weighs sixteen and three-fourths ounces, as compared with sixteen ounces for the first. Such information is important, but what is to be done with it? Finding the significance of the facts reached through analysis is the job of the great scientists, whom Mr. E. K. Graham used to call "the altar boys" of science. That is where thinking enters into the scientific process.

Brown: You find a place for the research man after all?

Williams: Oh, yes. Does that remove the difficulty?

Brown: Yes, sir. I see.

The Method of Science is Analysis

Williams: The thinking process is the opposite of the sciencizing process. To sciencize is to analyze; to think is to synthesize. If you love your pet dog, do not turn him over to a scientist, because the scientist will dissect him and that will be the last of your pet dog. We will come to this question again in the logic of science, but here I am trying to point out the world that we are to explore: the thinking process. I am offering science, the accomplished thing, as an illustration of thinking.

The scientist not only has discovered truth; he also says it is the only bit of truth there is. If the scientist has become so enthusiastic that he says you discover nothing in any way except his way, then is he not outside his sphere? I agree with the scientist that his is very fine knowledge. Science is very genuine, but it does not include all of reality.

It is interesting to observe that the scientist says he can give you knowledge of the object and then he gives you, not the object, but something else. Suppose I want knowledge of water. The scientist takes a specimen, analyzes it, and reports that water is H_2O. The genuine reality is hydrogen and oxygen in the proportion of two to one. He says this is knowledge, and he calls hydrogen and oxygen elements.

Now I do not see that this is knowledge of water. It seems to me to be knowledge of hydrogen and oxygen. Is hydrogen ultimate, the final result of the analysis of water? So far as chemistry goes, it is.

The scientist analyzes nature and finds about sev-

enty-two elements, so your knowledge of nature is knowledge of the seventy-two elements. Everything you see and hear is a different arrangement of those elements.

Boettcher: Do you get the same result when you take the process of evolution as an example?

Williams: Yes, sir. The process of evolution points out that the different forms of life are interrelated. You have seventy-two things to work with. If you bring three of these elements together, you get a man; two, and you get a dog. It seems to depend on the sort of combination you make.

This is a very good question, and it will come up again and again. The conception of relativity will stare us right in the face.

I stumbled as I made my way out of the classroom, for my mind was in a whirl. Is there uniformity in nature, or is it all in the mind that reflects upon it? What about the aspects of nature that are not orderly—the freaks and the accidents? My puzzled thoughts kept me awake late that night. Perhaps, I sighed at length, Professor Williams will clear this up when he talks about man and about history.

CHAPTER III

HISTORY

PROFESSOR WILLIAMS *was writing on the blackboard when I entered the classroom the next morning. Ten divided by three. The blue-veined hand drew the symbols, and that was all. Mathematics? But this is a course in logic, I thought, mystified. I waited impatiently for class to begin.*

Williams: It is essential to see that there is material for the logician to study. There are so many fields in which you deal with specimens. If you are studying a bug, you can turn him over and look at him. You can make a test and see the actual results. But logic is a study of thinking, and it is impossible to get a specimen of thinking. You think you get a specimen, but it is a word, an institution, a custom; it is not thinking. This is the peculiar difficulty of the logician.

A great many people deny that there is such a reality as the thinking process. They say that the mind is simply a part of the nervous system, and that thought is a reaction. If the rain hits you, you are wet; that is all. The circumstances determine the reaction. Now if that is the case, there is no such thing as logic.

I am quite sure that this view is not correct. It is

superficial and fails to get at the process which I want to call to your attention. Of course it is up to me to show this.

I have said there are three units within which your mind and every mind works. Nature, man, and God form a circle in which your intelligence is confined absolutely. The first one, nature, is the unity of science. The scientist will not tell you what he means by nature, so I have to make my own definition. Nature is something in addition to the specimen that is studied. We have considered the scientist's claim that the world of nature is the only genuine world, and we will come to it again.

Another unit in which your intelligence moves is history. You call it civilization, or you call it man. The historical world is a great and genuine record; it is not nature.

We will find two schools of thought about the relation of man to nature. There is on the one hand an effort to make the whole human being belong to the world of nature. It is claimed that there is nothing about man that is original; that everything about him can be explained in terms of some sort of natural process. Another school is quite occupied in trying to translate the nature process into the psychical process. I think we can explain both attempts after a while.

Logic Begins with Language

The recovery of a lost language seems to me to be the best illustration of the reality of history. There are a number of cases of this. When a civilization decays there comes a time when all the people who speak a certain language are dead. No records are left, and no one liv-

ing knows the alphabet or the pronunciation. Then a scholar digs up an old slab and discovers hieroglyphics. He studies them eagerly, and after a while that language is recovered.

What is the secret of the immortality of those hieroglyphics? What is it that lives in those marks, all covered over with dust, so that four or five thousand years afterwards, although there are no guides and no Webster's dictionaries, a lost language is recovered and enters somewhat into the literature and the civilization of people?

I am disposed to say that there is nothing like that in nature. Nature records the tracks of a big animal who comes along and steps in the mud, but nothing ever happens to it. It is only the scholar who can, if he is a great enough scientist in anatomy, tell you from that print what animal made it ten thousand years ago. My point is that nature cannot do this. Nature makes no effort at all to restore that civilization. It is the scholar who recovers the civilization.

Civilization is never completely lost to history. Now what is the secret of this? If the mental process is simply the product of environment, such a thing as recovery of a lost language would be utterly impossible. The environment is gone. The recovery of a lost language astonished me as much as anything I ever read the first time I heard of it.

This is an interesting problem for the logician. It is our business to throw as much light on it as we can.

Why do new words appear? When a new word breaks into usage, it always means that there has been some movement of the intelligence. You will find that there is an idea back of that word that is not covered by the existing words in the vocabulary.

Take the word "function". What does it mean? This is a very interesting word. It came along at a certain stage in the development of science when it was needed. The movement of the scientific mind had released something which had to be named. It could not be named for its brother; it had to be named for itself.

The word "boycott" is an interesting example also. Your grandfathers never used that word.

Ideas are Permanent

The word itself has no power of life; it is the idea in the word that is the secret of language. There is a tradition among logicians that truth is very difficult to kill. Somehow truth has a persistence, a tendency toward stability that is very surprising. Your intelligence is the outgrowth of your search after truth. I am quite sure that there is not a person in the room who is working to be ignorant. Every one of you is seeking knowledge, and you want knowledge that is correct. Nothing else satisfies your intelligence. When you see the truth your quest is fulfilled.

Truth will never change. Though you live a thousand years the right angle triangle that you are studying will not change a particle. This is the characteristic of truth. The fellow that puts a thought into language will die and be buried, but you cannot bury the truth that is in the word. Some one will come along and discover it.

Penn: How do you explain the word that becomes archaic?

Williams: The word ceases to be an aid to the idea, so we get a better word. Truth never dies. Why should it escape or seem to lose its place in human life? When a word becomes archaic we stop using it, but that does

not mean the idea has disappeared. The word is simply a vehicle for the truth; it is only one way of getting at the idea. There are others just as good or better.

I am about the only member of the faculty who does not own an automobile. When I came here everybody walked, just as I walk now, but walking has ceased to be a fashionable form of locomotion. Words, like walking, at some time cease to meet the situation.

Taylor: Could not the same truth be in another word?

Williams: Yes, sir.

Taylor: Then the truth does not die?

Williams: No. The word is a device to get at the truth. Every new word is a result of the movement of the intelligence.

Ross: Professor Williams, what is the relation of the mathematical symbols you have written on the board and truth?

Williams: Mathematics is another illustration of truth.

Ross: Do you mean that the relationship between the ten and the three will never change?

Williams: Yes, ten divided by three will never come out even.

Ross: How do you know?

Williams: From the structure of the thing.

Ross: Have you gone through the process of carrying it out?

Williams: Yes. I have been through the Tower of Babel. Why can I not work the problem? Then I looked at the structure of the thing. The trouble is in the structure.

Ross: Is it your position that five times five is twenty-

five because of the intelligence?

Williams: Because it is twenty-five. Minus times minus gives you plus, not because the Bishop said so, but because that is what it is.

This concept of truth as permanent makes the contrast between man and nature all the more startling, I thought, as I made my way home. Thinking functions in truth, which does not change, yet man the animal, who is part of nature, shares the relative character of his environment. Then truth cannot be fixed or static, either in form or content, because there could be no truth revealed by thought about man himself, much less about nature. There must be some other meaning of truth.

Thinking is unifying, Professor Williams has said. Then truth, the object of thinking, must be a unity. Unity of what?

An answer came to me just as I was going to sleep that night. I recalled Professor Williams' mathematical illustration and what he had said about the structure being the answer. The structure of things must contain the unity that is truth.

But what do you mean by structure? And where does process enter in? Those questions I determined to ask at the first opportunity.

CHAPTER IV

GOD

I HAD NO EARLY CLASS *the next morning, so I went to the Alumni Building right after breakfast, intending to limber up my thinking processes. Miss Penn was already in Professor Williams' classroom. I greeted her and removed my dripping raincoat.*

"What do you think about logic?" I asked.

"It is an interesting course," Miss Penn said. "But I do not agree with Professor Williams, particularly with what he says about man not being relative. He is pretty dogmatic in making these big generalizations."

"He did not exactly say man is not relative, did he? Perhaps he meant that man is not entirely relative. Man would have to be conditioned by his environment if he, a physical being, lives in the world of nature. I thought he was trying to show that man could create as well as adapt to his environment, because he can think, not just react."

"I do not see that thinking does anything but clarify the facts you experience. When you form a proposition you still have just a subjective idea. You have not created the object. The concept of nature is just a generali-

zation. Birds and stones may be real, not nature."

"Then you would not agree that truth is permanent, or that there is such a thing as truth."

"A generalization, such as 'nature', is a theory, and one that is practically useful, but it cannot be proved. It is probable, but not permanent or certain. Theories do change when people and circumstances do."

"Maybe that is what Professor Williams means by truth. You know he said that truth was expressed in lots of different words. Maybe lots of different ideas are included, too—in one truth, I mean. They would have to be if the intelligence moves from one concept to another in any sort of progressive understanding."

"Then you have several truths, or hypotheses, not just one. The first hypothesis is proved incorrect as you analyze further."

"I am sure Professor Williams would not say there is no truth just because we do not know everything about man, nature and God. I hope he will define truth for us soon, though I suppose he will talk about religion today. He has not discussed God yet."

"Here he comes now."

Williams: I am simply trying to lay a foundation for our thinking. I have named the two worlds in which I suppose everyone here except five or six of you move. Most of you are interested in nature, and you are trying to herd everything into the pasture labeled nature. Those of you who prefer history behave the same way. There is also a small group, called by Isaiah the chosen few, who believe there is still another world. This third world is that unity we call the religious life, or the spiritual life, or God. Many folks are most at home in the worlds of

science and history, yet I never saw a human being who did not move in the third world.

It is difficult for the scientist to realize that his method is adapted to one kind of knowledge only. Yesterday Doctor Mayo told me he believed in God and the hereafter. Then he looked at me to see how I was going to take it. He said that the doctors he comes in contact with do not believe in God. They think there is nothing but science or history. He confessed he had been to church once in his life, on the occasion of the baptism of his little child, and he was quick to apologize for it.

You will not have to search long before you will find there is this other world in which men move. You are natural; you are religious; and you are scientific. There is no such thing as an intelligence consciously exploring in any other place but one of these units. You will find that whenever an individual studies an object—whether a specimen of water, or a bug, or anything—he is trying to place it in one of these three units. I have yet to come on the study of any other.

Penn: The fact that you can study these three seems to argue that your vantage point is a fourth—that you are somewhere else, outside these fields.

Williams: What about that? Let me answer your question this way. Where do you get that unity? You do not get nature in the laboratory. You get a frog, a specimen; it is not nature. There is no such thing as a scientist without that unity he calls nature, and he is so sure of it that he says it is the only unity there is. Where did these three unities come from? Why do you not have four?

Everyone functions in these three unities—history, nature, God—but one person will stress one unity and

another another. It is like a family with three children. Professor Toy will, I am sure, brag about his girl; Mrs. Toy will brag about the boys. But each of the three children is fine. One is just as genuine a member of the family as another.

Every person is primarily interested in one field, but our problem, in being intelligent, is to have citizenship in all three worlds. We are trying to unify these elements in our consciousness. If you will remember this, we are ready to go forward.

There are all sorts of differences about religion. Genesis, the first book in the Bible, says: "In the beginning, God. . . ."

Why did it not stay that way? If truth, right, and beauty are original and fundamental, let us stop there. Why did God create things? All sorts of answers have been given to that question.

Reality is not Created

I do not think God did create things. Reality is never created. Reality means fundamental. In the beginning there was everything that there is today.

That is an awful thing to say, I know. But creation is a category. It comes in at a certain stage of your intelligence when you want to account for the beginning of things. You want to know exactly how the thing started. I do not know, and I do not know anybody that does know. It is difficult for me to lose any sleep over that question, except that I would like to satisfy everybody.

It looks to me as though intelligence is always intelligence. Divine intelligence is a peculiar variety; it is all there, always was there, and always will be there. It is not our task to account for something new. I do not

think there is anything new. I am the only individual in the room who does not believe in progress. Progress is a movement in details, never in fundamentals. Intelligence is intelligence, and wherever you find it, it is this synthesizing process. This process is real.

Take the familiar example of the hen and the egg. Which came first? When did two times two begin to be four? When will it cease to be four? Where there is no end, there is no beginning. Our task is not to account for the beginnings of things.

I suppose that everybody in the room believes in some form of immortality. The Western mind is very illogical; it thinks that immortality runs only towards the future. The sermon I heard the other day was divided in two parts, the first proving that there is nothing to a man and that everything he has is given to him; and the second demonstrating his immortality. To me that is a flat contradiction. Immortality has to extend in both directions if it is a genuine article. A thing that begins will stop. If immortality does not stop, then it does not begin.

Reality is a Process

Things do seem to begin. A grain of wheat, for example. When you plant it, it disappears out of your sight. You will never see that grain any more, but if you have luck you will reap twenty grains. Where did the additional nineteen come from? Does that look like robbing somebody? Any good farmer will get twenty grains of wheat for sowing one.

Not only is that true, but the next time you see that grain of wheat it is not a grain of wheat. It is a little green plant, and it has no mark in common with the grain of

wheat that you planted. You say that little green sprig came out of the grain, although it has nothing in common with the grain so far as you can see. It is green; the grain is yellow. It is long, and the grain is very small. It is different in shape; it is quite different in make-up. When the grain of wheat sprouts—cracks, swells, and dies—it ceases to be a grain of wheat.

Now Hegel raises a great question here, and this is what I want you to consider: What is the cause of that green sprig? Is the grain of wheat the cause, or is it the death, the destruction of that grain of wheat? Dying is the very opposite of life. Which is the most important, the positive grain of wheat or the negative, the destruction and disappearance of the grain of wheat?

Take my favorite example: Minus times minus gives a plus. A minus, you see, is a negative. How can a negative do anything? In the grain of wheat you see the negative at work. It works so thoroughly that the grain is gone, and when the process is finished there are twenty grains. We will forget the twenty for the moment, for we want to look at the process. In the process there is a positive thing, the grain of wheat, and then there is something negative. We call it nothing; algebra calls it minus; the theologian calls it death. The negative is just as important as the positive. Would you ever have a process—of life, of wheat growing—without negation?

Brown: It is a combination of minus and minus that gives the positive.

Williams: Yes, at least it gives something very different. That is clear, is it not?

Imagine that this paper I am holding extends infinitely in both directions. Now I want a piece of paper just an inch long. How do I manage to get it if there is

nothing but paper? I have to cut it off, do I not? I cut it off here, and I cut it off there, to make two ends. Is this not paper and the absence of paper twice? I am talking just about the length of the paper. Then is not the inch, the positive, the result of two opposites, two negatives?

Brown: Paper is not necessary to the getting of an inch.

Williams: No, I can get it with space just as well, or with wood. But I wanted to have something you can see. No matter what the material is, the same thing is true. You have to have the opposite, the utter absence, twice in order to get an inch.

Green: That grain of wheat does not necessarily die, does it? It just takes on another form, like the worm turning into a butterfly.

Williams: Well, that is complimentary to the butterfly, but what has become of the worm? A butterfly would not admit for a minute that he is a worm.

Heffner: Not every one of those grains that you plant will sprout.

Williams: No.

Heffner: And good soil does not necessarily mean that it will sprout. What is the trouble?

Williams: Climatic conditions.

Heffner: Yes, the negative was not strong enough.

Williams: The negative was too strong.

Heffner: You mean the positive was not enough.

Williams: Yes. As Hegel says, it is very difficult to see which one you have to have. No matter how sound the grain is, if you plant it where the negative cannot take place, it will do no sprouting.

Green: Why not say it changes form instead of saying it dies?

Williams: You can say that. That is the polite way of stating it. The trouble is that the forms that change will never accept that statement. It is all right to tell the butterfly he is the only pebble on the beach, but I do not know whether he would be proud of his ancestry or not. I think it is hopeless for the worm.

A preacher once called on everybody that wanted to go to heaven to stand up. Lincoln was present, and he did not get up. He said he did not want to go to heaven; he was going to Congress. Mr. Josephus Daniels said he would rather be a sinner in Raleigh than go to heaven, for he was enjoying it here. That is the trouble, you know—to get the fellow that changes to accept your theory.

Boyd: How about night and day?

Williams: Which one are you going to take?

Boyd: It does not make any difference.

Williams: Well, take one and then we will take the other.

Boyd: Take night then.

Williams: How do you get night?

Boyd: It is the absence of day.

Williams: It is the end of day that makes the night.

Boyd: Say we do not have anything but night.

Williams: That is too much night. Let us take it the way it is, for it is bad enough then. The day ends and the night begins; then the night ends and the day begins. It takes two ends to make a night.

Boyd: Suppose you take twenty-four hours. What makes it?

Williams: We are dealing with what we have. Of course, if we did not have any intelligence we should be cats.

Boyd: But we cannot necessarily say that the things that we define are all that we have?

Williams: We certainly cannot claim the things we do not know.

Boyd: What defines twenty-four hours?

Williams: The heading off of night.

Boyd: To complement truth, have you got to have falsity? Is there a beginning and an end of truth?

Williams: No, truth is like the ocean.

Boyd: Then you think that in order to have God, there must be something else, the opposite?

Williams: The devil.

Boyd: You mean that if there is a heaven, there is a hell?

Williams: Yes. The heathen is not worrying. For him there is no heaven or hell.

Penn: About night and day—you said a moment ago that one was caused by the absence of the other. You mean that each of the minuses is a minus because of the action of a positive on it. Then is each thing a cause and an effect of another?

Williams: Yes. This is the dialectic, a process which maintains its opposite.

Process is Dialectic

Penn: These things that are the cause of each other are the causes of other things. The day exists because of the night, and the night because of the two days. Then the day and the night are not complete. They must produce something else. What is that?

Williams: Time. There has to be the synthesis, you see.

Penn: Are positive and negative merely different ex-

pressions of the same thing? You can say that in electricity.

Williams: There is no difference. Of course in morals we say there is a difference, and in politics even more than in morals. If you call this negative, that will be positive. The positive is just as tremendous as the negative, and the negative as the positive. You say the negative comes out of the positive and the positive out of the negative. Every egg comes out of a chicken and every chicken out of an egg. All the evil comes out of Adam, and so on.

Boyd: Then it looks as though God had to make some evil.

Williams: It does look that way, does it not?

Boyd: It does not seem right that God had to do anything.

Williams: No. He does not have to.

Boyd: Therefore He did not have to make evil.

Williams: Yes. So you see there is more trouble.

Boyd: Every time a man does a good deed, he has to do a bad one, does he not?

Williams: It is like this: If I make a good lecture, you must keep silent and take notes.

Brown: Dr. Williams, can positive and negative change their relationship and still achieve the same result? That is what you call progress, is it not?

Williams: Yes, if you want to. A good hen is one who produces eggs, and a good egg is the opposite of a bad one.

Brown: Is all the good a result of some evil?

Williams: I do not know. I doubt if any good is the result of any evil. It is just good. You love your mother, but that is not a result. She is your mother. Your love is

not the product of your actions or of hers; it is something original.

Brown: Is a wise man wise because there is a world of fools?

Williams: That is what he thinks. I have my doubts.

Brown: How do we know that a wise man is a wise man?

Williams: Jesus said, "Let him that is without sin start the judicial process." The woman admitted guilt, and there was no question about the law. Why did He not condemn her? Would you have condemned her?

Professor Williams is contradicting himself, I thought as I walked to the library that afternoon. First he talks about truth being permanent, and then he says the dialectic process is the real thing. How was it he defined dialectic? Oh yes—the process that maintains its opposite. That certainly looks to me like change, relativity. Professor Williams has not said that thinking moves dialectically, but I am sure that is the meaning of his illustrations. If thinking is a process of affirmation and negation, where does truth come in?

Thinking has been defined as a synthesizing process. I can see that the concept of time is the synthesis of night and day, and so I suppose that the definition of time is an illustration of truth. But would not every affirmation in the dialectic process carry its own contradiction? The crucial point must be the character of a statement—whether or not it is synthetic.

Synthetic of what? Maybe that is the clue. Perhaps truth is the synthesis of negative with the positive. If an inch of wood is a unity of positive and negative in one object, I guess it is the unity of the opposites that is the

truth of the inch. But it is the inch and not the object that remains the same wherever you apply it. Objects change. They change forms at different stages, or as he put it, they die and are replaced by other objects. But the relations between the different forms remain the same. Perhaps it is this knowledge of the relations that holds good for all time and is true. I must ask him.

PART III

HOW MAN THINKS

CHAPTER V

QUALITY

WILLIAMS: A man in class said the other day that he was taking this course because he was planning to be a lawyer and he wanted to know how to ask questions, not how to answer them.

Is philosophy the only subject that goes beyond the reach of a student? Philosophy tries to understand, and I grant you it is very difficult to understand how anything can be the opposite of itself. I do not think that philosophy has any more trouble than any other subject, though it is a little bit more frank than most.

If you ask a chemist why it is that we always have H_2O, he will say that this problem is not chemistry. It seems to me it is. If you had a thousand oxygen units and a thousand hydrogen units and you wanted only a gill of water, it would still be H_2O and the balance would be left unused. What makes it that way? Logic cannot escape that question, although the chemist sails beautifully past it.

The difficulty is not in philosophy; it is in the thing. How can any object be something and also the opposite of that something? Even an inch of paper is a double; it is a unity of opposites. This is true of any object that

you want to discuss. Today I want you to consider that and to understand that is the way things are. Thinking is the capacity to deal with material that is exactly the opposite of itself. After a bit we are going to come to the dialectic process, which is the process of unifying opposites.

Denham: If every one understood the dialectic process, all forms of creeds and standards of judgment would be erased.

Williams: I think not. I think all narrowness, all sectarianism would be erased.

When you begin to study an object, what is the first mark that you discover? Here again the philosophers differ. Kant says that you begin your education with quantitating. The first thing you discover is quantity. Hegel says the first mark of the object is quality. I think Hegel has the deeper view. Quantity includes the size of the thing and the volume, the amount of it. But how can you measure until you have possessed?

Thinking is Qualitating

The quality of a thing is that which differentiates it from other things. If there is no differentiation, there is pure abstraction. If there is nothing but light, you do not see; if there is nothing but darkness, you do not see. Quality begins with differentiation, just how and why is very difficult to know. If you want to exercise your grey matter, see if you can figure this out.

I think that if you will watch your own mind you will find that you will deal with a new thing first by qualitating it. You differentiate it before you begin to quantitate it. When you get a specimen, the first thing you want to find is the particular characteristic of the

specimen. If you do not get that, you will get useless knowledge. The first movement of your intelligence is a qualitating process.

Now let us see what we can do with the object, stick. A stick is made of wood, but wood is not stick. The stick stops wood. Only when you interrupt the wood can you get a stick, and you must do it twice, once at each end. Now what is a stick? Is it the wood, or the absence of wood? If a thing is its opposite, it is going to be a lot of trouble.

It is easy enough to put the emphasis on the absence of wood. There are a whole lot of things that are empty vessels. "In ourselves we can do no good thing." Everybody has a philosophy built upon this view of things and objects which holds that things are nothing at all. We differ as to where we apply it.

I suppose everybody in the room except myself will apply this reasoning to the Negro. Most men would give the Negro no soul. They would say he is the absence of those qualities you call white man. There are plenty of people who apply this philosophy to everything. Somebody asked me the other day if I thought everything was going to be burned in the wind-up, in the absence of God.

Note this, for everybody uses this emphasis on the negative as the basis for a certain amount of philosophy. When you meet an example of this philosophy, do not say that it is not true. If you will point out the foundation for it, you will have success in your contentions.

The object, stick, is both wood and the absence of wood. The absence of wood alone is nothing. A stick is that which has the quality of stopping the wood at a certain place. That which differentiates this object is

its form, wood, and the negation of wood, quality.

Miss Penn, how can an object have a quality?

Penn: Only in as much as it is different from something else.

Williams: Is the quality something in the object, or is it the object itself?

Penn: It is the object.

Williams: You have the quality of citizenship. Is that North Carolina or is it you?

Penn: It is you.

Williams: Is it you and not North Carolina?

Penn: No, you merely have a relationship to North Carolina.

Williams: And is not your citizenship your relationship to North Carolina?

Penn: Yes.

Williams: So your patriotism is not any quality of yourself, but it is your relationship to North Carolina, is it not?

Penn: Yes.

Williams: Now what becomes of you? What are you? Was St. Paul right when he said that it is not I but the Christ in me that is a Christian?

Penn: No, I do not think so. The same process of wood and absence of wood would apply, because neither Christ nor St. Paul alone would have been complete.

Williams: Yes, St. Paul was the empty vessel in which Christ moved.

Penn: Yes.

Williams: So he was in himself nothing. An empty vessel is not anything, is it?

Penn: Yes, it is. It is just as necessary. We cannot say which is the most important, the lack of the wood or the

wood. We cannot say that Christ would be more important if Christ had no empty vessel to work with, for there would not be any complementary process at all.

Williams: So St. Paul did not get it quite right?

Penn: No, I do not think so.

Williams: Miss Boyd, do you agree with Miss Penn?

Boyd: To a certain extent.

Williams: Well, we want to work this out. It is not surprising that Miss Penn and Miss Boyd differ, because the doctors all differ. Dr. Bernard said that the soul has six qualities. Miss Boyd, did he mean that the soul possesses those qualities the way you possess a ring or a sweater?

Boyd: No, I do not think so.

Williams: What did he mean? How can one be six? That is rather puzzling. Dr. Bernard used the term the soul "is". What does "is" mean? Is that the right use of "is"? A rainbow "is" six colors, is it not?

Boyd: Yes.

Williams: Then you have no rainbow, just the six colors.

I want you to do two things: to follow this analysis and to see its application. I expect that three-fourths of all the people in the world believe that the individual is just a product of inheritance and the environment. That is the first argument reached by analysis. We have uncovered the basis of it—the moment of negation. There is not anything that you can call object. There is wood, but that is not the stick. Then you cannot blame the scientist when he analyzes the object and finds no object present, as in the rainbow. To them Dr. Bernard is talking poetry.

Yellott: So the intelligence is not anything?

Williams: There is no thinking, to this point of view. There is no Einstein, just relativity. Now how are we going to get out of this position? Everybody in the room is quite sure that this analysis is correct except with reference to himself. You are quite sure that you are a considerable unit.

The Object is Real

I do not know anything more interesting, and, I think, more profitable than pursuing the question Miss Penn and I followed for a short distance. Is there any such reality as an object? To put it another way, is there anything to the object?

Mr. Washburn stands for the university, but what does being a university man mean? It means that Mr. Washburn is a man in whom the university circulates. The individual reflects the institution; there is not anything to the man himself.

When you say a man has many good qualities, that he is the very soul of honor, what do you mean? Professor Royce says it is loyalty to principles, traditions. You can settle a good many questions that way.

I want it understood that I stand for the integrity of the individual. But what happens when you analyze the individual? You will be astonished to see how you dissolve into the traits of your mother, father, and grandfather. Last year a boy asked me to explain why he was a Methodist when all his folks were Baptists. I replied that he had a forefather who was a Methodist. The boy denied it, but after ten minutes he remembered that his father's mother was a Methodist. When there is an action, there is something back of it that explains the

action. If you bend a piece of steel, it will not unbend.

Grant: If you raise a boy with savages, will he grow up a savage?

Williams: Suppose you put a lamb among calves. Will he grow up a calf?

Grant: History says the boy will not develop any more than the savages.

Williams: It will not work with lambs.

We want to find here if there is any justification at all for contending for the object. It looks as if the object were gone, as if there were no ultimate unity. This is a great question; it is basic. If there is no such thing as an object, no such thing as an individual, then there is no such thing as a right. Then the New York legislature was acting correctly when it dismissed its Socialist members. But if there is an individual, he has some rights.

Mr. Taylor declined to join the Golden Fleece because he refused to submit to the hazing process of that honorary organization. I think his decision was right. No system is ultimate. There is never a time when the individual has to waive his own convictions. The rights of an individual student are the same sort of thing as the rights of the university, for the individual is as real a unit as the institution.

You do no service to the university when you sacrifice a student for the institution. That is an exercise of power. Although you may have the power to keep a man out of the Golden Fleece or out of the university, you will violate the very principle of self-development that you stand for if you use this power.

The question whether the individual has rights rests upon the fundamental unity of the object. If you do not

see it in a piece of paper, I do not see how you are going to see it in the individual.

Porter: We have to assume some things.

Williams: Then you may as well go home, for I will not admit assumptions. Wherever you find one of my students you will find an individual. The only way you can get along with him is to present a program that is right.

When I was a little fellow I was told that man is nothing in himself and that he owes everything to God. If he is nothing, where could an obligation be grounded? If in ourselves we can do no good things, then we are released from any responsibility. It seems to me that just the opposite conclusion should be drawn about the reality of the individual.

The Object is a Unity

You must do your thinking about this for yourself. The way I state the problem to myself is this: At this stage an object is simply the unity of opposites, the positive and the negative. That is the case in water, for although you may have all sorts of hydrogen and oxygen you will have H_2O every time. Dr. Bell, a great chemist, agreed with me that the unity is just as important as the hydrogen and the oxygen, although you cannot see or touch it. The unity controls the situation. I think it is even more important than the elements that make up the structure of the object.

The object does disappear. There is no question about that. If you take your dog to the laboratory, you will not have him any more when the scientist finishes with him. The scientist will tell you about some laws

he finds illustrated in that animal, but your pet is gone. Now is that the whole story of the individual?

Suppose you take the stick as an illustration. Is there anything that belongs to the stick? I do not see anything. I made the stick an inch because I wanted an inch, but if I had broken it a little further down it would have been two inches. The stick is not the wood, for that came from the tree; it is the absence of wood, because I am the fellow that cut it off. Now if this is true of all objects, then there is nothing to the individual. Everything in the individual comes from something outside of itself. The influence of external forces is the only reality.

For objects on the level of the stick this discussion stands. But suppose we move up the scale.

Let us take water for an example. If you analyze water you will find hydrogen, but if you analyze hydrogen, you will not find water. Water has its existence in hydrogen; hydrogen does not have its existence in water. We can jump to the conclusion that the water is just like a stick, but if you watch them closely, you will find that water is different. Hydrogen is not independent of water. No chemist can do with water what I can do with a stick. Does the trouble lie in the hydrogen or in the water?

Suppose you have one hundred elements of hydrogen and one hundred elements of oxygen. Let us make some rich water, some H_{100} O_{100}. No chemist can do this; pure water is always H_2O. What is the reason for this? The difficulty does not lie in the chemist, nor in the hydrogen. There is no lack of material. In the case of water do we not have something that we did not have in the stick? Is there not something that is independent of the hydrogen and the oxygen and the chemist? We call this a

"formula" at this stage. The formula is something that you cannot see, but it will not be set aside. It is of such value that you never find water without it. Here is something that we can put down to the object.

Green: How do you mean this something is not in the stick?

Williams: There is nothing in the stick that controls me as the formula controls the chemist. The point is that the stick is mere quantity. It is materialistic, mechanical. There is no stick in the end of the stick, and no end of the stick in the wood. There is no integral relationship between the positive and the negative in the stick. But in water there is a relationship which holds hydrogen and oxygen together to form the object. The chemist's own work contradicts his belief that the object is the product of its environment.

Suppose you look at a grain of wheat. The grain cannot run under its own steam. The grain has to be put in the soil; the soil has to get warm; and then moisture is necessary. As the grain goes through the process of growth, it never ceases to be wheat. The thing you have to credit to the environment is the nineteen grains, for although you planted one grain, you reaped twenty. I do not understand how the environment produces the other nineteen, but I know the wheat never becomes anything else.

Green: It looks to me as though the environment is responsible. One kind of environment will give you twenty; change the environment, and you will not get twenty. It seems to me that a simple process of reasoning will show nothing else could explain it.

Williams: If you will show me how the environment brings that nineteen, I will appreciate it. But just to say

that the environment did it is not good logic. It may work out, but so far I do not see it. There is a whole lot of environment that does not produce nineteen. If you plant a grain of corn, you get one hundred.

Green: So long as you have a definite result you can count on, the farmer is willing to rest his case on the environment. It seems to me that is as far as you can go.

Williams: It depends on what you mean by environment.

Green: When you begin to farm you study the soil and weather conditions, do you not? It seems to me that if there is not any environment you can go ahead and sow wheat in the woods.

Williams: There is a lot of reasoning of that sort. Well, we are going to find a lot of things that I cannot explain, and I want you all to be good to me and to help me out.

I do want to show you that as we come up the scale we can gradually find something of value in the individual. The animal illustrates quite an advance over the plant. It is true that the animal is quite dependent on its environment, but he is quite independent of it too.

There is a quality in the animal that stays. I tried once, by putting lambs with the calves, to make a lamb a calf. He never did become a calf. I have a sheep now that is trying to be horse. He will not stay with the other sheep at all, but I do not know how long it will take to complete the transformation.

I believe I will tell you where I am going to end up in our search for quality in the individual. As we study the individual we are going to find that he gradually becomes independent of his environment and gradually becomes self-sufficient. The life that is not dependent

is the spiritual life. When the object, the individual, becomes spiritual it becomes independent. It is entirely self-contained. This is a long story, but that is the theme.

Green: Do you mean that environment does play an important part at the early stage?

Williams: Yes. In the case of the stick I think it plays the whole part. The size of the stick, the length of it—everything comes from the outside. I heard a girl once say that a boy was a stick, and I thought that was awful. I hope none of you boys and girls will ever be classified as a stick.

Reality is spiritual. That is, it is not dependent on the environment. If anyone in this room is put in a place where everybody is stealing and lying, he would not steal or lie. There is in you the quality of being spiritual.

As the class dispersed I gathered my notes and walked over to the window where Professor Williams was standing.

"Professor," I said, "you seem to imply a connection between the human being and a chemical formula—and even a stick. The quality of being spiritual must be in some way the same as the quality of being a stick."

"Yes, it is the unity of the object. In the case of the stick the unity is formal and static; in the case of man it is essential and dynamic."

"Do you mean that man develops and yet remains one personality?"

"He develops himself. He not only grows, but directs his growth."

"But if unity is the objective of growing, there must be unity to begin with."

"Yes, reality is one."

"Reality is also many. How can you explain variety?"

"Unity is the synthesis of opposites. One has its existence in the many, and the many in the one."

"Then what is man?"

"A being that thinks, feels, and wills."

"What about the soul?"

"The doctors do not find a soul."

"And what about the body?"

"There is no body—just blood and bones and tissue."

"Then where is the unity?"

"In the individual."

"But how do you get at it?"

"Through thinking."

"Oh yes, thinking is synthesizing. But I thought you said the quality of the individual, his inner unity, is spiritual. That is not an intellectual process, is it?"

"I want you to work on that. What is there in a man that enables him to rise above his environment and to function as a free being?"

CHAPTER VI

THE INDIVIDUAL

THE BRIGHT SUN *of late October woke me early the next morning, so I hurried downtown to do an errand before class. As I turned to go out of Pritchard and Lloyd's drugstore, I spied Porter.*

"Come on, let's go to class," I said.

"I am not going today."

"Not going? Why not?"

"Oh, I am fed up. It was bad enough to find out that the professor is an absolutist, but now he turns out to be a spiritualist as well."

"Are you sure you are not hasty in your judgment? It seems to me he has hardly begun to develop his ideas. I am completely confused at this point, but that is all the more reason to stick with him. I want to clear things up a bit before I can be satisfied."

"That is another thing—he contradicts himself all the time. How is a guy to know what he does mean?"

"Well, you certainly cannot find out by cutting class."

"Besides, there is a Student Council meeting this afternoon, and I have to see some people. Cheating case coming up."

"So early in the year?"

"This fellow was called up last year and given a warning which apparently straightened him out. I guess he has slipped back over summer vacation."

"Do you think the Honor System really works?"

"I ought to ask you that question. You know that students behave around Council members."

"On the whole, I think the Honor System succeeds remarkably well. I have seen very few violations, and the spirit the System fosters is exceptionally fine. All my friends are enthusiastic, and I personally like having the responsibility for my behavior, rather than being watched by proctors and teachers."

"That seems to be a universal sentiment on the campus, all right. I think the professors are satisfied that it works, too."

"They have given it a long enough trial, certainly."

"Yes, it was begun when the university was quite young."

"Did you know Horace Williams was and is one of the strongest supporters of the Honor System?"

"I hear he talks of it a good deal."

"Williams was responsible for the decision to continue the system at the most critical period in its life. He was president of the Phi Assembly in the days when the Di and the Phi literary societies were the heart of campus life. The story goes that the best speaker in the Phi had advocated a resolution to suspend the Honor System. Passage of the resolution seemed certain until Horace called the vice president of the Phi to the chair and spoke in opposition. The resolution was defeated by a majority of thirteen votes."

"I had not heard about that. Maybe the professor has something on the ball after all," Porter said thought-

fully. "He certainly did stick up for individual freedom. Okay, I will go to class with you today."

Williams: Miss Lay said the other night that I treated her wretchedly when she studied philosophy with me. She told me she was utterly confused. But I think she is quite remarkable now. "Offenses must needs come"—Jesus never cleared up that statement. I wish He had said why.

Sometimes, in order to wake up an individual and get his mind going, it is necessary to confuse him. The poet says that things are not what they seem. But suppose you start out saying they are what they seem to be, and that if you do not put things together just this way you get a wrong answer. When you get the appearance and make all A's on your courses, you are perfect at this seeming business. Then what else can one do but rub your noses in the sand? Things are not what they seem, at least in philosophy.

The Honor System

I think you would be interested in my experience at Converse College last Friday. President Bell of Converse asked me if I would talk to the college on the Honor System. The entire college was present, both faculty and students, and I do not think I ever had quite such an experience in my life. Several members of the faculty said afterward that they had never known students to applaud a lecture as they did that lecture. It was spontaneous and tremendous. I mention it, not because I think it was personal, but because they were interested in the idea. The students and faculty are trying to work out an Honor System at Converse.

I had quite a talk with two or three of the officials of their system of self-government. They knew the Honor System was a good thing and were interested in it, but I felt they had not quite thought the problem through. I told them that I considered the head of their Student Council the most important official in Converse College, excepting the president. President Bell, an old North Carolina University man, is a very remarkable man. But nobody there fills the deep place in the student life that your president of the Student Council does.

The thing I said that hit them was this: I never call the roll on my students at Chapel Hill, and I have between thirty-five and fifty of just as fine folks as there are anywhere in the world. Well, sir, they looked at me in astonishment. More remarkable than that, I said, everybody is present. I do not need to call the roll.

I told the Converse students that I thought the Honor System begins with the professor. It is his business to make the hour worth while, for then the student will probably attend the class. I regard it my simple duty to meet you at every class period, for I deny the right of a college professor to cut a class. To me it is a moral matter. You come here, register, pay your fees, and plan your schedule according to the catalogue to get so many hour's credit at the university. The professor has no right to take from you the opportunity of getting an education. But deeper than that, nothing should come between the interest of the teacher and his class.

That is the way I regard our relationship in the university. Sometimes it seems that things do interfere with your meeting the sessions, and if so I will appreciate your telling me about it. I am going to assume that you will be here and I will try to say something every hour.

The whole idea of education seems to be embodied in self-government. The Honor System is the biggest thing in the university; it is the biggest thing in your life. You see, we are trying to prepare you to the point where you are self-regulative. The nurse stage will not apply to you when you get out in the world. If at that time you have not achieved the power of self-regulation, you are to be pitied. There is nothing more pitiable than a strong man who has to look around and ask somebody what to do when faced with a difficulty.

Wherever in North Carolina you find one of my boys he is a leader. I do not claim all the credit, for they are wonderful boys to begin with, but that is the way you will find them. The secret is that my boys get the habit of success—of doing the thing they ought to do at the time when they ought to do it. Gladys Avery, an old student of mine, is a wonderful woman. Her husband, Charles Tillett, is going to be a great success, for with the home and inspiration he has he cannot fail.

You must get the habit of regulating yourself, and the only way I know to do that is to practice it. So I leave to you the responsibility of coming to class. If you cannot practice self-regulation, I would rather you would not take the course, as I do not want to depart from the Honor System. Suppose you did not write your girl until about a month had elapsed after her letter had been received. If I were your girl, I would send your letter back. So I wish you would cooperate with me. If you want to be away, I wish you would tell me, and if you do not, I am going to tell the officials that you are here.

The other thing I want to speak about is this: I am quite sure that some of you have reached the point now where you are losing your bearings. That time always

comes. Unless you are different from other students, some of you are tempted to quit, saying it is just hot air and hair-splitting. I want to bespeak your patience. We will work it out, and when you come to review your lectures you will begin to see what we are up to. It is very unusual for a student to see the continuity until he does review the course.

I think Mr. Ed Graham probably kept his bearings all through the course, but he was one of the most remarkable students I ever had. I gave him an A on the course without reading his examination paper through. It was just like eating. You know whether or not a cake is good without consuming the whole thing.

You can ask me about logic at any time and at any place, on the street or at home. I am always at home to my students. I want you to master the thinking process, and I am quite sure that if you do, it will not, like starch, come out in the laundry. So if you will just be patient and use me in any way, then when we come to sum up you will see the philosophy in its unity. We have to chop it up because the bell stops us.

The Individual is Real

Let us take one more look at our object. I want you to analyze the object and do a rather complete job of it, for our understanding of all the different philosophies is based upon our grasp of the object, the individual. There are three types of philosophies in the world. One holds that the individual is everything; this is individualism. Another contends that the individual is nothing; this is fascism. Then there is a third school that says the process, not the object, is the ultimate reality. These

are the only three schools, I think, that there are, and they insert themselves in the thinking of peoples in various ways.

Now what I am anxious to do is to show that these three philosophies are grounded in the structure of the object. We have made a fairly clear case that the object has its existence in something else than itself. Water, to use our familiar example, has its existence in hydrogen and oxygen. This would seem to prove the argument of fascism, absolutism, and science that the object is nothing in itself, but is merely the product of environment. To the student the curriculum, the academic life, is supreme. You do not study yourself as a student; you study things that are prescribed for you. You have your place in the college as a student; in the state as a citizen; and in the creed as a Christian; but never in yourself. So it is easy to see the foundation for this philosophy.

It is not difficult to see the foundation for the individual. There can be no university without students. Which comes first? Neither, I think, for each has its existence in the other. The university is just as dependent on the student as the student is upon the university. Neither precedes the other; each lives in the other.

We define the object as the unity of these moments that enter into it. I wish you would let me use the word "moment", for it is better than the term "element". It means the elemental things that enter into the object. In the case of the student the moments are the various courses of study. If you do away with the unity, it would seem that the moments are superior, so the argument is made that the individual is nothing but the product

of these moments. I do not think that argument is valid. I do not understand that water is a product of the hydrogen and oxygen.

I should like very much to make this point clear to everyone in the room. I feel utterly helpless about it, for I cannot actually put the idea in a single intelligence in front of me. I can state it; I can analyze it; I can illustrate it; and I can ask your attention. But I do not know whether I have entered upon your intelligence or not. A student can fool a teacher, for he can look wise at the same time that he is thinking of something thousands of miles away. So it does not seem to me that it is valid to say that the unity which you call student is the product of the moments in the university life.

Spinoza was one of the greatest of the philosophers. He put it this way: All objects are forms of the one reality. That unity, I am disposed to think, is original; it is ultimate. If you take a specimen of water to the chemist and have it analyzed, the unity is gone. The next specimen will be just like the first. The object is not the product of the moments that enter into it—not wholly the product, you see.

I tried to indicate at the last time that as we ascend the scale we can claim more and more for the object. The object is a unit in the case of the stick, and the unity is a little more pronounced in water, a little more in the plant, and a little more in the case of the animal.

I contend that the object has a double life, a life that it has in its moments, and a life that it has in itself. You have an inner life and a life as a member of society. Some of you prize the inner life and some the outer life; very few appreciate both. If the object can maintain its

inner life, we say it has a character. "This above all, to thine own self be true."

To harmonize the claims of your self with the claims of society and of your neighbor is the great problem of life. Everybody in the room is entirely conscious of this. I want you to see that this dichotomy is grounded in your nature. Everybody is selfish; everybody is unselfish.

Mr. E. K. Graham told me one day—and he is the only man I ever heard say it—that he held it against Jesus that He lost His life. I hold it against Mr. Graham that he lost his own life. The university would have been better if he had served it longer as president, rather than burning himself out. But suppose Jesus had lived ten years longer. What would have been the effect? As it turned out, the early chapters of Christianity are very disappointing. Not long after Jesus died some of the Christians got drunk at the participation of the supper. They utterly failed to comprehend the meaning of this rite, just as they horribly misunderstood almost everything in connection with Christianity. If Jesus had lived, would we not be five hundred years further along than we are?

Action Expresses the Unity of the Individual

I want to point out that here in this early stage of the object you find two fundamentals: the individual (the unity); and the environment (the college, the family, and the friends). I want to ground both of these fundamentals in your structure, for they are part of your structure, not imposed on you.

The unity must maintain itself throughout the different moments. If the student is utterly absorbed in the

university, he does not go on improving. It is his duty to maintain himself, adjusting himself to this environment. A student fails if the currents are so strong that he cannot maintain himself. I think practically all of the collapses are due to that. In such cases there is not sufficient integrity in the individual, not enough individualism, to maintain itself. We call this person a weak individual; he is absorbed in the environment and disappears.

On the other hand, if the ego is too strong the result will be reversed. Now and then you see an individual who tries to absorb the university, looking upon it as a platform for his own purposes. This man also fails to get anything really worth while out of the life here. What I want to show by this illustration is that we find both of these moments in your structure. Therefore there are two fundamental currents in life: individualism and socialism. One is as deep as the other.

Jesus had a profound way of saying things. You remember He said, "Love thy neighbor as thyself". Why did He make Himself the measure there? Mr. Taylor, what did He have in mind?

Taylor: The inner life.

Williams: Yes. I think that is clear. The self is made the standard. It may be all right to preach utter forgetfulness of self, but that is not what Jesus advocated.

I asked this question once on an Ethics examination: Suppose you receive a telegram telling you that your mother is sick, probably approaching the end, and that she wants you to come home so she can see you. You do not have any money, but when you go to the library you find a ten dollar bill in a book. What would you do? Would you use the money to go home, or not?

I received all sorts of answers to this question. A preacher in the class said: "I would buy a railroad ticket and visit my dear mother before she died. If anybody said he owned the ten dollar bill, I should demand that he identify it."

What is the trouble with this solution? This man allowed circumstances to determine his action. He could not maintain his identity before that pressure. Of course, any normal man would respond to the call to see his mother, but an individual has obligations to himself. If a value is fundamental, you can never set it aside.

When ought an apple tree to start bearing peaches? Never. When should an intelligent man yield to pressure? Never. When should the university announce that students cannot take money for athletics and then rule as eligible men who have accepted money? Why, when a good deal of pressure is brought to bear, of course. Where is the difference? I do not see any.

When ought you to lie? When you are unduly excited emotionally? Steal? Only when you are hungry? Moses and the prophets did not get these commandments right, did they? They did not recognize human nature.

Taylor: But Dr. Williams, the boy who found the ten dollar bill in the library could replace the money later.

Williams: That is what they always say. I am not going to steal your cloak; I am going to borrow it, and next fall I will bring it back.

Taylor: He would not have to wait until next fall to return the cloak.

Williams: Well, it would have been better to have waited, as the borrower would have had longer to use it.

Ross: But does not seeing his mother have real ethical value? Surely you do not suggest that the man should not see his mother.

Williams: The intelligent man seeks the third alternative. He neither yields to circumstances that would prevent his seeing his mother, nor violates his principles. He could go to work for the money or give his note on a loan.

Brown: Professor Williams, you once told me never to tell a mother that her boy ought not to have won the Mangum Medal, because no mother will admit that the other boy ought to have won the prize. If you do not contradict the mother when she says her boy deserved the prize, are you not living a lie?

Williams: How?

Brown: Well, you believe that the boy is not bright, but the mother says he is, and asks you if you agree that he is. If you do not tell her your opinion, are you not living a lie?

Williams: Where is the lie? Suppose she comes up to me and asks if I think John ought to have gotten the medal, and I ask if she noticed how he developed that point about Kant.

Brown: Then do you not leave her with the impression that you agreed with her?

Williams: Do I? I am not responsible for what she draws; I am responsible for what I say.

Brown: But in complimenting him, it seems you agreed with her.

Williams: What is the sin in giving information? If a snake comes up to bite, are you going to stick your finger in his mouth? Here is a mother who is excited

because her boy did not win the Mangum Medal. I think the committee was right, but I am not going to tell her so.

Brown: You think it is all right to deceive so long as you do not do any harm?

Williams: No. You must use your intelligence. Of course, the way you answer a direct question leaves an impression. If there is no proper way to answer, I would say that I would rather you excuse me. I never knew of a man's having remorse for doing right.

Brown: But you did not say what you meant when you spoke to that boy's mother.

Williams: Yes, I did mean exactly that. I wanted the mother to get her mind off the medal.

Porter still looked thoughtful as the bell brought the students to their feet. We walked out silently, and when we were outside under the great oaks, he spoke.

"Professor Williams is all right. I do not quite understand his handling of the mother, but I certainly saw new meaning in the Honor System. I wish the other professors felt as he does about their responsibility to the students."

"Yes, I never thought about that aspect of the System."

"One of the problems that has troubled me most is the relation of the Council to the faculty, but this discussion clarified that."

"The problem of the lie worries me somewhat, too, Porter. Do you suppose Professor Williams molds his answers to the cases, and handled this particular one as a psychological rather than as an educational problem?"

"Could be. I am sure there are lots of times he would

tell a fellow the truth outright, or even state the opposite position emphatically."

"Yes, he has! Maybe his policy of stimulation by contradiction does not apply to parents. After all, they are not doing the developing."

"See you tomorrow," Porter said in parting.

CHAPTER VII

FINITE AND INFINITE

WILLIAMS: I would like to beg of you to be patient and to take one more look at our object. Once I tried to define an educated man, and I worked it out this way: That mind is educated that can apply itself to any point in which it is interested and hold itself there as long as it sees fit. You do not have to go to college to be educated. I have seen many people who went to college who were wholly uneducated.

The object we have found to be a unity of opposites. A stick of wood, once more, is wood and the utter absence of wood. The life of the object consists in maintaining this unity, and it does this by asserting itself and overthrowing the assertion.

Regarded in this light, the life of the object is a process. To consider that the process is the only reality is the substance of one of the three great philosophies that have been built up. The object consists in the struggle between the positive and the negative which we call growth, progress, evolution. This point of view gave rise to physics. A professor of physics told me that he

did not need anything but motion to create a universe, for matter is motion. This gave rise to a materialistic philosophy.

There is another philosophy built on the structure of the object, and it is flatly contradictory. This one points out that the action of the object in maintaining its unity consists in the effort of the positive to be what it is.

Yesterday I passed a stream and saw a great rock lying in the middle of the stream. The rock was cracked through the center, and in that crack was some grass. What cracked that rock? There was a little bit of life there, and when that life started out to assert itself, the rock had to give way.

This is an illustration of the positive element trying to assert itself. Why does the positive do this? Because that is what the positive is. The positive element is self-assertion, and over against it is the negative. These two opposites make our life.

Quality is the Source of Ethics

The necessity for all forms of life to express their inherent natures is called the "ought". Why ought an apple tree to bear apples? The only reason I know is because it is an apple tree. It contains that positive thing we call the apple life. Why ought a man to be good? Because he is a man. Man ought to be good because the goodness is there in him. If character, the positive, asserts itself in an apple tree, why should it not assert itself in the human being?

Morality and physics come out of the structure of the

object. Physics concludes that there is nothing but motion. Ethics concludes that there is nothing but the individual, and that there is not anyhing in the world that can crack or bend him.

As long as there is a human civilization the example of Daniel will thrill people. Here was an individual, a political slave, against whom all the pressure of society was brought to bear. He stood his ground and did not bend or crack. That is what we call character. The man of character does what he ought to do; the positive in him makes him what he is.

I think ethics is very much deeper than physics. I may be old-fashioned about this, but instead of finding nothing but evolution, I find an individual. I have had the inspiration of knowing that sort of student.

Not all of us are clear as to how we should act. We have got to have some battles, for we cannot have only peace. Last year Mr. Heffner had one of the hardest fights I have ever known a student to have, trying to decide what was right and then to do it. There were all sorts of reasons why he should have cracked under that strain, but he did not. I am using him as an example because he is not unusual. I have known that sort of student ever since I have known Chapel Hill. Character is grounded in the nature of the individual, and I want you to see it that way. Your mother is an inspiration because she is a wonderful woman, but you yourself, not your mother, are responsible for what you are.

Some people think that we have reached the point where there will be no further struggle between governments. That is an illusion. You will have to abolish the structure of the object before you can abolish war. You can control what is used in the struggle, but you cannot

do away with the struggle. Your life as a finite being is a struggle.

Quality is Infinite

What is the difference between an inch of space and what the geometrician calls infinite space?

Penn: You would speak of that inch as finite.

Williams: Would I speak of the space in it as finite?

Penn: No. All space is infinite.

Williams: Suppose I had not stopped the space at these points. Then the space would have extended into infinity. So what I have within the inch is the real thing.

Penn: You have no right to say that.

Williams: Miss Yellott, can you tell me the difference between that space and infinite space?

Yellott: The difference is in the quantity.

Williams: The quantity is defined by the place I stop the space, is it not? But if that space is genuine space and space is infinite, have I not this much—an inch—of infinite space? Now the Spencerians say you cannot have knowledge of God. I say I can have knowledge of God, just as in the example, space, I have the infinite even in the inch.

What is the difference between this space and infinite space, as space and not as quantity?

Bradshaw: How do you know there is a difference?

Williams: The finite is this space and the two ends, but if you do away with the two ends, what have you left?

Bradshaw: The infinite.

Green: But that is not space, it is the lack of space.

Williams: Do you mean the ends?

Green: I mean the inch itself.

Williams: Is that not space?

Green: No, sir. It is the absence of space. When you interrupt space you have space and the interruption.

Denham: Mr. Green, what interrupts the space?

Green: The inch itself, the measurement.

Denham: Does the inch mean space?

Green: No, you always associate some object with an inch. You cannot imagine an inch of space.

Yellott: It seems to me that Mr. Green is right. God is infinite. You can see a manifestation of goodness, but is that the interruption of God? It is a part of God, is it not?

Green: Like the example of the inch, it is an illustration of space, but is not space. Miss Yellott does not say it is God.

Yellott: But I do say it is God. The infinite is made up of the finite. The finite illustration of God is a part of God, because the infinite is made up of the unity of all the finite parts.

Green: We say that a man who does a good deed is a Christian, not God. Anything that is abstract is not an object and does not exist.

Williams: You have gone way ahead of us. Let us stick to space. The inch was made by my stopping the space, but if you do not interrupt the space, you will also have space. It seems to me that there is a fundamental unity between the space and the inch, for the inch is impossible without the space. If there is no real space, which is infinite, then what is it that makes the inch?

Sidney Robbins used to tell me that he could get along all right until I began to illustrate, and then he lost himself. So take any object you want. It is the unity

of something with the absence of that something. The negative, being the opposite of the positive, stands over against it and blocks it. If the negative could be abolished and cease to stand over against the positive, we would get the infinite.

The infinite is the very essence of the positive. It has to assert itself. It is no sort of a product, and it develops according to its nature. You did not come to the university to get sense; you came to develop it. Intelligence is the passion for truth, so if there is no truth, studying is a waste of time.

The best poem Tennyson ever wrote was: "Flower in the crannied wall, if I could know you, root and all, all in all, I could know what God and man is." If you knew that inch of space, root and all, all in all, would there be anything about space that you do not know? I do not think so. The object on its positive side is the presence of whatever it is, so I think Spencer was exactly wrong. Instead of saying you cannot know God, God is the only thing you do know.

I cannot imagine a more insignificant object than a flower—and it is not in the right place to begin with. A wall is a fool place in which to grow. But when the flower happens to appear, it is real, and when you master it you find yourself in connection with life itself. That is the way the poet saw it, and he had a great insight.

The Infinite is in the Finite

If you analyze any object, you will find that it is not over against the infinite; the infinite is within the finite. I took a little bit of space for an example because space is as nearly nothing as anything I ever studied, and yet

even there you will find that you are dealing with the infinite.

"I and the Father are one and ye are my brethren." I think that is the greatest sentence Jesus ever spoke. The relation between the infinite and the individual is identity.

When we first look at the object, the finite appears to be utterly different from the infinite. Everything that belongs to the finite disappears as such in the infinite. That is the appeal of the conception of the infinite that most of you have. The infinite seems to live in a country of its own, having nothing in common with us. It is divine; we are human. It is eternal; we are perishable. It is everything that the finite is not, and the finite is just what the infinite is not. There is an eternal gulf between the two.

Christian theology is split on this question of the relation of the individual to God, the finite to the infinite. Many sects take as their premise the belief that God and the human being are utterly different in kind. I have made a habit of measuring actions by the standard of Christ, asking myself what He did or would do under those same circumstances, and I have used this procedure with students. I often receive the reply that Christ was divine, and therefore that the analogy does not apply. There is utter difference between God and man.

Before Christmas you will have a sharp discussion with somebody about this theology, so I would like for you to consider it. If you are talking with a preacher or your mother, or anybody else who holds this view, there is no use to argue. You cannot by argument reach something that is utterly different in kind. The only connection is a miracle, and a miracle is something you cannot

explain. So I would like for you to take hold of this analysis that we have reached here.

I think the basis of this philosophy lies in this question of the quality of the object. I consider this so very important that I have no disposition to hurry over it. Is God utterly different from everything in the world except the Jews with whom He covenanted? The history of religion gives us an interesting illustration of the inconsistency that crops up in the question of the relation of the infinite to the finite. History shows that God was worshipped first as a place. In the Old Testament it was the sacred place that counted. Then religion was centered in a sacred time. Finally there was an advance from the place and the time to the form. You will find these three objects were worshipped a long time.

Everybody in this room doubtless has a sacred place and a sacred time, and so illustrates this point of view. I doubt if anybody here except myself can think of December twenty-fifth exactly as you do of December twenty-fourth, for it is a sacred day. What do you mean by a sacred day? How can time be sacred? A preacher told me the great question before the Christian world today is the Sabbath day, and I said I thought the great question was the seven days; not only one of them, but all seven. It is just as important to be right and just on Tuesday as on Sunday.

If the infinite is utterly different from the finite, how could there be any sacred place? If there is anything in the world that is physical, it is place. If there is anything in the world that is not divine, it is time.

Reavis: Dr. Williams, you observe the fourth of July and the twenty-fifth of December, do you not?

Williams: That is just form and custom.

Reavis: Would you be willing to use the church for a storage place?

Williams: I would just as soon use it for this purpose as for any other. What good would going to church do you if you do not carry the church with you? Of course, you had better be careful where you draw the line between the sacred and the profane, for most people will not tolerate any foolishness about the forms they regard as sacred.

I do not believe for a minute that the infinite stands over against the finite, nor that the finite stands over against the infinite. On the contrary, in so far as the finite is anything, it is infinite; in so far as the infinite is anything, it is finite. That is, when the infinite becomes quantity it becomes finite; and yet the quality of the finite object is infinite.

It seems to me that mathematics gives us knowledge of the infinite. Mathematics shows, even more clearly than religion, that reality is infinite. Mathematics is a system for translating the infinite as time, place, and form.

But suppose the infinite did not absorb the finite and the finite stood over against it. Would the infinite be anything?

Miss Penn, does the infinite consist in being the finite?

Penn: The infinite consists in absorbing and being the finite.

Williams: Then the finite disappears?

Penn: I think so. The infinite is not an addition to the finite, for then you would have to assume that the finite existed before the infinite, which I do not believe.

Williams: If the finite is different from the infinite and stands over against it, then the infinite is limited and

is not infinite. Only as the finite is absorbed into the infinite is it the infinite. Of course, the infinite is more than that, but it is that.

Are Terms Arbitrary?

Taylor: Using our example of the inch, I do not see how you can very well get anything out of the inch except the infinite. If the inch is not made out of the infinite, then what is it? The interruption of the infinite seems to me to be a process of the imagination.

Williams: No, I would not agree with that, for it is a very genuine interruption. You would not have the infinite without the finite.

Taylor: An inch could have been twice as long as it is if people had decreed that it should be that long. If this is not the imagination, what is it?

Williams: It would have been a big inch, and I do not think you would have accepted it. If I were to use my imagination and appeal to you in that wild way, you would say I am crazy, and that you would not take any more of my lecture.

Penn: Mr. Taylor, I do not see your argument. It seems to me that the inch is never anything but the inch. Your imagination forms a word to denote the measurement of length, but you could not, by changing your word, change the length of that inch.

Williams: It is true that there is a school of nonconformists who think things are what they are simply because you tag them as such. If people had agreed in the beginning to call an inch a yard, then the inch would be a yard.

Taylor: You say that an interruption is a genuine

interruption. If everything is infinite, the whole world is filled up and there is no room for anything else.

Williams: You are talking about the universal and the absolute.

Taylor: If you want to call it that.

Williams: These words do not mean the same thing. We will take them up later, but the only word we have at this point is infinite. By that we do not mean absolute; that is just another big word. The infinite is that which absorbs the moment of negation.

Taylor: My position is that an inch is not controlled by the same law that two times two is.

Williams: One is geometry and the other is arithmetic. You can change your watch or your seat, but do you change the time or place? I hold that the inch occupies the same position as the watch does. You can run it up or back but you cannot change it.

Suppose the moment of negation, acting in the sphere of form, runs up against the positive moment. Will you not have something that you call an inch or a foot? Will you not have something fixed in space, or fixed in time?

Taylor: I do not think you can have a foot or an inch except in the imagination.

Williams: I do not care where you have it. If I draw a line on the blackboard, what do you have?

Taylor: You have a chalk line, but it is not an inch.

Williams: We would not agree just what the name does signify, for people seem to differ. Where do you get numbers when you count? A boy once said you got numbers out of hogs; you say, out of the imagination. How did you derive the number two?

Taylor: I did not derive the number two.

Williams: But where did it come from?

Taylor: Two is just a convenient way of expressing the idea.

Williams: Where did you get your convenience?

Green: Would it not be easier to say that you are thinking of the ideal inch, which is everlasting and true, and that Taylor is referring to the expression of the idea?

Williams: Yes, I want to get the thing itself. You define the infinite in terms of the finite, for the finite is an interruption of the infinite.

Brown: It seems that there is no interruption at all. If you take infinite space and draw a line an inch long, that line is the infinite. The interruption all around is infinite. Where is the finite?

Williams: The inch is the finite. If you did not have any space, you could not get an inch, could you? So all there is in the finite object is infinite. We have reached the place where we see the interdependence of the two. There is no such thing as the infinite over against the finite, or the finite over against the infinite.

Porter: Would you call the infinite the continuation of the finite?

Williams: No, it is the interruption.

Porter: Which finite is the negation? Are you going to call the interruption the negation? Then it is finite from the moment of negation.

Williams: It is infinite.

Porter: Why is it infinite? Where does the change take place?

Williams: When does the egg cease to be an egg and become chicken? It cannot be answered. When does a boy cease to be a boy and become a man? Some of them never do.

Since the infinite seems to live in the finite, and the finite has its existence in the infinite, then the essential thing is the process. One crowd will say that if the finite is the infinite, the finite is not important. The church, the school—all these devices are outside considerations, they say. The other crowd will say you are lost if you do not have the finite forms.

Porter: I do not see how you can say that the process is most important. There is a contradiction between finite and infinite, no matter how you start.

Williams: If you begin with an egg, you get a chicken: if you begin with a chicken, you get an egg. It makes no difference how you go. If you put the emphasis on the process, the infinite is the inner absorption of the finite; the finite is the approach to the infinite.

Mr. Bradshaw told me the other day that Mr. Porter wants some change in the Student Council. I think it is time for that to be done, for nothing that is good stands still. Life is a process. I have been working twelve years to put this idea in the heads of the faculty, but they think we ought to let well enough alone.

The Object is Infinite

In dealing with the object we find that the object is not object but is in and of the infinite. Then we saw the foundation of the dialectic process, which is going to end in the concept of spirit. I do not object if you think this is a strange doctrine, but you can see a hundred illustrations of it.

Take a football game, for example. Football is the most popular game in America because it is more like life than anything I know. Everybody in the cheering

section supports his own team, yet if you watch the practice this afternoon you will find your team opposed by the scrub team. Everything the team tries to do, the scrubs try to keep them from doing. Is that not bad Carolina spirit? Why not let them make a touchdown every time they get the ball?

Every object is trying to become bigger, to be itself. I never saw one that was trying to be little. And wherever you study the problem—in the state, or church—the purpose of the infinite is always to be individual.

There are only two currents in history: the individual trying to be infinite, and the infinite expressing itself as individual. These are the only two currents I find. The form of the current will vary a little, but it is always that way.

The Roman Catholic Church and the Baptist Church illustrate this process. The Roman Church claims to have nothing human about it. It is all divine, perfectly divine, and nothing but divine. It is always trying to get the individual into heaven. The Baptist Church is the opposite; it is utterly human, and it does not claim to be divine. In fact, there is not any Baptist Church, just churches. According to their theory six Christians on an island could form a genuine church, so reality to them is not divine, merely individual.

These two churches are headed in opposite directions, so there is no feeling quite so keen as that between the Catholics and the Baptists. All the rest of the religious sects fall in between these extreme positions. How could you have this situation if one is right and not the other? They are not abolishing each other. As far as I can see, both are genuine churches, doing good work and quite absorbed in their separate programs.

CHAPTER VIII

STATIC AND DYNAMIC

WILLIAMS: I wish you would let me say just a word before I begin the lecture.

One of the things that a teacher ought to do is to start what I call a little blaze in your mind. In a very little while you will be gone from the university and the institutional way of imposing tasks on you will be finished. If there is not something in your mind that will keep on going, you will stop thinking when your courses have ended. My idea is to start that blaze which you call interest. If I cannot do this, I do not see that I have done much. Your interest should be so strong that it does not die out until you go to heaven, and then St. Peter has charge.

There are two sorts of teachers. One is a transportation agent, a freight conductor. It is his business to see that ideas are taken out of the mind of one great man who died four thousand years ago and spread out on the table where you can see them. This is the kind of intellectual dose you shake well before taking. It is important, of course. But there is another sort of teacher. This other kind of teacher is a gardener who tries to encourage the plants to put forth their utmost strength and beauty. Every student is acknowledged to possess an intelligence,

so there is cooperation instead of compulsion in this process. My notion is that a teacher ought to be an inspiration; he ought to set an example. A man who does not work hard himself has no business teaching school.

I do not feel that I know you now, for some of you do not say anything. Are you willing to do something for yourself, so that I can get better acquainted with you? Write out for me the two subjects I have attempted to present: the finite and the infinite. I do not mean for you to quote my own words. That always bores me. State your thoughts in your own words, for then you will be doing for yourself what I have done for myself. My descriptions are not important. I see these problems and try to describe them to you, but you are not doing anything yourself until you are able to put down on paper the reality you see.

As I have said before, philosophy may be illustrated by a stairway. You start with an object and go to the content of personal consciousness. I do not believe there is a gap, and it is my business as a logician to point out the steps between the two. The unity in the process is what we mean by logic.

All we have done so far is to deal with the object. We have found that the object is not object, but is in and of the infinite. Take the state, for example. Does the state owe more to God than to the individual citizen? Did God or Charles B. Aycock bring North Carolina face to face with the problem of education? According to the record it was Aycock.

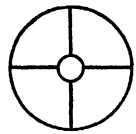
There are two currents in life: One is the infinite and the other is the individual. The individual does not exist in and of himself, as a physical being, apart from his nature as infinite. Martin Luther was one of

the greatest men of all times. He, the son of a blacksmith, stood alone, with everything in Europe arrayed against him—politics, society and learning. Martin said, "Hier stehe ich", and asked God to help him. A man cannot do that unless he has the deepest sort of conviction pulling him.

How does civilization go forward? Is it the group action or the push of the individual? Advance comes through some individual. I can not name any accomplishment brought about by going to sleep and agreeing with everybody else. Group action is all right, but that is all it is. It preserves what has already been achieved.

The Vital Relation is Religion

Why is it that every human being is interested in religion? This interest comes out of the nature of the object. It is like a small circle within a big circle:



Let the big circle illustrate the infinite and the inner circle the object. When the object finds that it is interested in the infinite, it explodes. There is no such thing as an object outside the big circle, and that is what you would have to have in order to have an irreligious man. The difference is not between the religious and the irreligious; it is in the interpretation and the understanding of religion. We will come back to this later when we study the logic of religion.

There are a great many folks who say that knowledge and religion are the same thing. According to Cal-

vinism, you are immortal when you see truth. The fourth Gospel says that "to know thee" is immortality. Pilate, I think it was, asked Christ what truth is. Jesus did not answer, and we have been wondering about it ever since. Why did He not answer? What do you do when you know? There is no sort of agreement.

In one view religion is knowledge; in another view religion is morality, a process of visiting the fatherless. To the academic world religion is culture.

I see it this way: Here is an object and here is the infinite. We have found them to be in and of each other. When you become conscious of that in yourself you develop the religious state of mind. You see yourself as real and of the divine, the infinite. When you turn your attention on this and formulate it, you grasp the truth of it. The knowing process is a moment in human consciousness in which the unity of things is realized.

"In Him we live and move and have our being." That is the best definition of religion ever written. Consciousness of this unity is religion. When you reflect upon this consciousness—"I in thee, and thou in me, that we may all be one"—you will have perfect knowledge or truth.

Green: According to your definition, I do not see any difference between knowledge and religion.

Williams: There is no difference in content.

Green: Does this not mean that the more knowledge a man has, the more religion he has?

Williams: Yes, if his knowledge reaches the point of truth. What is the basis of validity? A student of mine, who later became famous at Hopkins, considered thinking to be a function of the nervous system. If I want knowledge of a piece of chalk, I take it in my hand

and that stimulates the nerve in my finger-tip. But suppose I should catch the impulse just before it reaches my elbow. Would it be chalk or something else? If it is something else, then when does it cease to be chalk, and does it become chalk again when it gets to the right place? I asked him if it made him chalky in the head, for I did not understand it. It seems to me that if you looked at a bench and got knowledge of it, you would be wooden-headed.

Green: How does truth apply to the chalk proposition?

Williams: When you feel the chalk you do not get knowledge of the chalk, you get an impression.

Green: Then the scientist gets true knowledge of the chalk only as he traces it into the infinite?

Williams: Yes.

Green: Knowledge is a movement within the consciousness of our relationship to the infinite. Does it not become the consciousness?

Williams: Yes. The individual, represented by the small circle in this symbol on the blackboard, is in and of the big circle. Everything inside the big circle belongs to it, and everything in the little circle is a movement in the big circle.

Our next step is pretty difficult to make. It is what I call a transition. There are several great transitions in the world of intelligence, for thinking moves from one stage to another. There are no gaps in the process, but there are distinctive moments. This morning I want to make the transition from the static to the dynamic.

The Object is Formal

We have been considering the static. At the static

stage the object has its existence in its form, in its appearance. Form is necessary to the existence of the object. It is essential that the form be fixed if the object is finite, and that it remain just as it is. Any change in the form destroys the thing.

This conception of the object is the basis for one great type of philosophy. To identify anything with its form is characteristic of the static philosophy. It is true that a great deal of life is made up of form, and a question of form must be decided on that basis. The trouble arises when vital questions are identified with forms.

Literal interpretation of the Bible affords an excellent illustration of the static point of view. The Bible has 10,000,000 words and they are all true, in this philosophy. Each one of these words must be taken exactly as it stands, for if you change a sentence you have lost the Bible. There are a great many people who believe this. They see the Bible as an absolutely perfect presentation of religion. What they have in mind is the Biblical form, not the truth contained in the Bible.

At one time I thought the faculty of the Yale Divinity School was not going to let me graduate. I had said one Sunday that we did not know who wrote the Epistle to the Hebrews. The English version of the Bible reads, "The Epistle of Paul the Apostle to the Hebrews". Yet the interesting fact is that there is not a single manuscript which said Paul wrote the Epistle. Because I was proposing to change something that had been accepted, I was called in by the Advisory Committee and put on the carpet. I thought my name was Ichabod.

The static philosophy encounters difficulty with the introduction of the question of change. Would not a thing cease to be if it changes? When you die, what be-

comes of you? Mr. Boettcher says you are gone. This question, can the object stand the change of death, is an old one. I raise the question: Can the object stand any change?

I suppose the majority of the people on the campus are conservative, so I have not the slightest doubt that Mr. Porter will fail to gain his desire to extend the Honor System to class attendance. The conservatives will argue that we have been running the university the other way for one hundred years, and therefore the proposal is wrong. If you change the rule, you will destroy the system. You are a dangerous radical if you propose a change. This point of view has certain advantages, of course.

Things do change, whether we like it or not. I wonder if there is anybody in the room who has not changed at all? Once I gave a boy a testimonial which read: Dear Mr. Blank: I understand Mr. A wants a position with you. He is a conservative, in fact the most conservative man I ever saw. He has been in the university for four years and has not changed a particle. Yours truly.

Mr. A said I had overdone my statement.

Mrs. Williams said the other day that she had changed her mind. I asked her what she had now.

It is our business as logicians to see how you make the transition from the static to the dynamic. Geometry says it cannot be done, for a point will be a point one hundred years from now. Arithmetic holds that everything is changing all the time, for there is nothing fixed about counting. There is one change, then other changes. The arithmetical method is opposed to the geometrical method, so it is very difficult to show the relation of arithmetic to geometry.

A transition is the discovery that the next step is in the analysis you have made. It is like pulling out a telescope. If you want your professor or friend to change his mind, you must make the transition from his point of view to yours. You must deny that you are proposing a change and say that you are simply showing that this is what he has been trying to do all the while. If you make an argument, your case is lost. I never saw a college professor who would let somebody persuade him, so do not try it. That would prove you are a greater debater than he is—an admission he will not make.

University students have made a great record in debating through such men as Ed Graham, Pony Stern, and W. R. Edmonds. The secret of their success lies in the method of making transitions. A man who debates by points misses the connection between the points, so whenever I see a debater counting the points, I know he will probably be defeated.

The Object is Active

The first effort of thinking to meet the problem of change is what I call the mechanical effort. The Ptolemaic astronomy was based on the concept of a fixed earth. The Copernican astronomy was developed on the premise of motion, so the Ptolemaic advocates were hard pressed to explain the fact of motion. They said it was a result of the work of angels, and that everything that looked like action was imposed by the divine. Change is the work of God, but not of the object itself. This philosophy has been applied to all aspects of life, for it has been very difficult to accept change as genuine.

The stars have in themselves motion, and yet they

remain stars. How can that be? This is a fundamental question.

Suppose you analyze an inch as a form. An inch is made by stopping the moment of negation by space. At a certain point the inch stops; it is cut off. Or suppose you take something in your hand, and it yields to pressure. You can reduce its size, but you reach a point where it resists. What is this resistance? Is there not action present in any form, however small?

Taylor: I wish you would say just a few words more about what you mean by form. It seems to me what you are saying agrees with the scientist.

Williams: Yes, I am trying to lay the foundation for science. It seems to me there is no such thing as a fixed form. Any object represents the stopping of the moment of negation. There is a bit of action in form, even in an object whose existence is nothing but form.

The static is not lost in passing from the static to the dynamic; it is carried along with the dynamic. When you pass from the static stage you do not destroy it; you add to it. There is no such thing as pure form and no such thing as pure motion.

It is clear that action characterizes animate life. What do we mean when we say the individual acts? We say a man is a puppet when he does what the authority commands. There is no action there; the individual does not assert his inherent nature as an individual. The essence of the dynamic is that a man does something in himself and for himself.

The newspaper this morning carried a story about a man who had committed murder. The guilty man said he had nothing against the victim, and that he had never seen him until he killed him. The boss of his gang had

decided that a certain man must be killed, and the gangsters had voted to decide who should perform the murder. The lot had fallen to this man. Is this not an example of perfect obedience to the government of the gang? There is motion, but it is on the static level.

In the static the thing has its existence in its form; in the dynamic it has its existence in its action. Not what it looks like, but the way it behaves constitutes the dynamic. To say that a Christian is a man who believes in the dogmas of the fathers is a static definition. To say a Christian is a man who does three things—seeks truth, does good, and loves beauty—is a dynamic conception.

Suppose a fellow lies about the financial subsidy given him to play football, in order that he may play with the team to beat Virginia at Thanksgiving. Ten years from now if you need a cashier for your bank and this fellow needs the job, would you give it to him? There is not a person in the room who would give it to him. He did not act like a man, and it takes a man to be a cashier.

What is it to be a man? A man is an object that always acts for himself. If you are a man, you are going to illustrate the quality of being a man; if you are not, you will be a shadow and just reflect something else.

I knocked on the door of Professor Williams' study early that evening and found him seated at his typewriter.

"Am I interrupting you?" I asked.

"My students are always welcome," he replied. "Tomorrow's lecture will profit from a discussion with you. I rarely have an interview with a student that I do not gain something of value."

"After all these years of teaching, do you still prepare

each lecture the night before?"

"I never look at my previous lecture notes. The process, not the achievement, is the important thing in life. If we want to reach the truth, we have to keep thinking."

"I am very interested in the relation of what you have said about quality and form to the concept of truth. The object illustrates unity, for it is a synthesis of positive and negative, of finite and infinite, and now of form and process. Is understanding that synthesis what you mean by truth?"

"Yes. The scientist analyzes the object and gets knowledge of its component parts; the philosopher synthesizes the separate moments and finds the truth in the unity of the whole."

"If any object is a moment or unity of action as well as an expression of form, then the truth of it would have to be the way its structure is combined with its process."

"Yes, we will come to this tomorrow in the problem of the one. There you have the beginning of the concept of knowledge as synthesis."

CHAPTER IX

THE ONE

"WHAT A HEAD-ACHE," I moaned as I gulped my coffee and hurried out of the clamor of the cafeteria. The closing of the door of Swain Hall behind me brought the same ecstatic relief that the first cold plunge in water does to the heated athlete.

I shrugged my coat into place and resumed reading the Tar Heel as I walked across the campus. Taylor hailed from the doorway of Old East Dormitory and joined me a second later.

"Written your paper yet?" he asked.

"No. I spent last evening with Professor Williams talking about truth. It seemed clear then, but I cannot see it now for the life of me. Maybe this headache is playing tricks on me."

"What did he say?"

"Well, he was talking about the unity of things and the way processes keep right on going even though forms change. After I left I thought of so many things that complicate the order and unity that run throughout life. What about the extreme differences in people, even between father and son?"

"That is right. The closest kind of relation between

individuals does not always mean identity of ideas or anything else."

"Also one son will surpass his father and another will be a ne'er-do-well. Why?"

"If the psychologists cannot settle this question, we certainly cannot. Maybe it is heredity and maybe it is environment. Probably it is both."

"But where is there any universality or any continuity in the process of intellectual development? There seems to be no logical explanation for the development of individuals, or for the lack of it in some cases where there is plenty of opportunity."

"Maybe there is a continuity in this idea of the dynamic and its emergence from the static. You remember Professor Williams insisted on the importance of the transition, even though he did not explain very fully. Perhaps all people begin on the static level and develop gradually to the dynamic, making the shift from authority to freedom as they learn how to make decisions."

"That is the answer, Taylor, I do believe. A child, for instance, has to accept his parents' decisions. His is a static existence for a long time, for even the negative stages he goes through do not make him an independent source of action. He has to learn to distinguish fancies from realities, and he has to work out some meaning for these concepts of man, nature, and God."

"Lots of people I know never have any original ideas. They keep on farming the way their grand-dads did, going to the same church, and reading the same papers. I guess you would say these folks never reached the dynamic stage in their development. They never learned

to think objectively, or to foresee the consequences of their wishes and desires."

"That is right."

"That sounds like pragmatism. The consequences of action are most important."

"Maybe it is pragmatism. You remember, Taylor, that Professor Williams said, in answer to your question, that the dynamic is the realm of science. If so, then analysis of process—and of form too—characterizes this stage. All seems to be relative."

"If that is true, then there must be a third stage, for this is not the realm of philosophy as he has defined it. There must be a point in individual development where these two different, even opposite, stages are seen to be related. Form and motion are united in all objects, so consciousness of the unity of static and dynamic must be a third point of view when truth emerges and the individual functions philosophically."

"That would explain Professor Williams' statements, and it would allow for lots of individual differences, too."

"Yes, those people who emphasize, or over-emphasize, form would be in the static stage of development, whether they are fifteen or fifty. Those who emphasize actions would be in the dynamic stage, along with scientists and businessmen. And those who see the values of both form and process and try to understand the functions and limits of both are the philosophical."

"Of course, this does not explain specifically why certain people become dynamic and others philosophical, or why a great many remain static. That, I guess, is where heredity and environment come in, determining each case differently."

"But if you see that there are in the process of development definite stages which hold true of all people, it does help you understand the differences as well as the similarities in the ways people think, feel, and act."

"It helps me, Taylor. I hope Professor Williams will talk about the dynamic again today. I would like to see if you are right."

Williams: In the dynamic process the concept of the one emerges. A one is something that maintains itself under varying circumstances. The very essence of the one is action. If the object is present it will act; if there is action, you have to have an object.

Suppose you take a specimen of water. Would you call it one water? You would not, because water can be analyzed into hydrogen and oxygen. The object that we dealt with turned out to be, not one, but something else. This seems to be true of most objects; the world is all a fleeting show. Mr. Boettcher says this is his philosophy. Everything turns out to be something else. This philosophy is widely accepted, but I do not believe it for a minute. I believe there is a one, and by one I understand that which is not reducible.

Mr. Braswell, what does one mean to you?

Braswell: That which is left after everything else is analyzed away.

Denham: I think one is all-inclusive. It is the expression of all that the object really is.

Williams: She says you have got it exactly wrong, Mr. Braswell. What do you think about that?

Braswell: I want to hear some more of her argument.

Green: Dr. Williams, do you agree with Miss Den-

ham? I do not think she is right in saying one is all-inclusive.

Williams: Mr. Green agrees with Mr. Braswell, and wants to hear some more argument. Let us see if we can find something that satisfies these ladies and gentlemen.

The place to account for the one is in action, not in form. I do not think there is any such thing as one form, for form is in its nature general. Form is the product. There is nothing individual about form. If you illustrate good form, you are like other cultivated people.

A one is a unit of action. A team is a good example, for a team that does not play is not one. It is a bunch of wooden-headed animals. There is no unity, and I mean by unity, one.

Penn: I think water is one.

Williams: Which one is it?

Penn: I think it is one because it is not dependent on form.

Williams: What is the one?

Penn: The H_2O.

Williams: That would be three.

Porter: It seems to me there are two sides to it. There is such a thing as a one being the action. A football team wins a game, but the game is not a one until the action is through.

Williams: We are going to discover that action is double. In the realm of politics this shows up in the fact that there are good arguments for protection as well as for free trade in foreign relations. The answer to this dual character of action will come when we deal with the concept.

Heffner: You place reality in the process here?

Williams: Yes, sir. In so far as the reality is quantity, it is process; in so far as it is quality, it is not process. It is the same yesterday, today, and forever.

Heffner: Can you reconcile the one of action with form?

Williams: Yes, in this respect. If you study yourself you find that the unity is the self-consciousness in your intellectual life.

Heffner: I do not see any way to reconcile the oneness of the individuality that will not compromise a principle with the form that the community accepts.

The One Comes Out of Action

Williams: Before we look at the individual, let us take the grain of wheat as an example. It is one object in a geometrical sense. When there is warmth, moisture, and other necessary conditions, it begins to sprout. These external factors that cause the grain to produce the wheat are the negative elements, from one point of view, for they destroy the grain. Yet they become characteristics of the grain, because they enter into and become a part of the action of the grain. The unity consists in the fact that this grain of wheat transforms these opposite elements into cooperating elements.

When the little green sprig appears out of the grain, there are not two, but one. The form is gone, but the one is maintained. The plant becomes larger and puts out leaves and in due time a head. Then from some unknown source, the lost form reappears and the grain is there. The form is not lost; it reasserts itself and you gain nineteen grains in addition to the original one. If we can explain this, we have the many, do we not? Yet there is only one process.

Anything is a one that utterly excludes all others from it. It is nothing but itself, for there is nothing else there. If you can see this, it is proper to call the object one, and it is one in proportion as you can say that.

Miss Penn says that water is one, but I think that when she reflects on it she will abandon that view. It is the opposite of one; it is nothing but oxygen and hydrogen. From this point of view it is a shadow, the reflection of something. It is not a one; it is a flood.

Green: Could you say that the one is utter inclusion?

Williams: Yes, monotheism holds that reality is a big one. One day the human intelligence woke up and made the greatest statement ever written: "In the beginning, God. . . ." Before that the world had seemed full of quantities. It was a great day when religion decided God is one, because of the movement from polytheism to monotheism. The great Hebrew insight into the unity of reality was so clear that they never have been able to see how you can have three.

As action completes itself you get a form, and the form is always of something—of a man, or of a geometrical figure. But the form does not meet the test of a one. You find the one in action.

Take the one that everybody accepts: the I, the individual. Every organism is a one, not as a body, but as an intelligence. As a body you are all combination; the chemist analyzes you almost as successfully as he does water. There is no one in you as a physical presence. It is different in your intelligence. The I will be found in any state of consciousness, and it is the only thing found in your consciousness. The I meets this test of a one; it is that which moves within itself.

It is the unity of consciousness which enables you to

say that you dressed, went to bed, and did a thousand things.

Your mind is one unit of action, and it moves within itself. If you look at this box in my hand, the content of your consciousness right now is knowledge of a crayon box, yet your consciousness never connects with the wood at all. What your consciousness gets knowledge of is a presentation, an image of the box. My finger comes in contact with the box, but my finger is not conscious. The object stimulates your vision and nerves, but you are not conscious of that stimulation. Your picture of a crayon box will not hold crayons; it is a presentation that your intelligence has made of the object.

The I moves within itself, and that is why it can maintain its identity. It is the best illustration of a one. The picture in a person's mind is his and not yours.

There are three types of men in the class, so I use three kinds of illustrations. I cannot interest everyone with one illustration. You do not get my words; you get the form that your consciousness makes of my words. I am simply a stimulus, and if I use words you cannot translate, you do not get the idea. Your intelligence cannot get hold of it. In other words, the I cannot go outside of itself and operate to get knowledge.

The individual is ultimate, irreducible. You will find that some philosophies begin with two ultimates: God and the I. Others will see three. You begin to use the word "one" as you begin to see that objects have an existence in themselves, and that there is something that belongs to the object itself. When the process is finished you are completely one, and there is nothing in you but this one.

This is what the word "immortal" means. There is

in consciousness a one that is so definite that death cannot dissolve it. Most objects dissolve when they meet death, but the one is such a complete unity it cannot be dissolved. When the intelligence reaches the point of unity in studying human life, it will come out with the concept of immortality; if it is studying the differences between men, it will come out with electrons.

Green: How do you separate consciousness and the ego?

Williams: Consciousness is, I think, an expression of the ego. Consciousness is related to the ego very much as the bloom of the rose is related to the rose. It is the fruition of the life of the ego. You become conscious as you mature. When you reach a certain stage you see in yourself qualities you did not know you had.

When Judge Stacy was in the junior class here I told him he ought to be a lawyer and he laughed at me. He was not then conscious of any ability for the law. I saw it, and now he has no doubts about the wisdom of his choice of a profession.

Walter Brem of Charlotte is a great doctor, but he wanted to be a preacher. I told him he could upset the plans of the Almighty if he insisted, but that he should be a doctor. Now he is widely known on the Pacific coast.

Green: I would like to see the relation between the consciousness and action.

Williams: That is my next step, Mr. Green. You always stay a little bit ahead of me.

The One Absorbs Change

When we analyze action there seems to be nothing but the unity, and yet there is something else in it. Some-

thing in the moment of negation ceases to be over against and different from the one, and it enters into the action of the one. For instance, when you first come to college you feel strange and ill at ease. All the processes of the institution stand over against you, for they were not a part of your home life. You get homesick and wish you were back home. Everybody seems to be talking about you. In due time you incorporate your freshman year into yourself, and then you become a sophomore. The life of the one assimilates the moment of negation so that the negation enters into and becomes a part of the life of the one.

We say that a good student is one who exemplifies the Honor System. How does he do this? Some people say that he is a bright fellow; others say he had a good mother; and still others say he is a politician and has "booted" the faculty. I have tried to say that the individual maintains its unity in its action. The self absorbs the things that oppose it, when it comes into contact with them.

Suppose that a part of the opposition of which you are conscious is what you call righteousness, and you absorb it into yourself. When righteousness becomes such a part of you that it expresses itself spontaneously, you have reached the point where you cannot behave in any other way.

Kant called this the *a priori* in the intelligence. The true and the good are in your intelligence and control your intelligence. But no *a priori* ever controlled any intelligence until the time came for it. You have to prepare for it and grow up into it. The unity is in the action. The opposition passes into the unit of action and becomes a moment in that unit so that the difference be-

tween the I and the Carolina spirit ceases. You ought to forget yourself in this something that is in you, for when you see this unity you get the key to all your interest and enthusiasm for life.

Grant: You are using unity and one as synonymous, are you not? What is the difference between one and two?

Williams: That is just ahead of us, Mr. Grant. First I want you to see how you become something in yourself. If the one were static, progress in appropriating the fine things of life would be impossible. It is the nature of action to synthesize, and to exclude the difference. Being action and bringing into itself all that is in the environment, the one is spontaneous. If individuals keep growing, they reach the point where wisdom and righteousness are spontaneous. Everything issues into the Honor System when you come to understand it.

As I read history, Protestantism is not the revolt from Romanism, but the product of Romanism. Romanism has for its sole purpose the production of men, and the ultimacy of man is what Protestantism represents.

CHAPTER X

THE MANY

THE NOVEMBER SUN *enticed me out early next morning. I breathed deeply of the sweet air as I swung past the woods and up by Professor Williams' house. A knock on his door and a few minutes of waiting; then we walked together up the path to class.*

"Why is it, Professor," I asked, "that people generally do not give more real thought to human nature and its processes? Is it because they are confused by the complexity of the problems?"

"Yes, but I have a pretty strong feeling that it is possible to make a statement of a question that is as convincing as it is for a chemist to take up a specimen of water and analyze it. There is no way to beat the chemist because he gets it right. If you can work that way in a laboratory, why cannot you work that way with your own intelligence?"

"It certainly seems as though that ought to be possible, if there is such a thing as truth. But how?"

"By logic. My notion is that logic will enable you to make a statement of a case that simply cannot be met. I received a remarkable letter last night from Coates, one of the brightest men I have ever known. He had just won a case in Harvard Law School by unanimous

decision, and he attributed his success to his logic."

"That is mighty difficult, Professor."

"I am constantly trying to illustrate the method of logic, myself, and I am trying to get you to use it. That is why I wanted you to write out your thoughts for me on paper. Since you have not, as yet, would you rather choose another topic?"

"No, but I am having trouble expressing myself."

"Well, if you would rather do something else, please do. It seems to me that your thinking must be free, if anything is. If democracy is a good thing, why can you not apply it to the classroom? The results ought to be encouraging so long as we cooperate to the end of developing your intelligence. No one can set a problem for you. To be real, the problem must come out of your intelligence and not out of mine. I have never taken an assignment in my life from a teacher. I was very slow—it took me nine and one-half years to do what you all do in four. I always asked more questions than I could study up, but I have no regrets."

"I doubt if I would have the persistence to read every book in the library, as you did when you were a student," I said ruefully as I turned to sit down at my desk.

Williams: We have found the one, so our next question is: How can you have two? A one is that action which is contained within itself and which cannot be resolved away, for it is not a product. One means the exclusion of all else. Well, what would two be? If you mean by two the disappearance of the one, putting two in its place as something new, then you cannot explain the two. It is hopeless.

We do not lose the one when we get two. In order to

have two you must have one. This is one stick of crayon, but when I break it there are two. The same thing that happened at each end of the one crayon now happens in the middle, and there are two. This interruption is the moment of negation which occurs in the middle of the one. A brickbat and an elephant do not make two. By courtesy you could say there are two, but two what? Two objects, yes, but that does not say much about an elephant. Only in the most general, abstract sense can you say these are two.

When I broke the crayon, I imposed the two, for it was not the result of the action of the crayon. This piece is crayon, just as much as the other piece, and there is nothing but crayon here. Is there really a two? I broke the crayon in two, so this is a formal two. The crayon has not changed and yet we have a formal two. Now, can you get a vital two, or is everything a matter of form?

The amoeba is an illustration of a vital two. When the amoeba divides, which of the new ones is the other of the original one? There are two now, where there was only one, so which one is the one we had before? If the original of the amoeba was A, and the two divided amoebas are B and C, are there not three? There are A, B, and C. No, there are two amoebas. Then what has become of the one?

As I understand it, there is no more in the two than there was in the one. The two were there in the one. The difference between the amoeba and the stick of crayon is that the amoeba did the separating itself, while the stick of crayon was broken by me.

The first step in the understanding of the many is to go back where two begins. The crayon (or the amoeba)

is as simple an illustration of a one as there is. It consists of two things: the chalk and the absence of chalk. Every object is made up of exact opposites, and life is the struggle between these opposites, the positive and the negative. When the moment of negation asserts itself, there is a one. If it occurs at a different place there is a different one, and there are two. In this struggle there is the possibility of variety, as the positive element tries to absorb the negative and the negative tries to absorb the positive.

Many Exists in the One

The many also may mean several of utterly different things. The university, for instance, is one university although it consists of departments that are different. The process of the university is a differentiating process. Ten years ago I taught psychology, but when I got a chance I stopped. When Dr. Dashiell came to teach psychology, he said he wanted psychology to be a separate department, not a part of the department of philosophy. I told him I had no objection, for differentiation is a sign of life. Now each one of these departments is a unity just as much as the other, yet both are in and of the university. The same university is expressed in each department, so there is not an utter difference when there are two, or many. A continuity exists, and this is important.

In order to have the many, you must have unity. One university, many departments. But what is a department? Does it not mean asserting itself and excluding the others? The Department of English says you must read 10,000 fine pages. You cannot read 10,000 pages of Greek while reading 10,000 pages of English, and you have to read the English because it is not a real university unless

you do. So the English Department in asserting itself does away with the Greek Department. Then the Greek Department comes along and wants to do away with the French Department and the French Department wants to do away with the Chemistry Department. The university must demand a lot of the student if it is to be a fine university. The professors get mad at you if you do not read the 10,000 pages.

The individual in being an individual breaks away from some other unity. The student comes to a logic lecture and wants to study the way we do, but tomorrow morning he has to report on a thousand pages of something. What will he do? He says he will work for one professor one way and the other way for the other fellow. Two methods, you see, in one. In order to carry out his plans and be the sort of man he wants to be, the positive element and the negative element struggle with each other.

I suspect everybody in the room has had this experience of conflict and has had to revolt against the requirements made of him. A man just gets tired to death of "don'ts". Did you ever wonder why the Ten Commandments are all negative? Why should they have been put that way? When you break away from your environment you are beginning to be an individual. In throwing off controls you assert yourself. Nobody wants you to break away, so your life is a series of "don'ts" at the beginning. Every individual begins as a prodigal.

A lively one is a two. The two comes out of the one, for every vital thing is a centripetal force and centrifugal force.

Porter: Is each of these entities that make up the two a one also?

Williams: Yes, sir. When it can assert itself you have a one. If a department in the university could not assert itself and appeal to students, it would cease and disappear. As the positive impulse and the negative impulse assert themselves, each to the exclusion of the other, you have a finished thing, or one.

Penn: Is it not just as true to say that sixteen is one?

Williams: Yes, that is what we mean by quantity. Quantity is the way in which this quality expresses itself. If it is vigorous, it will be twenty.

Difference is the Source of Institutions

If I have made this clear to you, we have laid the foundation for the organization. The unity which is the organization has its existence in the action of the parts that make it. The university has its existence in the action of the students, but the university is not the students, and the students are not the university. Yet as the individual works he illustrates the university. The only way to have a good university is to have a good student, and a good student is one who stands for something in himself.

We have just witnessed a little scrap between the editor of the Carolina Magazine and the editor of the Tar Heel. One contended that it is not best to have student fraternities here; the other that it is not best to alter anything that has been settled. Both defended their opinions as being for the good of the university. If both were doing a good thing for the university, does not the disagreement disappear? There is the mystery of it. In doing the same thing, these students are fighting each other.

Porter: But if both of these editors stand for something good, why is there a clash between them? One is bound to be wrong.

Williams: That is the puzzle in it.

Porter: There is no unity.

Williams: Do you not think that each one stands for the good of the university?

Porter: I do not know that I do.

Williams: If each one were here explaining his own position, he would say he took it out of a sense of duty.

If we can understand the one and the many, we can understand the organization. The individual does not turn a double somersault when he becomes a citizen or a student. It is in him. The object exists in its opposite. We began by saying that the one is one as it excludes everything. Now we are going to say the opposite of that: the one is as it finds itself in its other, its opposite. St. Paul wanted to define himself as a Christian, so he defined himself not in terms of himself but of Christ.

The individual is an individual exactly in proportion as he is something else. The characteristic you prize in yourself is your citizenship, your honor, the Christ in you, never yourself, is it not? Jesus, who was one of the greatest individuals, told His questioners that in Himself He was utterly helpless to do these things. Not He, but the Father, does the works. The individual is great as he abandons himself, as he is not an individual.

Wherever there are Christians there is a church, for to be a Christian is to be in and of the organization. It is the same way with your citizenship, in the university and in the state. If you are a debater, you cannot keep out of the debating societies. Your interest leads you there. The individual, you see, realizes himself in his family, in his friends, and in his state.

Why do you risk your life for your mother or go to war for your country? Is that not absurd? I think not.

Life is very complex, and, I think, it is utterly logical. I read nothing finer about the war than that the mothers did not cry when the boys left. Mothers are citizens, but they are mothers, too, so that as soon as the train pulled out the mother asserted itself. The object lives in its other, yet in absolute identity with its own convictions, else the individual disappears. It is the need for identity which produces the struggle.

Many people think the one is the only reality. Spinoza said reality is one, and everything else is a modification of this one. The one has two modes. I think myself that this view that the one is only one is a surrender of the necessity of thought. The trinity, which expresses the reality of God the Father, God the Son, and God the Holy Ghost, is just as deep as the unity, and just as profound. The trinity is a matter of intelligence as well as of faith, but I admit at once that it is exceedingly difficult to see that reality is three in one.

Green: Is the one an illustration of freedom?

Williams: It is the root of freedom, and the root of autocracy, too. A man's life illustrates tyranny just about as much as it does freedom. Yet the individualist will die rather than surrender his freedom.

Green: I do not see where the many gets away from the one and has the power of its own that seems to be stronger than the one. When a man projects himself in other fields, the form comes out of itself, more beautiful than it was.

Williams: When you study history you find that success in either direction always returns to reaction.

Green: The many gets too strong for the one, and the one reasserts itself?

Williams: Yes. When the organization becomes sep-

arated from the individual, it overemphasizes its own process. Lincoln was right when he said that government is of the people, for the people, and by the people.

Green: The disarmament conference is an illustration of something too powerful for the individuals to handle.

Williams: And they are not going to handle it. You cannot stop war, for it is the nature of the object to struggle.

Green: A contradiction?

Williams: Yes. The League of Nations is a beautiful dream, but it is impossible.

Taylor: Is not the struggle of man changing?

Williams: It is bigger and worse.

I caught Taylor as he started down the steps and persuaded him to accompany me to the Book Exchange for a cold drink.

"This business of unity coming out of the variety in the process of life interests me," I said, "with regard to what Horace said about the trinity. Do you suppose his concept of reality as being three refers to the Hegelian dialectic: thesis, antithesis, synthesis?"

"I should not be surprised. He certainly is no dualist. Unity is the source of the many."

"I do not understand where the third moment or stage is. Sometimes Horace speaks of the organization as the antithesis of the individual. Then what would the synthesis be, if the Hegelian dialectic applies?"

"Perhaps the ideal represented by both is the synthesis. Is that not usually called a universal?"

"I think so, but would not the universal be the some-

thing opposite or other from the individual's self that he expresses?"

"Well, then, perhaps the synthetic moment is the organization itself, since it is the concrete expression by man of the universal."

"I do hope Professor Williams will develop this idea of the trinity soon, as it seems to be the key to his philosophy."

CHAPTER XI

QUANTITY

"PAUL, *what do you think about Professor Williams' remark about the League of Nations?" I queried when we had settled ourselves for class.*

"I think he is right—at least for our generation," Green said.

"But how can he say it is impossible? There are other ways to settle a fight besides killing the other fellow. It seems to me it must be possible, at some distant time, when men have realized the need and have worked out suitable mechanisms, to provide a way to resolve clashes without bloodshed. This would not imply anything so unrealistic as the elimination of conflict, for Professor Williams is surely right when he says men and nations will always have conflicting interests. But an international court or world federation of some sort would provide a means of settling controversies without fighting."

"I am pretty skeptical myself of the possibility of working out such an arrangement."

"Well, democracy is a form of government that few people thought would work, yet it does just that. It pro-

vides opportunities for opponents to meet, air, and adjust their differences so that they can keep on living together in peace."

"Do you think a sort of world democracy would be the answer?"

"Maybe not political democracy, but perhaps acceptance of some of the broader principles. One basic assumption would seem to be willingness of all nations to accept a compromise. This in itself would not be easy for some nations to adopt. But if nations are economically interdependent, we will have to learn to think and act internationally as well as nationally."

"The principle of compromise certainly has helped to keep democracy peaceful, but it has its limits, does it not? In the Civil War, for instance, when Americans differed on the slavery question, the opponents of equality had to be defeated."

"But it would have been possible to have fought the issue to a conclusion with ballots rather than bullets, if tempers had not been so hot. I mean, Americans could have voted on a constitutional amendment in the first place and abided by the decision of the majority, as they do on all questions."

"Working this out on a world scale still looks mighty difficult to me."

"Yet is not man compelled to go on working toward the goal of achieving world unity?"

"I suppose Professor Williams would agree with that. If thinking is a unifying process, then the application of thinking to international problems should be the means of reconciliation of differences."

"It seems to me the whole process of compromise ought to be possible in peace as fast as men can see the

superiority of intelligence over force in the settlement of disputes."

"Maybe that is the catch—that we static and dynamic folk cannot eliminate force as a method."

"Yes, but we must learn to limit and control force. Society of any kind depends on the existence of force, but there is a great deal of difference in the way it is used and for what purpose."

"Did not Williams say, 'You can control what is used in the struggle, but you cannot eliminate the struggle'?"

"Here he is. I hope he discusses this further."

Williams: A man who wields the power of office is greatly tempted to consider no one else in asserting that power, for every individual (being quality) must maintain himself. This is tyranny. The university has just given us an example. The administrators did not consult the students about opening a laundry until after the plan had been agreed upon. I think this was a profound mistake. The university cannot develop good democratic citizens that way.

Penn: Do you think the government was wrong in conscripting men for the armed forces?

Williams: Conscription was justified by the fact that the life of the country was in danger. What would you do if somebody were to come here to destroy this class? If the life of a group is in danger, the obligation to repel that attack rests on the group.

Yellott: Does not the majority rule?

Williams: Unless the majority is right, majority rule is a mere superstition. Can the majority claim to be infallible? The class can outvote me on any question, but I do not think that proves anything. The whole world

was against Noah, but was there a flood, or not?

The essential thing about quality is that it must maintain itself under all circumstances without any change in identity. When one quality makes connection with another quality, what happens? The second is different from the first, yet both must maintain themselves. The way of tyranny is for one to maintain itself by destroying the other, but there is the fallacy. The philosophy that maintains the sovereignty of the quality of one will have to maintain the sovereignty of the different quality.

Green: It seems to me that is where Darwin slipped up with his theory. But how is it that life produces individuals who are above other individuals?

Williams: I do not have any intention of getting you gentlemen to agree with me. My wife says I am the most aristocratic fellow she knows, but I think I am a democrat.

Green: If quality is a recognition of the unity of each individual, why do you draw the line when it is applied to political affairs? Is it not possible to maintain the unity of each one and at the same time to work out a unity of all?

Williams: Did I make that distinction? We will find that what ought to be done can be done, and that which will enable us to do it is cooperation.

In this analysis the essential thing about the object as quality is that it must maintain itself in cooperation with elements which are different from itself, but in which it exists. Tyranny is one way to apply this doctrine. For example, I as a college professor must dominate you students in a debate, or else I suffer. The imperium, I think, was the discovery of this in history. The imperium is that political thing that must maintain itself under all

circumstances; it is the pure essential of power.

If you accept this analysis that the quality of the thing consists in its capacity to maintain itself under all circumstances, will you not always have imperium? The imperium resists all variety; it is indivisible. The Jews called it the Kingdom of God; we call it sovereignty.

I had quite a discussion with a law professor when President Wilson went to Europe. I said President Wilson ought not to go, but the professor believed it was the proper thing to do, since the President makes treaties and cannot delegate this sovereign power to anyone.

Penn: Is sovereignty indivisible?

Williams: No, it is divisible when you are ready to divide it. You see, the trouble is that quality becomes quantity, and quantity becomes quality. They run into each other. At a certain point quantity becomes quality, although in the beginning they are quite different.

Quantity is Formal

Quantity at first represents that which is outside the object, non-essential to it. Then it becomes essential. For instance: There was a time when you were three feet tall. Then you became five feet tall. Are those two feet yours or not? If they are yours, then why were they not yours all along? If not, whose are they? The two feet belong to you, of course, but the funny thing is that you were just as much yourself when you were three feet tall as now. You have added something that is essential to you, for if I were to take away those two feet it would mean your death, certainly if I took it from the upper end.

Quality and quantity are the two categories in which your mind expresses itself. Confusing problems arise in

the effort to adjust quality to quantity, for these contradict each other. At first quantity seems to be the opposite of quality, for quantity has its existence in its form, while quality has its existence in its content, or action. Quantity is a matter of limits, and the limit of a thing is outside of the thing, so we find the curious situation that any change in quantity fails to affect the thing itself. The process remains the same even if the limits are removed. No change in the quantity affects the quality.

If you do away with the limits, what is left? The universal. The universal is quite different from the infinite, although most people use the words interchangeably. The infinite is that which absorbs the finite, but the universal is that which has no limits.

Suppose you have two parts of hydrogen and one of oxygen. If you combine these elements something new is produced. You can take a bath in water, but not in hydrogen and oxygen. But when you are dealing with quantity no change in quantity makes any change in the quality, so it is a very different idea.

The infinite is not subject to the universal, for the quality of the universal is to be beyond the reach of limits, whereas the infinite exists in the finite, which is limited. If you will remember, we found that there is no such thing as the finite apart from the infinite, or the infinite apart from the finite. The important point about the finite is the process, for the finite is the approach to the infinite. Perfect quantity is the same as quality, for if you do away with limits there is nothing but quality. Then we have the universal, which is consistent with itself.

Do you see that, Mr, Porter?

Porter: No, sir, not exactly.

Williams: I thought that was what your frown meant.

Let me try to explain it again.

Quality is that which exists in itself, negating difference. Quantity exists in its form and the form is made by a limit. A difference in quantities is a difference in limits, and only in limits. Now a limit is moveable, so if you do away with the limit you have the universal. Does that not meet our definition of quality? The quality of God as universal is to be entirely within Himself, not limited at all. If you fly to the uttermost ends of the earth, God is there.

Does that help you?

Porter: It satisfies me. I follow your argument all right.

Williams: You see, we want quantity and quality to come together.

Taylor: I am afraid I do not see how quantity and quality can ever be one. The trouble comes from having a pre-conceived notion that the infinite and the universal are the same.

Williams: Yes, that is the difficulty, but they are not the same.

Taylor: However, please go on with the analysis.

Williams: I do not mean to deny you the right to use words in a different sense from mine, but we will get along better if we understand the way I use them. It seems to me that if the two words meant the same thing there would not be two, but we will not argue about that.

I am using the term universal in the philosophical sense to denote reality that is not subject to limits. Quantity runs into quality at each end of itself. At one end is a point and at the other end is the universal. A point has no size and no dimensions. It is divisible and the process of dividing can never stop because it is in its nature con-

tinual. You will always wind up with a point which has the quality of a point.

This characteristic of quantity is the source of the historical movement which swings from the individual to the institutional and back to the individual again. When you get to a point the only thing to do is to turn around and go back; when you reach the universal you go back to the point or stop. The term revolution means the reaction from one of those to the other.

In your life you will find it is the same way. There are just two things that you value: the unity of the individual, and the culture. Every individual is trying to be different from other folks, and yet each is trying to be a leader in the community. Individuals vary in their ideas, or standards, of individuality, and they vary in their descriptions of the universal. Some will want all men to be Catholics, and some will want all to be Presbyterian, but it is the same thing.

Quantitating Quality Produces the Standard

The individual and the universal are the two standards which come out of the life process. Everybody has a standard, but what is a standard? Standards are not a matter of custom, for it is the standard that makes the custom. The size of a definite quantity will vary, but there will be a minimum and a maximum standard, which will not vary. The inch is the small standard; the maximum standard is called principle. What is a principle? A principle is a universal in action. The man who illustrates principle under all circumstances is one in whose actions you will always find the universal. This is a perfect man.

The concept of beauty illustrates the standard. Yesterday I noticed a lady in a black dress and a blood-red hat,

but I could not see anything but the hat. Is such an extreme as that good taste? Beauty is perfection, and perfection is a matter of getting quantity and quality in harmony.

Green: How is it possible for action to run counter to standard?

Williams: Action which fails to exhibit the standard violates either quality or quantity. If you are in New York at Christmas, go to the Metropolitan Gallery and, without consulting the guide book, select the best picture there. To do this will be a test of logic. If all you see in the Madonna is a gold frame, pass right on by; but if you do not see anything in it but the mother, that picture is great.

Boettcher: I do not like classical music, and yet it is supposed to be the best music there is. Does that mean it is not good?

Williams: You are like I am. We are not educated to classical music. You like melody, but melody is not perfect music. There are two elements in music as in everything, for that is what we mean by the perfect. Quantity and quality blend into each other.

Boettcher: Would great music be great if there were no one to hear it?

Williams: Yes. It would be great if some folks were not there.

Penn: Could absolutism be defined as lack of respect for the individual, and therefore a violation of the standard?

Williams: Yes. Dr. Wright said in his lecture to the YMCA on Sunday that God could not enter uninvited into the holy of holies, the individual.

Penn: Then is not God limited?

Williams: Certainly. Could He cook breakfast with a snowball?

Penn: I do not know. I suppose the absolutist would say He could.

Williams: The absolutist says that some day we will see the good in everything that happens. If God is in everything and overrules everything, every event must be good.

Penn: Do you believe everything happens for good?

Williams: A bad egg, for example? I have never had anything good happen from a bad egg.

Penn: How do you explain the fact that bad sometimes comes from the good?

Williams: Because there are just the two extremes on the moral level: good and bad. Can the good maintain itself in dealing with the bad?

Penn: It looks as though it will if God is the sovereign.

Williams: Yes. That brings in the miracle, but my experience is all against it. It seems to me that good comes from good.

I was very sharply criticised by Mr. Mills because I could not read Tolstoi's *Anna Karenina,* which is called his best book. As soon as I saw that the plot revolved around a nasty episode between a Russian lieutenant and the wife of a major, I threw the book out of the window. Mills said I should have read the book for the art, but I told him I could not do that and remain clean. He said that was a weakness, and I had to submit to that, but I do not believe Mills or any man can associate with a bad woman and maintain himself.

So this question of quality is a great question. It is possible to go to either of two extremes. First, it is pos-

sible to be so devoted to principle that you cannot adjust yourself or accept any sort of variation. Tyranny results if the conditioning factors are not recognized, for quality does not vary. To this point of view, I am right; therefore you must be wrong and you must yield. But tyranny cannot be right.

At the other extreme, the form can be regarded as the essential thing. Any variation from this particular form is heresy. Form—the way, shape, and style of the action—wins its way into your emotions and becomes your habit. This is dogmatism: an assertion of the form without variation of any sort.

The two great troubles in life are tyranny and dogmatism. The fact is that every dogma that has ever been held has been overthrown, and yet the inner substance has not perished. The prophecies of the dogmatists are never fulfilled. You do not have to violate your principles, for you perish when you do that. Neither do you have to conform strictly to the crowd.

The right is a fluid quality; it is principle in action, not an abstract principle. A principle in action is a principle in variety, so the problem is to maintain yourself in the change; to change and yet not change. Your quality is in your change. The whole merit of quantity is to change, so it is the life of quantity to contradict the life of quality. The right is the unity of those two contradictories. You cannot be right in principle and wrong in form.

I could scarcely wait until afternoon to go to Professor Williams' house. The professor greeted me with an invitation for a cup of tea, so we began our conversation with the white cloth of the round dining table as the

stage and the wall-high windows as the back-drop.

"I am greatly puzzled," I said, hardly pausing to murmur the usual pleasantries. "You believe in democracy, and yet you say the League is impossible, and that there will always be war. Do you mean that world organization is impossible, or that world unity is?"

"Neither. But the existence of the League will not prevent war."

"Can any organization of governments illustrate the universal?"

"Each government is responsible for the welfare of its people, so the variety of views represented by the different governments is enormous. At the present stage of human development we can hardly expect to find the universal in the relations between governments. We have not the statesmen who can see it."

"Am I wrong in thinking that democracy—that is, the principles of liberty, equality, and fraternity—are universal?"

"They are universal, but not the political, social and economic forms in which they are embodied."

"Then are not the principles of democracy a suitable base for a world organization?"

"A standard for international relations, yes."

"Are not truth, goodness, and beauty likewise standards for men?"

"Yes, these are universals. No one can operate on the level of the universal all the time."

"Is that why peace is so difficult?"

"The life process is one of seeing standards and applying them. In this process first one element and then another stands out. The expression of one standard is about all any institution can do. Each institution is sup-

planted by another after achieving its particular end. Mrs. Charles Tillett, who visited our class this morning, has mastered this question of the role of the institution. She is the leader in Charlotte."

"Do you mean that cooperation between the people of the different nations—and their leaders—in the attainment of universal goals would be more apt to bring about peace than any formal organization?"

"That is necessary in any case."

"It seems to me that peace rests ultimately upon the question of whether or not the forces making for unity among peoples are stronger than the forces pulling them apart. Of course both are at work all the time, but if the whole process did not begin in unity, there would be no hope of getting more and more cooperation as we go along."

"I should like very much for you to work this out."

CHAPTER XII

NUMBER

WILLIAMS: Today we will try to go a step further toward understanding quantity. Just as the tree is known by its fruit, quantity shows itself in its fruit: number. Our question now is: what is number?

It is discouraging to read the books about number. Shaw, who wrote a philosophy of mathematics, was one of the best. He says that the origin of number is in that mysterious creative power of the intellect. That is not very illuminating, for it does not tell us what number is. Bertrand Russell says there are only two men in the world who know what number is: One is Frege, a German, and the other is Russell.

The question of number is an interesting one, and it is very important. The Greeks were greatly impressed by it. Pythagoras said that number is the essence out of which all things are made, and this began the intellectual process of interpreting the world in number. The Greeks thought that 6 is a perfect number, and that the next perfect number is 28, and then 496. Number seems to be quite fluid, for you can apply it to practically anything. And yet it is quite rigid. You cannot add 7 and 4 and get

10. If there are plenty of objects, why can you not get 10? You cannot divide a 5 by a 3.

Some folks think that number is very easy to understand. A student once said that you just look at objects and get numbers. This is one finger; that is two. I said that it is not two, for it is one finger also. If I should begin with the little finger, the one you call two would become four. How could it be two one time and four the next time? Which is it, two or four?

Taylor: That depends on which side you start from.

Williams: If the finger is two, why should it depend on where I start?

Taylor: Lots of things depend on their points of origin for what they are.

Yellott: Suppose you say that the forefinger is another, and that together the fingers are two.

Williams: So one would be——

Yellott: A combination of two ones.

Williams: So there is no two?

Taylor: The two is in your head, not in your finger.

Williams: No, it is the finger that is two. If you say it is in the head you lose it. What is there in the head that makes two?

Taylor: Two is just a convenient way to enumerate. It would be equally as good to say "second".

Williams: Just as convenient—do you think that explains it? If you add 2 and 4 and 8, you get 14. The 2, 4, and 8 are gone, but if you analyze the 14 you can get them again. I do not know anything else of which that is true, but it is literally true in numbers. If you scramble six eggs, I would like to see you unscramble them. Why is there this difference?

Number is quantity, so if we can see what quantity

is, we will understand it. Quantity is defined by its limit, so that when you change one quantity to another you shift the limit, but you do not modify the quantity. The differences that make up quantities are outside the quantity. In other words, quantity has its existence in its form; it is what it is by excluding everything else. The addition of 2, 4, and 8 is an act which comes from the outside and which does not change the 2, 4, and 8. These numbers maintain themselves in that process so that you can take the 14 to pieces and get back exactly what you put in. This is one reason we call mathematics "pure mathematics." It deals with number, which, being quantity, has its existence as it excludes everything else.

On the other hand, quality maintains itself by absorbing differences. The qualitating process is what we call growth, for the college freshman becomes a university man, not by resisting influences, but by absorbing them. The quantitating process is simply a moving of the limit, which means no change in the quantity at all. The difference between quantity and quality is the basis for a great division between kinds of people. A snob, for example, cannot mingle with men. Quantity is the basis of his philosophy, for it exists by a process of exclusion.

To me the strong man is the man who has the quality of maintaining himself in varying circumstances. It is rather unusual to enter heartily into athletics and to maintain your scholarship at the same time. The difficulty of maintaining quality is the explanation. This is one of the differences between an educated and an uneducated man. The uneducated man has just as much sense as the educated, but he cannot use it.

It is very unusual to find anyone who does not attach ultimate value to quantity. Many people have been con-

demned because they did not believe in the trinity, although few understand what the three means.

Number is a Concept

Number is a concept in the sphere of quantity. But what is a concept? William James in his *Psychology* has a chapter on conception. He says that you look at an object, then smell it, then feel it, get four or five impressions, and then by a process "too well known to need description" get a concept. One wonders why he wrote the chapter. Dashiell, the psychology professor, will probably tell you, likewise, that you associate three or four sensations, and that is a concept.

I understand a concept to be the way a thing is made. It is not anything your senses report—not the look, the size, the weight, or the smell; it is the structure of the object. You do not get a concept of water by looking at it, smelling it, and so on. You get sensations, a percept, but not a concept. H_2O is a chemical concept of water. It is scientific knowledge and it will stand any sort of a test. It is not peculiar to this or that water, or this or that chemist. A concept of a mowing machine will apply just as well to a million as to one. It is the way a mowing machine is made, so there is no limit to its application.

A concept is never individual; it delineates the class or type to which the object belongs. Since a concept is a definition of the object in terms of its structure, it applies to all objects of like structure. The concept covers all of the kind, and number has the same power to circulate that any concept has. Three is a type and it will apply to elephants or to roses.

I ought not to use the word concept at this stage be-

cause there is a difference between knowledge of pure quantity as in mathematics, and that of concrete quantity, as in the world of objects. Conceptual knowledge is inside knowledge. Number is a concept which does not give any inside knowledge except of quantity, and quantity has no inside knowledge. The concept ought not to come in here, and I do not expect it to be very clear, but I suppose there is no good place to introduce anything difficult. The last division of logic deals in concepts.

When you get a concept you get real knowledge, and until you do form a concept you have impressions, not knowledge. You may see the object, but you do not, without a concept, know whether it will look the same way tomorrow or not. You really have not begun your student life until you begin to get concepts, for until you do you are memorizing. That is all right, but that is all it is.

Penn: When you enter into the structure of a thing, do you create it?

Williams: I think not. Conceiving is becoming conscious of the structure of things. The content of your intellectual process is the structure of the thing. or a concept. For example, democratic government is a type of institution. Numbers are types of quantity. A lion is a type of animal life. 3 is a type of quantity; 5 is another.

Heffner: Do we form concepts in the sphere of action?

Williams: Yes, we call them rights.

Green: Is the concept in the mind or in the object?

Williams: Both. If you study the thing you will see that. The concept is your moment of insight, the Eureka experience. Why does minus 3 times minus 3 equal plus 9? You may remember that the answer is plus 9, but do you see the plus? The act of seeing the plus comes from the process of getting a concept.

Green: I still cannot see why number should depend on any sort of structure.

Williams: The structure is the way the thing is made. How do you make a 3?

Green: There are infinite ways of making 3.

Williams: Just one way.

Green: Do you mean just one way for me to make it? My way, as opposed to the way another does it? I have to make it artificially.

Williams: You make a picture of a 3.

Green: Yet number is the conception of the structure?

Williams: Quantity is made by limits; it has no inner structure, or life. It consists in something outside itself. For instance, the only difference between these two lines (quantities) is that this one kept the limit off longer than the other. It is longer.

Green: I do not see how the word structure is going to apply to number.

Williams: I apologized for using the word concept, for it is not going to work. Concept applies to something that is a synthesis. But in so far as number is anything, it meets the requirements of a concept. A concept has the power to maintain itself and to be not itself. Any minus multiplied by any minus will give a plus, so number, it seems to me, has that much of the nature of a concept.

Bradshaw: Could you not say that number is a symbol of quantity?

Williams: Yes, numbers are pictures. Numbering is the process.

Green: Are not all processes of reality built of action? That is, can you turn out a new machine without seeing it in action?

Williams: Could you build one if you did not have

the conception?

Green: It is possible for me to get a concept of a mowing machine, but not without seeing it work. I could take it to pieces, but not put it together again.

Williams: Some minds are more dependent on illustrations than others. I can see things better by illustrating, but there is the other type of mind.

Green: I cannot imagine an Arabian discovering numbers without action.

Williams: I cannot imagine his getting numbers that way. Howard Rondthaler used to say the same thing that you do: That he could not understand anything without doing it. I have to know where I am going before I start. There are schools representing both points of view. Mr. Stuhlmann, the professor of physics, says that truth is the result of things. He is a man because the doctor and nurse called him a man when he was born. If they had called him a woman he would have been Mrs. Stuhlmann and she would have been Mr. Stuhlmann.

Quantity expresses itself in lines and angles, as well as in number, but the important point is that number excludes everything else, so that it is pure. If that is its nature, it does not vary and it does not lose itself. 3 and 5 make 8, and you can break up the 8 and recover the 3 or 5. This is what the scientist calls a fact.

What is a Fact?

A fact is, to the scientist, the ultimate unit of quantity that is experienced. It is the thing that you can rely upon, and that does not vary.

It is easy to see that history has no facts. I am rather fond of asking professors of history if they think that history is a science. They frequently claim that it is, for

they think I am deprecating history by implying it is not a science. Where are their facts? When studying Caesar's death, do they get a specimen of his death? The chemist gets a specimen of water. Does not the historian have to take somebody's report?

Penn: You can depend on those reports. They are facts.

Williams: I never saw one.

Penn: Do you mean by a fact, a statement that is true?

Williams: What do you think is the difference between a fact and the truth?

Penn: The truth is broader than the fact, but the fact is part of the truth.

Williams: Which part of the statement of truth is the fact?

Penn: The whole statement is the truth, as far as that statement is concerned.

Williams: In the case of Caesar's death, is the fact the statement or his death?

White: That depends on what you mean by fact.

Williams: I do not use the word, for there are no facts in history or philosophy.

White: Is it not a fact that, for example, the inn burned down?

Williams: Which is the fact: the inn or the burning? Is it still burning?

White: It was a fact two days ago.

Williams: Where is the fact? Those of you who are scientists do not want me to throw off on fact, but I think it is clear that we do not know what a fact is.

Brown: Would you say that when the inn was burning it was the truth?

Williams: No, it was fire.

Brown: It seems that the fact is a specimen of the finite, but we have not found out, have we?

Williams: My own definition is that a fact is any report of the senses. The scientist does not mean that. He must find the permanent units of quantity to have something solid on which to build.

Penn: You can get 4 and 4 out of 8 as well as the 3 and 5 you put in, can you not? Where do the fours come from?

Williams: You will not get them out unless you put them in. A 3 is the sort of thing that can maintain itself under changing circumstances, but an egg is not. If you scramble 6 eggs you can never analyze them back into what you would call a 3. It would not be a scientific process, and would end in confusion.

Brown: What would you call these events in history?

Williams: The burning of the inn, for instance? I should say it was a phenomenon. The point is that it is gone.

Brown: Is a fact fundamental?

Williams: That is what science means by fact. This lecture is a phenomenon; there is nothing permanent about it.

Penn: It seems as though there are two sorts of facts: figures and chemical elements.

Williams: Those are the only kinds there are. Science is always translating objects into some number and the stuff that illustrates the number.

Penn: What is motion?

Williams: There is no motion in mathematics, but there is in science. The formula H_2O is an expression of motion. Motion is relation.

Penn: Is mathematics a science?

Williams: No.

Penn: I understood you to say that science was based on fact and that figures were facts.

Williams: Science calls them facts. Mathematicians never consider a mathematical process finished until it has been reduced to an invariable.

Penn: That looks like science.

Williams: Science makes use of mathematics, but there is a fundamental difference between the methods of the two subjects. To mathematize is to study a thing in terms of itself; to sciencize is to study in terms of something else. The study of water illustrates the scientific approach, and the study of the right angle triangle illustrates the mathematical method. Water turns out to be something else, but in studying the triangle you do not get outside the triangle. You find out about the angles in terms of the lines, and about the lines in terms of the angles. If I want to sciencize about you I ask all about your people, but not about you. To mathematize I must find out what is in you, not in your grandfather. Both methods are valid.

Green: Each way is incomplete without the other, is it not?

Williams: Yes. That is the reason you never produce a big man by specializing. A man who is only proficient in mathematics is a crank.

Green: One tends to the point, and the other to spread himself?

Williams: Yes. If a man takes one without the other he is lost.

Green: Then the problem is how to ride the two horses.

Williams: "Render unto Caesar the things that are

Caesar's and unto God the things that are God's."

Taylor: Is philosophy always a vacillation from one to the other?

Williams: Not a vacillation, but a recognition of both. The philosopher gains the reputation of being not fixed. That is his glory, not his sin. You cannot use only one method, you see. If the question you are studying is a mathematical one, it is a mistake to use the scientific method; if it is a scientific question, it is a mistake to use the mathematical method. Do not try to measure molasses with a yard stick, nor silk with a quart pot.

If you watch your mind you will find it is just like your body—two-legged. It is important to have a good grandfather and a good mother, but it does not follow that on that account you are anything. You have not finished your case until you have mathematized it. If you are nothing but your environment, you might as well accept every invitation that beckons. But if you are an individual you ought very rarely to set aside your plan of work and development.

Taylor: Do you not think some are too individualistic?

Williams: Yes.

Taylor: A miser?

Williams: No, he is a slave of money.

It is the nature of quantity to exclude difference, to be pure. Take, for example, the simple device of drawing a line two or three inches long. The difference between this line and any other line is in the success with which the stop, the negation, is excluded.

Mathematics Deals with Quantity

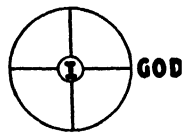
So mathematics is a lordly sort of thing. A professor

of mathematics told me that he was quite sure the principles of heaven were mathematical, because mathematics is the only process that gets the pure truth. Mathematics illustrates the nature of quantity, and when you can translate in terms of quantity you are on bed rock. Things that cannot be studied in terms of form cannot be mathematized. Students of philosophy have marvelled a good deal over Kant's doctrine of *ding an sich*. Kant was a professor of mathematics first, and that explains it.

There is a third method of study—philosophizing—in addition to mathematizing and sciencizing, but at this point we are primarily interested in what you do when you mathematize.

It is the nature of quantity to be self-sufficient and self-contained, but if that is all the object is, knowledge is impossible. All differences are excluded. If God is set over against the individual, there is no connection and the individual cannot know Him. Let us illustrate with these symbols:

This contrasts with the symbol illustrating the integral relation between the individual and the infinite which arises out of quality:



If a person limits his thinking to mathematics, to the

problem of quantity, it is hopeless for him to reach God. Men trained in mathematics will develop the doctrine that individuals cannot know God because He is complete in himself. If there is any connection between God and men it is a miracle. As Jim Austin says, faith is believing a thing you know is not so. Faith, the Bible, the Church—these are great words to indicate a process by which the gap between religion and science can be bridged. The individual then feels that he has established relations with the infinite, which by mathematics cannot be done.

Orthodoxy has its root in mathematics. It is a process of imposing forms upon the actions of men. Right action from this point of view consists in adjusting one's action to a form which is pure and superimposed. The forms do not come out of the individual's action. You are a good man if you obey the Bible. You are a cultivated man if you express the forms of polite society. You cannot say two molasses, although you say two boys, because that is not the right standard.

The intellectual process always expresses itself in certain forms and in a great many cases the forms are good. Plato's philosophy is based on this same idea. According to him, the form is the ideal, and everything in nature is what it is because of the form imposed upon it. The form comes from heaven and it is the business of the individual to accept the form if he is learned, correct, and pious.

Number is Pure Form

There are many varieties of orthodoxy, all imposing form upon action, and the logician should explain this. Where did the idea of perfect form come from? As I see

it, it comes from the mathematician. The nature of quantity—the shape, the form—is to be pure, so that it does not mix. It never varies and it has the capacity to circulate. It is the true, the ideal, in concrete; the pure in the physical. Three can be applied to anything except molasses. A debating society tells you how to debate; a tennis society tells you how to play tennis.

I was quite astonished to find that the Synod of Paris which met in the seventeenth century condemned the study of nearly everything except mathematics. Law was condemned; science was and is still considered heresy by the church. Mathematics has never been condemned, and I can understand why it has not, but I think that is the biggest mistake ever made by the authorities. What is the reason for this partiality? Mathematics is a bundle of pure forms which have a wide application and are authoritative. So the church has accepted mathematics as its own. The study of mathematics has had the most profound influence on our civilization.

When the church is in the mathematical stage, you will find the church members going away where things are pure. Today, in the scientific age, religion is about to lose itself. The church is mixed up in everything; it cannot be just itself but has to have kitchens and suppers.

Grant: Does religion never become a social concern?

Williams: According to science it is nothing else.

Grant: You have evaded my question.

Williams: It does have a social concern.

Grant: How is it going to express it?

Williams: If you are dealing with hungry folks, feed them. The kitchen is an attachment to the church that may be needed, but what do folks that have had dinner want with a kitchen?

Grant: Attachments are expressions, are they not? Is it not a good way to interest people in religion?

Williams: I have no objection to eating, but do not call it religion. It is too easy for social affairs to dominate the churches.

Grant: Do you not think the church ought to be judged partly in terms of form?

Williams: Exactly.

Grant: Then why not have the social room?

Williams: It is good to have a fine room.

Grant: I thought you said not to call this religion.

Williams: That is not an objection to having a room, is it?

Grant: That is what it seems.

Williams: If a man is interested in religion, do not take him to the kitchen.

Green: Does relativity come from science and mathematics?

Williams: Relativity is pure science.

Green: Is it not trying to operate in the field of mathematics?

Williams: Yes, science has to stop somewhere. The most ardent evolutionist wants an original something.

Green: According to relativity, everything is understood in terms of relations.

Williams: Then there would be no mathematics.

Green: It seems to me that Einstein synthesizes science and mathematics. I was struck with how nearly he approximates the truth of philosophy.

Williams: Yes, if you can translate relativity into synthesis. The form of the object is opposed to the content at this stage, but our next subject is to relate them.

CHAPTER XIII

RELATION

WILLIAMS: This morning I want to talk about the third category: the category of relation. So far we have considered two categories—quality and quantity—which I will sum up briefly.

Quality is positive; it asserts a limit. To say that you have the quality of a Carolina man means that you are not a Virginian. You might call quality the moment of individualism, for it is exclusive in its nature. If your hair is red, it is not black. If an object is wood, it is not paper or anything else. Quantity is just the opposite. Quantity is inclusive; it is the removal of limits. A mile is the same thing as an inch with the obstructions left out, for when you stretch a quantity you do not change anything at all. You just keep out the limits.

Quality and quantity are different, but they run into each other. Any object is both quality and quantity. Chalk excludes everything else in being chalk, but it also has extension, quantity. The difference between these two sticks of chalk is not in the chalk-ness, for so far as they are chalk they are the same. The difference is in the quantity.

Objects are related, and relation is the next cate-

gory. But how can you pass from quantity to relation, if quantity, or form, is unrelated? The problem is to find the one in the many without destroying the many, for that is what I understand by relation.

I should like to use water as an illustration. We want to get away from quantity, which is pure extension, and to find intension. Miss Penn, what is the difference between water and hot water?

Penn: There is a difference of motion.

Williams: Suppose the water is not boiling.

Penn: The water is hot because of the energy of the molecular motion.

Williams: Does the molecular motion add anything to the water?

Penn: Not in quantity.

Williams: In content?

Penn: I think there is a difference. The molecules move more rapidly.

Williams: There is a change of relation of the molecules in the water and that means a change in position, but you have the same H_2O you had when you started. The difference in heat is called degree, is it not? We mean by degree that the quantity, instead of removing the limits as in extension, maintains itself in those limits. For instance, when we raise the temperature of water five degrees, the previous temperature—ten degrees, let us say—is not abolished or removed. That ten degrees remains and the five is added to it to make fifteen, twenty, or thirty. With extension it is different, for we simply move away the limits to expand the quantity. The only difference between a foot and an inch is where the limits are placed. In extension the quantity is pure, so that any difference is eliminated.

The main point is that in extension the quantity removes the limits, but that in intension the quantity retains the limits as degree. The water approaches the limit of twenty degrees without losing the original ten. The ten degrees do not become water; they are in the hands of water, so to speak. The temperature of ten degrees does not cease when it reaches twenty. It is there and you can get it back. In intensity the quantity maintains itself in this limit and then goes on to establish relation with the next limit. Instead of producing purity, it is the most vital relation.

Relation is the Source of the Absolute

The reality of relation is the basis for the concept of the absolute. The absolute is that which maintains itself in variety without destroying the variety. Difference that is related is a difference in concreteness. With the absolute you get Bruno's conception of an infinite number of infinite worlds; with the universal you get the ecclesiastical conception of a pure heaven. The universal abolishes the variety.

How can the absolute maintain itself in the world and not destroy the world? The answer is that they are related and each exists in the other. If God is absolute, how can man be free? There have been whole libraries written on this, but you can not solve it until you define the absolute. The universal means that there is nothing else besides itself; the absolute means that unity exists in difference without abolishing the difference.

I think Hegel's discussion of intensity is the most difficult page I have ever tried to read. I had to work it out for myself. It is very difficult to explain, but I think I have told you what Hegel says.

Bradshaw: It seems to me there is a difference between a foot and twelve inches.

Williams: There is. One is one, and the other is twelve.

Bradshaw: Is that a quantitative difference?

Williams: One is intensity and one is extensity.

Bradshaw: Then is there quality as well as quantity? As a matter of quantity I do not see any difference between the two measures.

Williams: It is a matter of relation. You can illustrate it on a scale.

Bradshaw: I do not see any difference between a foot rule and a thermometer in that respect.

Williams: There is no difference, but the thermometer is the better illustration. The possibility of degree is relation, for we mean by degree that the one exists in the many without destroying the many. In extension the differences are removed; in intension they are not.

The category of relation brings in the great doctrine of cooperation. It is only when you bring in relation that you can have cooperation—democracy instead of despotism. The problem of relation is the fascinating one of maintaining one's self and adjusting properly to a new situation. The question always arises of how to give to Caesar what is Caesar's when Caesar is claiming the universe.

The fundamental problem in finding a genuine relation is to show that neither quality nor quantity is destroyed, although they are mutually exclusive. Up until the nineteenth century the human intelligence rested in these two categories. The ideal world of Plato, composed of truth, goodness, and beauty, stood over against the physical world. Quality was opposed to quantity. Aristo-

tle's logic was built on the either-or process.

It has been the teaching of philosophy for centuries that these two worlds have nothing in common. According to the Old Testament the ideal world was the world of Jehovah. To illustrate the complete remoteness of this world there is an account of a man who, because he wanted to establish relations with Jehovah, dropped dead when he did establish contact—not with Jehovah—but with the ark. That is to say, any relation between the physical and the other world is impossible. Many people today think in terms of this philosophy. To them the life of Christ cannot illustrate the proper way to handle a question, for Christ is divine and therefore in a different class from human beings.

The nineteenth century seems to me to be occupied with the third category, relation. We have tried to bridge the gap between the two worlds with the bridge of science, which demonstrates relativity. Science has explored and found that relation is real, and men have become interested in describing and using specific relations. Anyone guilty of any intellectual activity will find himself in the relatedness of things, although few are interested any longer in understanding relation. Similarly, in the days before the airplane there were a few people in the world who were greatly interested in flying. Now nobody is interested in the theory; what a man wants is an airplane.

Our business as philosophers is to understand relation, not to describe or use it. Dr. Stuhlmann, the physicist, gave me a definition of relation that was fine. He took the old saying: If an irresistible force comes in contact with an impenetrable body, what happens? From the standpoint of the two categories of quantity and quality

it is hopeless. Force that cannot be stopped comes in contact with a surface that cannot be moved. Dr. Stuhlmann told me that he had worked it out himself that the impenetrable body stays impenetrable, and that the irresistible force stays irresistible, and they go on their careers. The physicist's assertion of the relation was good, but it was only an affirmation, not an explanation. He did the same thing that the theologians do; he stated a miracle.

Relation First Seems a Miracle

The miracle is the first effort to explain relation. I understand a miracle to mean that something happens to upset the law in a situation without destroying the law. In the case of Dr. Stuhlmann, the problem was to relate the two worlds, quality and quantity, which in their structure cannot be related. He stated that they were related, but how? That was the miracle.

The point about the miracle is that the act is done at variance from the law, yet without setting aside the law. It is said that Jesus turned water into wine without the usual process. What is the value of this miracle as far as you today are concerned? If you want to make wine you have to do it the old way. When you ask for an explanation of a miracle you will be accused of lacking faith. Faith is accepting as established the relation between man and the divine. The relation is there but you cannot understand it.

Most individuals, I suspect, are either scientific or idealistic, and translate either quality or quantity in terms of the other. That is not a solution to the problem. Plato, for instance, says there is a relation between the universal and the individual, and that the relation consists in there being nothing at all to this world. This world is a fleeting

show, for only the ideal world is real. On the other hand science says that it is only as you become related to this world that you as an object have any value at all. How are you going to relate yourself to your ideal world? If your ideals are in another world, you cannot ever realize them. If not, that is the only thing you can realize. Browning put it this way: "All that I could ever be, all that men ignored in me, that I was worth to God".

If I can get you to see what I am presenting, you will never more argue with your father or pastor on the question of a miracle. From the point of view of the categories of quality and quantity the miracle is fundamentally necessary. If you are in Europe and you want to come to America, you have to take a boat. You cannot walk, for the two worlds are not related. These two categories represent those two worlds, each excluding the other. It is impossible to relate the two, but if you do not relate them you are lost forever. Until the intellectual process has reached the stage of relation, the miracle is required to express its existence. You must not expect anyone to give up such a fundamental position, so when you come in contact with someone who believes in the miracle, it is your business to understand and sympathize.

The intelligence first qualitates. You go in search for something but are you through when you have seen it? No, everybody is ambitious. Ambition is simply quantitating without any limits the quality that you have selected. The question of quality—of being a Christian, for instance—is the same fundamental question that it was in the beginning, but the time comes to think of it in terms of another category, relation. Then the miracle no longer applies. There was a time when I was quite sure that unless some miracle was worked I could not be saved.

Now I do not think it would be fair and square if St. Peter did deal with me on that basis. Now I think he is going to deal with me as I live. If I lie, that lie is in my system, and I cannot get it out. If you break your leg, you can patch it up a little, but you cannot get back where you were. If you cannot patch a broken leg, how can you patch a broken character?

Green: What do you mean by the use of the word "first"? It seems to me that the nature of quality presupposes quantity.

Williams: Yes. I do not mean by "first" that there is quality and then quantity, later in time. I mean by the qualitating process the focusing of attention upon the structure and function of the object. This is the first step in the process of understanding. The concept of relation comes last.

Relation is Real

The central problem of relation is: Can you relate quantity and quality without destroying either one? Perhaps a little bit of mathematics would help. Take this formula and let $n=1$: $\frac{1}{n-a}=1+a+a^2+\ldots$.

If you begin with one and divide it, what do you have when you get through? Would it not be "a^n"?

Toy: Did you complete that series?

Williams: You cannot get any nearer than that. An "n" means an infinite quantity. Two divided by seven runs in six series and then repeats itself. If you begin with less than one, you find yourself in relation with the infinite. We do not have to establish relation with the infinite; we are in relation to the infinite. On the basis

of this simple little bit of analysis I deny the philosophy that man cannot understand the infinite.

Calculus is a study of the infinitesimal, while geometry begins with a point. The difference is that the infinitesimal is a unit of action, while a point is a dead thing. This unit of active quantity, the infinitesimal, tells you about the infinite when you explore it. At the same time that the philosopher, the psychologist, and the theologian are disagreeing, one saying that he has something the practical man cannot see, and the other telling him that he has nothing but a delusion, mathematics is exploring the infinite. The first clear word ever given to the world about God was given by mathematics.

If you do not think that the infinite can be studied intelligently, what are you going to do with calculus? Calculus is not a complete statement of the doctrine of God, but in so far as it is anything, it is knowledge of the infinite, beginning with the infinitesimal. I maintain that the individual is endowed to lay hold on things fundamental. We live but once, and there is not much to life but this companionship with things worth while.

Taylor: You started with less than one and found yourself in relation with the infinite. If you had started with one, what would have happened?

Williams: One divided by one?

Taylor: Yes.

Williams: It gives you one, does it not?

Taylor: Yes, there is no need of any end to the process.

Williams: Then we would have to analyze the one. If you divide one by three you will find yourself in relation with the infinite.

Harris: How do you know that series of figures will continue indefinitely?

Williams: I take the mathematicians' word for it.

Harris: That is not thinking.

Williams: It is like fishing. I have the infinite.

Harris: You have not. You have just gone a little way.

Williams: Well, you have got to fish in a little pond. What test do you want for knowledge?

Harris: If I doubt the division, could you prove it?

Williams: To get knowledge, I look at the thing I am studying.

Harris: Yes, but you cannot look at the whole thing.

Williams: We are agreed. You do not have to eat a whole pudding to know that it is pudding. I have seen folks who had that view, but it is not necessary. You get the nature of the thing as soon as you see what it is.

I would like to say a few things about the examination before I close the lecture. I am quite sure you do not endorse what I did with your records. Usually people do not like low grades, and I like to please people, so it makes me unhappy. When a paper strikes me as being unacceptable, I have never worked out any way of reporting that it is acceptable.

An examination should have a range so that the extraordinary man will have a chance to show himself. Every pitcher in the American League has a chance to strike out Babe Ruth, and he really does not know Babe until he sees him at the plate. If he sends Babe to the seat, he is a great pitcher, and if Babe sends him to the dugout, that is something else. Knowledge ought to be as near the living thing as possible, so I never give an "A" grade unless a fellow has earned it.

It is an event when a man makes an "A" in philosophy. It gives him reputation on the campus, and I think it ought to be that way. A "B" grade is an excellent

grade with me. It means you have done the work that was set for you to do. This is a matter of industry and keeping yourself in good physical shape and working with one or two other people as bright as yourself. This is good, but you really have not done anything that is distinctive. If I find that your methods are not as good as they ought to be, it is my business to say so. Mr. Frank Graham said he is giving five percent of his class "A's". I do not believe five percent of any class are perfect.

There were two methods presented in the examination papers of the class. One method was the descriptive method. This is fine if you are writing a report of a ball game, but it is not philosophy. The good papers were analytical. The analytical method is an intense right-between-the-eyes method, that gets at what you are dealing with. This is the method of logic. Do not drop the descriptive method, but bring in the analytical to supplement your power.

I have a delightful announcement to make to the class. On Christmas Day I received a letter from Mrs. Graham Kenan, the wife of as good a friend as I ever had or ever hope to have. She sent me a check for $26,000, which she wanted me to present to the Trustees to found the Graham Kenan Fellowship in Philosophy. $1,000 of it was to be used this year. I have divided this in half, and then that $500 into two fellowships of $250 each, which I would like to offer to anybody in the class this spring. Those of you who are interested may write a thesis on any subject connected with logic. The two best papers will be printed, and the balance of the money will go to the student.

Ever since I have been here I have wanted a chance to give the wonderfully fine boys that come to the uni-

versity a year of graduate study. Now this chance has come, for the foundation will yield about $1,500 a year. We can make two graduate fellowships, in addition to the undergraduate ones, or send a man to Europe. You do not have to be a philosopher to get this fellowship. You may study the philosophical side of law, or teaching, or anything you wish, for that is the way I am going to administer it. This is a university matter and not attached to the Department of Philosophy. Mrs. Kenan made the gift beautifully, and left the decision to me. This will mean a great deal to the university and the state. We have not had a lawyer on the Supreme Court of the United States in my life time, but we will change that now.

If you will take anything I have said and prove I am wrong, I will give you that fellowship. I won a fellowship at Harvard that way. I wrote a thesis proving my teacher at Yale was wrong in his lectures on the Epistle to the Hebrews, and I submitted it to Harvard and won the fellowship. That teacher was a great man. He said that, although he would not admit he was wrong, he could not make those lectures again until he restudied them. I, too, think that my lectures are right, but I am quite human, and the Roman says the human errs.

The trouble with academic life is that it is too commonplace. Routine is all right in a factory, but never was a scholar made that way. It seems to me that a scholar ought to take up his belt every now and then. If I may be personal again, I did this in my senior year at the university. I made myself sick studying, so I determined to start a new chapter. I studied myself and found that I had neglected my physical needs. I changed my eating place and began to take the proper exercise to keep my-

self keyed up. A student can go along on a certain level, or he can pull himself up to something beyond the ordinary prosaic success. There was a fellow in my class who was a mathematical prodigy and had never been beaten. I went to work and I got 98¼ and he got 98.

All of you will succeed, for all of my students do that, but some of them get out of the class of the prosaic. You have the brains, the ambition, and this prize to let me tell you that you have done it, so I think this is one of the happiest years of my life. I have taught thirty-two years, and I have had a great set of boys. Examine yourself to see where you can supplement your powers. Remember that the sound foundation of the mind is in the physical. Keep the engine up to the mark so you can make the run without accident. Otherwise you will have to go into the shop for repairs.

CHAPTER XIV

TYPES OF RELATION

I FOUND *Miss Yellott in the classroom when I arrived early the next morning. She greeted me with a query.*

"Are you as confused as I am about the concepts Professor Williams has been discussing?"

"I confess my mind is quite cloudy. The idea of relation does clarify quality and quantity for me, however."

"Yes, quantity and quality do seem incomprehensible and abstract unless they are in the concrete context of relation, as they always are in objects."

"Did you understand his use of degree to illustrate relation?"

"That was rather difficult. I tend to think of degree as a measure of quantity rather than as an expression of relation."

"So do I. Then why did he say a footrule, which is a quantitative measure, would illustrate the same thing?"

"Professor Williams has made no distinction in essence between continuous and discrete quantity."

"For me the idea of the individual is a much better example of relation. It is easy to see that there is a unity in personality that expresses itself through many different talents and tendencies. The body, with its emotions and

appetites, is not abolished by the mind, or vice versa, so it meets the test of unity that does not abolish variety. The idea of development also illustrates relation. A person changes in his ideas as he grows, which is analogous to the change in position of the molecules in water, yet the basic realities of life—the categories of quality and quantity, for example—remain throughout."

"But are not the earliest ideas overthrown by more adequate ones in the process of growth?"

"Expanded, but not lost. If they were completely invalidated, the individual would not express relation. It seems to me that growth is characterized by emphasis of first one element and then the other, ending with a synthesis of both."

"That is the dialectic, is it not? You mean quality is the first positive expression to be achieved and then quantity emerges as the negative of quality, with relation as the synthesis?"

"Well, quantity is the expression of a limit and so it is negative. But I was thinking of the stages of development called static and dynamic. Perhaps the emphasis upon quality is characteristic of the static stage, where the existence of relation is regarded as a miracle. Then follows emphasis upon quantity, with forms that change regarded as the ultimate fact of science, which is the dynamic stage. Even this is an over-emphasis, though, for the one is swallowed up by the many— the individual is absorbed by his environment. Professor Williams has said there was a third stage in which both positive and negative, or quantity and quality, are related in a way that harmonizes both."

"That certainly gives these categories, which are horizontal divisions of reality, so to speak, a real significance

in life which is always vertical—progressive. All three exist for the individual at any stage, yet with different meaning at each."

"Yes, but I am puzzled about how to work into this framework the three terms Professor Williams has used to describe God: infinite, universal, and absolute."

"If infinite means the abolition of the negative, then God absorbs the individual. This looks like pure quality."

"And if universal has no limit it is pure form, for form is a question of limits. Then this concept comes out of the concept of quantity."

"Then the absolute is a concept of God, the whole, on the level of relation, since according to Dr. Williams' definition, the one does not absorb the many."

"I think you have something there!"

"Here comes Professor Williams. Do you think he will tell us if we are right?"

Williams: The relation of quality to quantity is a very deep problem, and I hope it interests some of you. If you are interested in theology, work on the question of the relation of the quality, divine, with the human, the physical. I think the first successful statement of this relation was made by Jesus. He is not written up in the history of philosophy as a philosopher, but to my mind he was very great as a philosopher. There had been all kinds of efforts before Jesus' time to grasp the problem, but always, as in Plato, one of the elements was destroyed in attempting the relation.

Jesus did not destroy any of the elements. He said: "I and the Father are one and ye are my brethren." I take that to mean the unity of the divine and the human. The utterly divine, completely divine, and I are one, and ye

folks are the same thing, Jesus said. There is no deeper unity than brotherhood. I think that statement cost Jesus his life.

The early Christian community struggled with this problem a long time, trying to appropriate this idea. Two schools developed, one believing the reality of the divine but not of the physical, the other believing that the human included everything. When this question came up at the Council of Nicaea there was a sharp division between those who did think God and Christ were the same in essence and those who did not. Many of the church fathers did not believe Jesus meant what he said. The trinitarian view won by a close margin. It is very interesting to note how near humanity came to taking the wrong view.

The trinitarian is the greatest of all doctrines. It means the unity of man, God, and nature. There is nothing in the world that exists by itself, separated from the rest. In other words, this is a statement of the third category, in which things are related from bottom to top. Theology presents this relation but says man cannot understand it, although he must have faith that it is so. Science says the relation is intelligent and orderly, and that is why science makes such an overwhelming appeal to the intelligence.

If things are related, it is our business to see how they are related. Unhappily the authorities do not agree. Kant says there are three sorts of relations: inherent, causal, and reciprocal. Hegel gives the same number, but they differ. Dr. Everett says there are two kinds, and Professor Royce, another Harvard teacher, says there are a countless number of relations. When the doctors differ, we will just have to make our own classification.

Identity is a Formal Proposition

You will all agree that one method of relating things is by the sign of equality. Does anybody believe that things equal to the same thing are equal to each other?

Boettcher: Yes, we believe it.

Williams: DOG is equal to three letters.

GOD is equal to three letters.

Are things equal to the same thing equal to each other?

Boettcher: If you wish to change their position, then you have to change the rule.

Williams: Are you going ahead when you back out the door?

Boettcher: I have not backed out of any door.

Williams: Suppose A=A. A hen equals A hawk. That would not do, would it? If A equals A, then A hen ought to be equal to A hawk.

Dr. Everett says that there are lots of things you can say are equal to each other and some that you cannot. When you are dealing with form, the proposition of identity is all right, but when you are dealing with life you find the unequal proposition. The scientist tells us that there is no life exactly like another life. In the sphere of form, A equals A, but the moment you apply the proposition of identity to living things, it ceases to work. In the sphere of form there is no change. The multiplication table stays the same yesterday, today, and forever. The angles of a right angle triangle remain fixed.

When a person explores the world of form he is apt to carry it with him into anything that he does, for there is a reliability, an exactness, which is very satisfying. If you are dealing with questions of form there is no need

for variety; but if you are dealing with living things and you are a formalist, you will run into trouble. The proposition of identity will not stand up when there is a question of action, of life. The proposition, "John is good", does not mean that "good" is the same as "John"; the "good" may include *you*.

Both unity and variety are real, and they are the source of two schools of psychology: the intuitional school and the experimental school. One uses the intuitional method and the other uses the analytical. Although these schools call each other names, both methods are necessary. You get at a question of form, a proposition of identity, by intuition, for you cannot by analysis find A. If you analyze A it ceases to be A. A moment of insight is necessary to see that A equals A. On the other hand, if one term is bigger than the other, the intuitional method will not work. The analytical is the only method that will fit the case.

The adherents of the intuitional school are great discoverers of truth by revelation, while the empiricists are great experimentalists. They want to make a research. I think all students fall into these two groups. The intuitional student sees the unity when he comes to it, but if the question is something which has to be analyzed, he is bored by it.

Trotter: Where does the imagination come in? Is this not the role of romanticism?

Williams: No, romanticism involves exploiting the emotions.

Trotter: How much do memory and imagination figure in the proposition A=A?

Williams: Not at all. A moment of insight is neces-

sary to see identity. Memory and imagination come in afterward.

The decision of the University Debate Committee on the question of labor unions illustrates this process. The Committee was discussing which side to take on the question: Resolved, that the labor union is inimical to the best interest of society. I took the position that there is only one side. And that is the affirmative, they asked? No, it is the negative.

Well, what is a labor union? It is an organization to further the interests of the laboring classes. How can the relation between the labor union and the laboring people be inimical to their interest if it exists because of those interests? Do you think it has hurt Christianity to organize religion into a church? Has it been harmful to organize citizens into a state, or educators into a university? Watt Stacy asked if that was the question, and I said yes. Then we take the negative, he said. The committee was fumbling around in the region of results, worrying because labor unions have brought on strikes, which throw people out of employment. The committee would have never found the answers in the results, for it was an intuitional process.

Taylor: It looks to me like pure analysis.

Williams: Analysis of what?

Taylor: Of the facts.

Williams: That was just what the committee was trying to do. There was a fact professor present who told them to take the affirmative, and he made some good points.

Taylor: I suppose we are just quibbling over terms.

Williams: You have not yet done the intuitional act.

This is not a scientific process.

Taylor: No, but I can show by analysis that the principle of the labor union is the principle of organization.

Williams: Please sit down and do it for me.

Taylor: Intuitional means instinctive to me.

Williams: Yes, that is just what it is in animals.

If you will study life you will find that there is more than one type of relation. It seems to me that Hegel and Kant are right when they say that there are three kinds of relations. Quality is related to quantity in three ways.

External Relations are Mechanical

The first kind of relation I want to call mechanical. The first relation of quality to quantity is a mechanical one, where the quality seems to be something outside of quantity. For instance, suppose you have a piece of wood and want a table. The quantity is the form and the quality is the wood. The table form is not in the tree but is imposed upon it, and that is what I mean by mechanical. A table is a relation of building material and a form that is imposed upon it by someone who has the knowledge and the skill.

Now the essential question is, even at this stage, whether or not the connection between quality and quantity is purely arbitrary. If it is, then the form has no real relation to the content and it can be applied at will. You can impose the table form upon wood, but I would like to see you make a table out of water. Why not, if the power lies in you? It does not lie in you. There is a potential table in the tree and there is not in the water.

The Greeks understood the mechanical relation. The Greeks could take a piece of wood and relate it to a form which they called the column and then that piece of

wood would have beauty. The Greek column shows the synthesis of quality and quantity perfectly, and that is why we admire it and call it a standard in architecture. Still, the mechanical relation between form and content is not one which comes from within. Nobody ever saw a table grow out of a tree.

Human beings are prone to use the mechanical process of nailing qualities and quantities together. It is so much easier to be a Christian by joining a church than by living like a Christian. It is highly satisfying, for it saves so much time. If you want to be a scholar you remember that somebody said something about something else, but you do not understand a thing. If you want to have peace all over the world, you try to do it with conferences. You get eighteen or twenty men together, drive a nail, clinch it on the other side, and you expect to achieve world peace in about two weeks. It is a magnificent prospect—a thing that civilization has not been able to do in two thousand years. Why, you cannot keep peace with yourself. Every now and then you get angry with yourself, and yet you plan to bring the world together in about two weeks.

Bradshaw: I do not understand where the man who makes the table comes in. There is in the table a relation between quality and quantity, but it seems to me that he, the agent, is a third factor.

Williams: That is a good question, Mr. Bradshaw, and I am going to take it up in the second relation.

Internal Relations are Vital

The second way of relating quality and quantity I want to call the vital way. Christ put it this way: "I am come that ye may have life." If I understand this, it is a

great statement. He also made a prayer for us: "I pray that ye may become. . . ." If you are a Christian by a mechanical act, what does He mean by saying "may become?" If you put those two statements together I think you will understand the vital relation.

Suppose you were introduced to St. Peter and had "Solomon's chance" to ask only one question. What would you ask? I would ask to be able to go up the street, act like a man, and be a Christian. It is easy enough to be a Christian in your room behind a locked door. But it is a job to enter into business and politics, have a man lie about you, and be a Christian.

The vital process of relating quality and quantity is the central problem of your life. Everyone has a quality, an ideal, that he values highest. He wants to relate that to himself. How to be a gentleman, a friend, a citizen, a Christian—how to become one's ideal—is the problem.

Jesus said, "I pray that ye may become even as I am". We take Jesus' life as a standard because He made no mistakes. What is a mistake? It is the failure to relate quality to quantity properly. A mistake happens when we have too much quantity and too little quality, or vice versa. The only failing in Jesus' life was his driving the traders out of the temple. What business did he have upsetting those old gentlemen and in that tremendous way? That is the only jar I get in studying his life.

According to Hegel there are three forms of the vital relation: the direct, the reverse, and the potential.

In the direct relation the quality persists in and through variety. The object relates itself to its other and maintains itself in this other.

This relation is the origin of what we call authority. Why do you obey the state? In the first place, you obey

the state because you and it are one. That is, the state is the quality that you would like to be, that you are ideally. You cannot have that quality in individualism. Nobody in a woods all by himself can be a citizen. You can be a citizen only as you maintain yourself in something not yourself. The authority of the state comes from this essential identity, and for that reason Lincoln said the perfect thing when he said that government is of the people, for the people, and by the people. All people admit that the government has the supreme authority in the state. Men differ only in their definition of what particular form government is to have.

There are abundant historical illustrations of the direct relation between the individual and the state. Louis XIV not only claimed absolute control over all the French, but over the English as well. Even the anarchist's dream of the abolition of government fails to dispose of the reality of control, for in the anarchistic society the control of the society over its members is no less absolute.

The master-slave relation illustrates the same sort of domination that grows out of the direct relation. The control of the white man over the Negro stemmed from the fundamental proposition believed in the South that the Negro had not even a soul. As a logical conclusion, the testimony of the Negro in court was just like that of a dog—it had no validity.

Take the process of teaching. My master passion is to be a good teacher. Now how am I going to do this? The temptation is to follow this process we have been discussing and to make as many Williamsites as possible. If I can make 1000 imitators of me I will be greater than the teacher who makes 100 imitators of himself.

But if I want students who can think for themselves,

I must start the wheels turning in their heads, in their own ways. I felt greatly complimented on Wednesday when somebody thought Miss Yellott scored on me. I am not trying to get your mind to reflect me, you see. I make it hard for you to find out what I think, if I find you are simply trying to copy it.

This is the reverse relation. Your thinking must increase as my participation in it decreases. It is like a fire. When you strike a match to a piece of paper it begins to burn. As the fire increases the paper decreases.

In the reverse relation you encounter the phenomenon of ambition. The object goes outside of itself in order to be itself, and is utterly disconsolate if it cannot become what it is not. France wants to destroy Germany. If you analyze this process you see that it consists in the object's absorbing its opposite. As the object succeeds, it destroys the conditions of its success, for the thing it feeds upon disappears. Hence competition cannot lead to greatness.

There is another side of this reverse relation. Hegel does not deal with it, but it was the view of Jesus. It is the idea of service rather than competition. Quality achieves itself as it loses itself in the state or the church or the university, or in friendship. "He that would be great, let him serve."

Last fall an engineer became a hero by saving a child from the cow-catcher of an on-rushing train. That engineer could have lost his life. If he had stopped to consider this, he would not have gone to the rescue of the child on the track. He was a hero because he abandoned himself in his sympathy for the child.

This quality has its existence in its other, in complete service to the state or family. The mother is a real

mother as she loses her life in her child. That is what Jesus meant when He said, "He that loses his life shall find it." If a man serves the university, the university flows through him, and his life takes on the proportions of the university and of the objects that he serves. He becomes a leader in university life and his life is secure because of its largeness, its genuineness.

Hegel calls the third form of the vital relation the potential relation, but I would like to call it the relation of cooperation. Suppose your ideal is to serve the university, and you work hard to do this. As your service is rich and splendid the university prospers, and in prospering it enriches you. As you grow, the university grows, and as the university grows, you grow. Each finds itself in the other, developing as it develops.

There are two great expressions of the relation of cooperation: the law of gravitation in science, and the brotherhood of man in human life. In gravitation there is mutual attraction by which all particles of matter tend toward each other. In human life the polarity of relations is what we call reciprocal. Each human being exercises helpful influence on every other human being. Cooperation is the great doctrine of democracy.

Ross: Professor Williams, is it possible to say that the direct relation and the reverse relation illustrate relations in which one of the two elements outweighs the other? For instance, in the direct relation is the quality out of proportion to the quantity?

Williams: It would be clearer to say that the direct and the reverse relations are one-way relations, whereas the relation of cooperation is a two-way relation. In the direct relation quality controls.

Ross: Then in the reverse relation quantity predom-

inates. Does this mean external factors?

Williams: No. Form comes out of the vital process.

Ross: Does the direct relation illustrate relation on the static level and the reverse relation, the dynamic?

Williams: If you will study relation you will understand the differences between people. So let us reserve that question for the next lecture, which will deal with the institution.

PART IV

THE ACHIEVEMENTS OF THINKING

CHAPTER XV

INSTITUTION

WILLIAMS: Relation is the basis for the institution. Whenever individuals begin to illustrate their relation to God, a church is always created. Whenever individuals begin to relate themselves in political life, the result is not pure citizenship; it is a government. The direct relationship, you see, shows itself in something that is not itself.

When intelligences begin to cooperate, an institution is formed. In the relations between men, or between men and God, a third is developed. In the case of a horse and a post the relation is obvious, for the halter is there. In human relations the process is the same, although the relation is not visible. The church is a religious relation, genuine and valid, and the state or school is the same sort of thing. Hegel calls the existence of relation the *dasein.*

Institutions do not depend for their reality upon a single individual. An individual can build a business, but he cannot build an institution. Can one individual establish a university? It is unthinkable. There can be no college if there are no students. Alone, even God could not establish a university, for it is not that sort of thing.

Take the problem of the church. Ministers often say

that the church was made by Christ, and that no man has a chance for salvation outside the church—and they frequently mean their own particular denomination. If one could believe this, it would settle all sorts of questions.

But when Christ died there was no church. When you read the Bible to find out which is The Church, it depends on the kind of man you are as to which kind of church you will find. Because there were three sorts of men living at the time of Christ, you will find three types of churches; the aesthetic, like the Episcopal or Roman Catholic Church; the intellectual, like the Presbyterian Church; and the emotional, like the Quaker or Moravian Church.

The institution arises when people are in relation. It lies in the structure of reality. The particular form the institution takes will depend upon the particular quality and quantity that are brought into relation. Sometimes I want to call an institution qualitated quantity, and sometimes quantitated quality.

The quality of the institution is the ideal for which all the individual members are striving; the quantity is the procedures and methods used to attain it. In a democratic institution the way to decide what to do is to vote. Voting is simply a way of finding out the quantity. The quality is not at issue at all.

Bradshaw: Is the doctrine that might makes right the quantitating process in a democratic institution?

Williams: No, I think that comes under the head of causation. The view that cause is power comes from physics; for in physics everything is settled by power.

Porter: Dr. Williams, do you not believe in the vote?

Williams: Yes, but I do not see how anything can

be settled that way. Suppose the quality is on the side of a lone individual. It is mighty hard for one man to put a question over when the crowd is against it. Jesus had a way of getting around this situation. He said to put in a little leaven and the whole loaf would rise. If you took a vote on it, the leaven would be abolished.

Porter: I do not see how you can take this step from politics.

Williams: Well, voting is a practical way of settling institutional questions, but you do not settle your intellectual question that way. If a big question comes before the Student Council, you, Mr. Porter, will turn it over in your mind before you have a meeting. You form a conviction that is personal; institutionally you act through the Council. How will the Council decide? If the emotions of the majority have been touched, the majority will be against you.

Porter: You are assuming I am right and they are wrong. I cannot accept that.

Williams: You have thought it out, though. If you have all the elements in the case and go off in the woods to turn it over, you will have the answer. But if you have missed a factor, the probability is that you will not be right. If you let emotion enter in, the emotion will throw backwater on your analyzing process and you will reach a partial conclusion.

Emotions are Separating Elements

Essie: Do you feel that emotions are headed in the right direction?

Williams: No. I had a good friend, an old student of mine, who married a drunkard. Her husband started drinking to show up his rival, whom he had cut out,

and now he is a drunkard, a product of the emotions.

Essie: You mean that the individual should make cold-blooded decisions?

Williams: I do not like the term cold-blooded, because there is no such thing.

Taylor: Would you say that marriage is an intellectual matter?

Williams: No.

Denham: It seems to me you talk as if you can shut off your emotions as you shut off a radiator. How can you shut off your emotions at will?

Williams: Well, you are getting the benefit of a striking figure of speech. But it is true that you do not bring in your emotions when you work a problem in mathematics.

Taylor: Perhaps that is an extreme case.

Williams: Oh, no. If you get mad you will not finish the problem, no matter what field it is in.

Bradshaw: You cannot apply the method of the mathematics problem to a personal problem.

Williams: I did in the case of a clash between my cook and a member of my family. I had to adjudicate, and I decided for the cook, because she was right. Great guns, I caught it. They said I was a traitor to the family and to the white man.

Denham: Then the Methodists, who are emotional in their religion, have very little chance of getting into heaven.

Williams: Oh yes, the Methodists are the only folks that do—in crowds. It is the Presbyterians who never get to heaven.

Green: I do not feel that you are quite giving reason and emotion their reasonable place. There must be no

conflict between the two. If there is a conflict there is a hole in the system.

Williams: No, it is the dialectic process. You get the synthesis, but not by abolishing.

Taylor: What happens when a man falls in love with a girl and marries her?

Williams: Charlie Tillett worked this problem out right. He fell in love with one of the prettiest women I ever saw. When he reached a certain point he shut off his emotions and subjected her to a mental process. Then he announced that his intellectual process had okayed his emotional process.

Taylor: Do you think an ambitious man can be happy?

Williams: The only happy things in the world are animals, I think, though they are unintelligent.

Bradshaw: What do you and Mr. Taylor mean by happy?

Taylor: I would say happiness is supreme satisfaction with yourself.

Williams: A Berkshire pig will relax and go to sleep, but if an intelligent being faces a problem he immediately becomes unhappy. He wants to know the solution.

Trotter: If he solves it, has he not solved his unhappiness?

Williams: No, for the answer is the key to a bigger problem.

Trotter: Do you not get satisfaction out of your work?

Williams: Yes.

Taylor: What is a realized ambition?

Williams: I do not know what it is. I always want to do my work better.

Trotter: And yet you get satisfaction out of it.

Williams: Yes, when the bell caught us on Wednesday, it seemed as though only twenty minutes had passed instead of an hour.

Porter: If our intelligence does not give us satisfaction we might as well quit. I believe it does give us satisfaction.

Williams: Happiness is a state of emotional equilibrium, but emotions are in their nature unstable. I was quite pleased momentarily when I worked out the doctrine of cooperation, but immediately the next thing I wanted to say began to buzz in my head.

Where do you find cooperation? Mr. Wilson says that the world will not cooperate with him. Mr. Lodge says that this independence is the world's glory. The brotherhood of man is a great doctrine, but we do not find cooperation except in the intelligence.

Ross: Is not the desire to cooperate as important a factor as the intelligence in group relationship?

Williams: Emotion is the spark which ignites the fire, but thinking is the fuel which feeds it. You might say that all intellectual activity is aroused by interest, and that the achievement of a discovery or insight is accompanied by emotional satisfaction. But the process itself is not emotional, it is intellectual.

Ross: What about ants? They show remarkable socialization, but they are not intelligent.

Williams: Teamwork is instinctive with ants.

Ross: But that is the point I am getting at. Is not the intelligence an individualizing factor, rather than an integrating one?

Williams: It is both. Thinking proceeds in two ways, you see: analysis and synthesis.

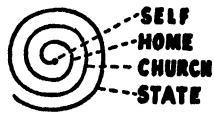
Ross: You mean that factors are isolated by analysis, and united by synthesis?

Williams: The reality of relation, which is the basis for all unity, must be grasped by the intelligence.

Taylor: Where do rights and duties fit into the picture? They arise out of relation, do they not?

Rights and Duties are Expressions of Relation

Williams: Rights and duties go together. Let me see if I can symbolize this.



The individual acquires virtues as he finds himself in organizations. These virtues become his qualities as he identifies himself with them. The small circle represents the individual self. In the home he is judged in terms of the home; in the community, in terms of the community; and in the university, in terms of the university. He becomes a Christian, a democrat, and a Carolinian, for these are the qualities he acquires. The individual claims as his right the quality with which he identifies himself. If he participates in government, he has rights as a part of it.

Taylor: Suppose the government does not grant you the quality you claim. Would your right to that quality exist?

Williams: You would not have that certain political right under that government. In a monarchy you have no right to say who should be king.

Taylor: Would you say, then, that a right is something that you can enforce?

Williams: No, you do not have to enforce it.

Taylor: It seems to me that there might be grounds for believing that people have rights that they cannot obtain.

Williams: There are. The Constitution calls them inalienable rights. These rights are just as much a part of you as the color of your hair. When Dr. Winston was inaugurated president of the university he said: "I grant the inalienable right of every student to be a fool, but he must exercise that right in his room, not on the campus." I do not believe there is such an inalienable right. A fool could have that right, but there are no fools in the university.

Bradshaw: Does the right of revolution come from your right as a man and not as a citizen?

Williams: Your right of revolution lies in your identity with the truth. You see, the institution arises when qualities have the movement to quantitate themselves. Any one of these qualities wants to be imperial, so there is bound to be a clash between them.

The individual has the right to choose the institution in which he finds his quality best expressed. With some individuals the church has the last word; with others the state does. Now and then you will find an individual who goes a step further and finds his citizenship in the world of principle. This individual will refuse to follow the dictates of the institution when they clash with the ideal. His refusal is based on the convictions that a violation of truth, goodness, or beauty destroys the structure and purposes of the institution itself.

If an individual revolts against the church, it will

burn him; if he revolts against the family, it will ostracise him. But if the question is important enough, three fellows will say, after he is hung: "By George, he was right." Then two more will agree, and then five, and soon there will be a revolution. A revolution so based never destroys anything that ought not to be destroyed. It restores the institution to its true function.

Essie: Does the Disarmament Conference illustrate the vital relation?

Williams: Between whom?

Essie: Between the ideal of peace and the diplomats?

Williams: There is no relation between peace and international diplomacy. You see, the gentlemen who held the conference are not the gentlemen who did the fighting.

Essie: But they were touched by it.

Williams: No. The Disarmament Conference illustrates the intellectual relation. This is a valid relation, a third major type*, but it is not vital. The ideal can be related to practical problems and can be made vital through the institution but in this case it was not.

Knowing is the Highest Type of Relation

The category of relation finds its best illustration in knowing. If you want to understand knowing, study relation, the third category, and if you want to understand the third category, study knowing. Knowledge is always the relation between the knower and the known. The knower is the I, so knowledge is the relation between the I and the objects known. There is no case of knowl-

*Williams considered the three main types of relation to be: the mechanical, the vital, and the intellectual. Propositions of identity are not true relations.

edge where this I is absent. The activity of this is what we mean by knowledge, and this knowledge is always a relation.

Every now and then somebody says knowledge is relative. This means that there is not any certain knowledge. I hold that relation does not mean that there are no things related. No part of this category is a product. The I, instead of being the product of the environment, maintains itself as the same I. If the I is not there, no knowledge takes place; you are simply submerged, confused.

Trotter: What do you mean by I?

Williams: I mean the ego, the total individual that is in your consciousness. Man used to call this I a soul. Today we do not talk about the soul; we talk about the spirit, and it is the fashion to say that it is the product of the environment.

Kant gives one of the best definitions of the I. He calls it the transcendental unity of the apperception. Transcendental means that it belongs to itself within itself. It is pure quality, you see, which negates every thing except itself.

Essie: When does the ego reach the stage of maintaining itself without any assistance from anything?

Williams: I had a thrill one day when I watched a little child. This little fellow had discovered a toe at the other end of the carriage and in good baby fashion had put it in his mouth. Down he came on the new object with two teeth. He discovered that the toe was part of the I, too.

Essie: But in infancy the ego does not seem to maintain itself.

Williams: Not as it does in its maturity. When do

you really know you are maintaining your identity? I would say you never fully know it, for it is a gradual process of learning. To know yourself in terms of your intelligence, instead of in terms of some fellow who thought something and wrote a book, is a very slow process.

We have said that quality must maintain itself or else it ceases to be quality. How can the I maintain itself and really get in relation? This is the great problem of philosophy, and the thinkers have always differed.

Idealism is founded on the purity of the I. It can have no relations at all, and so arises the doctrine of the two worlds having nothing in common with each other. Spencer's agnosticism is founded on the belief that you cannot get hold of anything except your conscience.

On the face of it there does seem to be a contradiction. We began by saying that knowledge gives us an illustration of the category of relation in its highest form, and that knowledge is a perfect example of cooperation. Now we almost seem to deny that and to say that there is only the pure unrelated I.

I will state the problem this way: The I, in its purity, is a full relation negatively. It is the very nature of the I to complete the moment of negation. It is related to everything in the world negatively, and we have found the negative relation to be quite as real as the positive. So the I, instead of being unrelated, is related.

Yellott: Does negation lie in the nature of the I?

Williams: Yes.

Yellott: Does the relation contain the I?

Williams: Yes.

Yellott: So the I is not absolute?

Williams: No, it consists in maintaining this negativeness. The I is itself the process of exclusion, and so it has existence, and in having existence it is quantity.

Porter: It seems to me that the I is the positive factor, and that everything else is negative.

Williams: Yes, as far as you are concerned, but yet you keep my I out. What I want to show is that the structure of the I is in and of life and not over against it. There is a deeper basis for philosophy—for knowledge—than idealism. The I maintains itself in these relations. In so far as it is quantity it is infinite. So this I is pure quality of infinite quantity.

This I is within itself, and in itself is related to everything else in the world. It is a transcendental unity of apperception and nothing is beyond its reach. One intelligence draws a deadline, but always another I disregards this deadline and goes forward.

Leadership is Necessary

Individual intelligence is the path to the truth. The institution cannot reform itself or introduce new views for that is not the business of the institution. Only the individual can do this, and he cannot serve an institution until he understands the process. Of course the institution can wring the individual's neck, but that does not affect the truth. No institution can permanently block the development of the truth.

The first amendment to the Constitution forbids Congress to control opinion. Opinion is free. It is beyond the reach of authority because of the individual. There are no institutional intellectual activities, because no institution has an intellect. All knowledge is individual,

so one end of every proposition is an individual intelligence.

The biggest problem of the Honor System is what to do with a violator. Should a person who cheats on an examination be sent home? I have told the President of the Council that the only thing to do is to educate the violator, for his I is a case of arrested development. A man who violates does not understand what the Honor System is. What you want is to establish a richer relation between him and the System, not to terminate that relation, as expulsion does. The Honor System is self-government, and so the problem is one of education. Each individual, not just the Council, has the responsibility for maintaining the system. To expel a man is not self-government; he ought to expel himself.

Taylor: It seems to me that when a man comes here he accepts our system and, with it, its duties, one of which is to report violations to the Student Council. If a man does not testify to violations he sees, he is not living up to what is expected of him. If you had a cancer on your finger, would you not cut it off?

Williams: The student who would not report a violation would not admit he is a cancer. I would say that he is immature. Jesus' way was to put in a little leaven. Gradually it will go through the situation.

Taylor: Does not the majority rule in an Honor System?

Williams: Perfect government is administered by each self. A perfect class is one in which every student and the professor know and practice the system, and government is the same sort of process.

Taylor: Is not rule by majority really the rule of the minority?

Williams: I would not put it that way.

Taylor: You said that you could control the campus if you had five good men.

Williams: Yes, but the truth would spread from these five men to others, you see.

Taylor: That still looks like rule by minority.

Williams: From the point of view of quality, it is. One crowd thinks what another man thinks. But intelligence is not a matter of control, as action is; it is a matter of education. If you want to help a man, do not hit him in the face. Smoke him out, and give him a bigger view.

I think we will all agree that we have made a mess of prohibition. It is true that the drunkard ought to be abolished from the world, but you cannot do this with a sword.

Great truths are always released through the individual. There is no institutional truth. When the institution clashes with some individual and uses its power to compel or change the movement of the intelligence it always fails. Generally it kills the individual, but that is merely an expression of power. It proves nothing intellectual. The institution which divorces itself from truth eventually decays and is replaced by another more adequate institution.

Some day you people will be in a position of power and will have to deal with this question. The problem may concern your son, or your student, or a church member who does not agree with you. You are the head of the institution and he is simply an individual. Will you ostracise him, expel him? I do not think that is the proper procedure.

All persecution is an application of this approach.

It is much quicker to cut off the offender than to integrate him into the process of growth. Dr. Porter of Yale once told me that it was a very serious thing for an old man to block the mind of a young man. I disagreed and felt it my duty to convert him. In a beautiful way, sweetly and simply, he said, Mr. Williams, if you are sure that is the right way, I have not the slightest objection to your holding that view. Then I woke up.

Whenever you find you differ with someone, do not undertake to use power to make him adopt your opinion, and do not call him names because he does not. Set forth an adequate view and if you cannot, let the matter go.

So far as I know, I have never in my life led a student to become a skeptic. I could name many who have moved out into a positive view of things. To abandon a negative view does not necessarily mean that he agrees with me; it does mean that he understands the significance of relation.

CHAPTER XVI

LAW

WILLIAMS: If an individual, an I, is always one, and always part of the knowing relation, then what is truth? According to the record Pilate asked Jesus that question, and Jesus did not answer it. I wonder why He did not. Maybe He knew of the hopeless tangles on that subject and did not want to add any more confusion. I am going to be less prudent than He was.

The purpose of study is to get at the truth. The stage of maturity in knowing is marked by insight into truth. Whenever you see a vital unity between the knower and the known and the relation between them, your state of consciousness is called truth. In other words, truth is vital unity. Structurally things are different, but the thinking process, as I understand it, is the power to see the unity without losing the differences.

In so far as you set yourself against something and you triumph as the other fails, you are carrying out the process of the particular, but you have not illustrated truth. It is easy to identify your own party with the truth, but not so easy to see any truth in the other crowd. To see the unity between a Democrat and a Republican is

to see the truth of fine citizenship. There is no such thing as Democratic truth, or Republican truth.

I think Christ's answer to Pilate's question was this: "I in thee and thou in me, that we may all be one". He did not give this answer to Pilate, for Pilate would not have understood. Pilate was a partisan.

Truth is vital unity in structure difference. Does a man make his own truth? If I make my truth and you make yours, we make it individually. That cannot be. You cannot have a university without students, but if you had nothing but students you would not have a university. There is a vital unity, you see. The difference in structure is as necessary as the unity. Truth I understand to be the vital, non-formal unity that does not destroy the difference.

The point about being vital is that the unity lies in the action. Action expresses difference, for two men will move in opposite directions while following the same impulse. The unity which lies in this action difference we call law. Action is a matter of types or groups. Laws apply to the groups in which men act together, but if a man is not a member of a certain group he does not obey the laws of that group. A dancing group has a different law from the YMCA. The action of praying is very different from the action of dancing; one has to do with the head and the other with the feet. So it is difficult for the institutions expressing those actions to dwell in peace. Each wants to substitute its laws for the laws of the other.

Law is not Truth

Many people identify law and truth. The Jews did, and that was one difference between Jesus and Jerusalem. The point of view of Jerusalem was that law is final.

With Jesus it was not final. Jesus distinguished between the law and the truth, and several times in his life he violated the law.

John Marshall regarded the law as final. Once as he was traveling by car he came to a point where the road was impassable. A lawyer driving ahead of him passed the impassable place by going off the road through a field, and urged the Judge to do the same. Judge Marshall refused, because it was against the law. He felt that the law was ultimate because it expressed real unity.

Law is unity, but it is not truth; it is law. Wherever you bring unity into the action differences of a group, you get law. If you want to find the law of vertebrate animals, you limit your specimens to vertebrates. Laws are limited. They extend only to the span of the action differences, and so far, of course, they are the truth. From the point of view of the participants in the group, the law of the group will be their truth, and they are right about it.

Bradshaw: Is there no relation between structure and action?

Williams: Yes, the structure explains the action.

Snell: If you say that in so far as individuals obey the law they illustrate the truth, are you not making law individual?

Williams: No, law is typal. As the individual keeps the law, he is a type. In family life the law of the family is illustrated by every member of the family, but each in his own way. When there are different laws, there is a divorce.

Trotter: It seems to me a law is truth.

Williams: It is, as far as it goes. How do you bring about unity in action? Law is not a matter of education.

Green: If democracy is what it claims to be, it brings in the educational process through the election of men to represent the people. If that is not so, democracy seems to conflict with truth.

Williams: The business of the legislature is to translate into fundamental statements the right things to do, but it cannot go ahead of the development of the people. Truth deals with the way things are made; law deals with truth in the action of things, not in their structure. All the reality in law is truth.

Ross: Do you mean that there are laws which are more or less real in proportion as they express a unity?

Williams: Study the prohibition legislation. We have statutes forbidding the selling of liquor, but the liquor business thrives in this country. There are no arguments in favor of the liquor business, but I am quite sure you cannot eliminate it by force.

Ross: If law is more limited than truth, there are times when laws do not illustrate truth and have to be changed to become more adequate, do they not?

Williams: Yes.

Ross: Could you say then, that all laws change as men develop, becoming more integrated and more cooperative?

Williams: Not all laws change. The Constitution does not change. Every field of human endeavor holds a body of truth which is held to be unchangeable. A new subject of study will have fewer truths; an older subject like mathematics has a larger body of truth. No science, however young, lacks a certain amount of definite truth. Is human life, which is the highest expression of life, to lose this characteristic of all lower forms of life?

Ross: Do you mean that the forms of government as

set forth in the Constitution remain the same, as well as the principles?

Williams: The forms may change, but the principles, which express the truth of governmental processes and structures, remain.

We will understand law better if we will look at two or three views of the nature and origin of law. One view is that law springs out of custom. Custom is unity of action that is unconscious of itself, is it not? Nobody is aware of his customs until he ceases to exemplify them. No sheep is conscious of his wool, but he is conscious that the goat has hair. The custom of producing wool does not spill over from sheep to goats because they are different kinds of animals. There is a lack of unity there, and where there is no unity in action you never find a custom. Some customs are translated into law. Many of them die and never become laws.

Taylor: It seems to me that custom is not so limited as law.

Williams: Custom is the unconscious expression of the unity of action, and therefore it may change with the change of human action more readily than the formal expression of it on the statute books. But the basic unity is the same.

Yellott: When custom becomes aware of itself, is it a law?

Williams: Yes, but if a custom lives and becomes a law, it is not because it was a custom, but because there was truth in it.

Another view of law is that law is the rule of conduct issued by a superior to control the action of the inferior. From this point of view the source of the law

is the state. The sovereignty of the state is its capacity to issue laws.

If law is a rule to be obeyed, there must be power to enforce it. There you lose the unity. With the insertion of power duality occurs. There is the rule and the power to enforce it. Dualism always produces a king and slaves, never a free spiritual life. If under this system the people develop a law consciousness, the first thing they have to do is to kill the king.

To my mind the explanation of the execution of Charles I lies in this fact. Charles I considered himself the source of the law, and he had a considerable following, although many English people knew that the people are the source of law. There could be no united England, so Charles had to be killed. The people were very particular to say that the execution was execution of the self-appointed source of the English law. Think of the confidence those people must have had in their position. It was, from the point of view of the majesty of the law, one of the most magnificent events of history.

Law is Unity in Action

Law is unity, and the very moment duality enters law disappears. Power is a very different sort of thing. There have been a great many decrees arbitrarily issued by officials. These are merely expressions of power, but they are always labeled laws to get the support of the world. St. Paul, you know, had himself okayed as doing good service for the church before he started for Damascus. That is an old trick.

Taylor: Can a miracle happen in accordance with law?

Williams: No.

Taylor: It seems to me Christ would not fulfill the law and then destroy it.

Williams: That is just what you would do if you take the question literally.

Still another view of law is that law is the decree of God. This is the belief of the theologians, and I call it to your attention because neither the problem nor any of the theories have changed. Men regard law in each of these ways today. I would say that the decrees of God are laws so long as they express unity. Until they are shown to be law they are simply arbitrary statements of power.

Porter: Does law depend absolutely on life?

Williams: It begins to look that way, does it not? Law is grounded in life so that life expresses itself in action as law. The result of the application of power is often the same as the exercise of law, although they are entirely different. For example, one man does not steal money because he is an honest man, while another does not steal because he does not want to go to jail. The latter is obedient to law, but the former is not.

The difference between law and power can be stated this way: The use of power to get a result is a creative act; it adds something. The working of the law, on the other hand, is the unfolding and developing of what is already there, in the process. Law expresses itself in growth, which is a process that lies in the structure of the object. An apple tree bears apples not because of what is in the books but because of what is in the life of that tree.

Essie: If law lies in the structure of the thing, it is true.

Williams: Yes. There is no difference between law and truth except in the quantity of it. Law belongs to types. University of North Carolina men do not act the way Wake Forest men act, but so far as their actions are true, there is no difference.

When you see the fundamental tendencies of social life you have a constitution. A constitution is the structure of social justice. The constitution does not tell you that you must do anything, but it does tell you that if you want to live a certain way, you will have to live that way. In democracy your ideal would be justice, and this ideal is just as binding on the legislature as on any individual. It lies in the structure of right social life.

Porter: Do statutes have any place in our form of government?

Williams: Statutes are devices to express the law. Statutes cover this case and that case, specifying actions in certain instances. But when a man understands law he is through with particular statutes. It is like the mathematician. A mathematician does not say 7 and 5 are 12; he just looks at those and sees 12.

Porter: Will not the individual get into difficulties if he asserts his own interpretation of rights as against some statute?

Williams: Yes, the need for a legal system shows a lack of development of the individuals in society.

I confess the recent war and the way we handled the peace has shocked me. It seems to me the Versailles treaty was about as immoral a performance as I am acquainted with. You may grant that Germany is wicked, but that does not justify the same sort of action on our part.

It is the function of statutes to call a man's attention

to the right way to act. Action, you see, is the very essence of difference. If you, an individual, act, and I, another individual, act, there is bound to be difference. Both the movement toward unity and the movement toward variety are real. It is the nature of life to maintain its integration and it is the nature of action to break up this integration. So in this stage there is struggle.

The big question is: Can we go beyond this struggle. or is life, as one fellow said, just one thing after another? Mr. Porter told me the other day that if you could not grant some great purpose being worked out in the universe, life was in vain. The same day a scientist told me that all the talk about immortality and accomplishment of great purposes was nonsense. There was nothing in the world but an unconscious whirl of things. Mr. Porter did not quite say whether purpose lay outside the individual or in the individual.

Suppose you grant that there is purpose. Are men making progress toward that purpose? The other day I read a story about a family from central Europe who had sold their house to come to America. There were five in the family: a mother, two small children, and two young ladies. Only three could be admitted into America under the quota of immigrants for that twelve month period, so the two young ladies were boxed up and returned to Europe. Are we really making progress when in this day of Christian brotherhood we treat two young ladies that way? I can imagine an Indian raising the point that perhaps the early settlers should have stayed at home, but not Christians.

CHAPTER XVII

RELIGION

WHEN I ENTERED *the classroom early that cold winter morning I found Mr. Green and Professor Williams already deep in conversation. Mr. Green was saying:*

"I have been wanting to ask you about the intellect and the emotions. You said some time ago that emotions were law-disturbing and the intellect was law-abiding. Are emotions contrary to law?"

"No," the Professor replied, "emotions are the servant of law. Run the emotions against any accepted law and see how helpless they are."

"Yet you say that spirit is superior to law."

"Yes, because spirit embodies law."

"I do not quite see it. I can see that law controls emotions, but intellect—I cannot see where that comes in. There ought to be a synthesis of the intellect and the emotions."

"Hold that question, Mr. Green, until we come to it. It is a good question."

"Are you including all law, natural and moral, in your definition of law, Mr. Williams?" I asked.

"Yes."

"Could you tell me what you mean by action?"

"That comes under the logic of will. I would just take advantage of physics to let action designate any change in place, situation, and so forth."

"Where does law come from?"

"It is in the nature of an object. It does not come."

"How can objects differ? You said law was the unity of action difference."

"Yes, but in so far as there is a difference there is not law. For much of life and human life action does differ. It is puzzling, but it is psychological and can be explained."

"I cannot imagine anything without a source."

"What is the source of quality? It shuts out all source and every other influence. Your intelligence is just as logical as mine, even if you have never studied logic a minute—that is, if you let your mind alone to work as it will."

"Well, a man comes here to school for something. What have we here that we would not have in Apex?"

"You would not have me, for one thing."

"Why should students need you if their minds are sufficient unto themselves?"

"They do not need me. They all leave."

Williams: I always feel ashamed of myself when I miss a class. It seems I have done something I ought not to do. But the doctor said there would probably be a funeral in the Williams family if I came. Whether that is desirable is a debatable question, but I gave myself the benefit of the doubt. I thought of you and wanted to be here, and I appreciate very much your coming.

In our discussion of law we have brought out two opposite movements, one toward unity and one toward

difference. These two give rise to struggle, which characterizes the stage of law. Today we will go one step further, to beauty, which is the source of religion. You do not go from truth to beauty by side-stepping the law stage. That is never done, as I see it.

By beauty I mean achievement of a perfect sort. Beauty occurs when quality and quantity have been so related that each loses itself in the other. Beauty is achieved truth. In other words, truth must pass through the process of struggle, into law, and beyond the law before there is beauty.

We speak of Jesus' life as a perfect life. What do we mean? There was nothing creative about Jesus. He never wrote poetry or plays; He was not a philosopher. Do we mean that He never did anything wrong? But Jesus did all the wrong things, in the view of society. He was consistent. He saw the truth in a problem, not the current opinion of the lawyers or politicians.

If Miss Yellott will pardon me, I would like to use her acting as an example of beauty. The Tar Heel reported in its columns that she acted well. She lost herself in the part she was playing so that the quality and quantity became one. She was not conscious of herself at all. In perfect acting, you see, there is no antagonism between character and performer.

Beauty is Perfect Harmony

Beauty is truth, but it is the truth spontaneously exhibiting itself. The man who acts perfectly, or beautifully, goes through the process of obeying the law, but he is so identified with it that he is utterly unconscious of the law.

Essie: Would the beauty that appeals to me appeal to you?

Williams: If it does not appeal to both of us there would be some difficulty with you or with me. If either of us is still in the stage of struggle there will be no beauty. The man who says he will try to break as many laws as possible leads a slave's life.

Essie: What I cannot see is this: There are things that appeal to the emotions that will not appeal to the intellect.

Williams: Beauty is spiritual, as I understand it, Mr. Essie. It is truth having passed through the stage of struggle to the stage of unconsciousness. It is spontaneous and it is free.

Essie: Does not the effect of the object on you have something to do with your response?

Williams: That is a part, but the richness will depend on the other end of the relation. I suppose the architect of this building had states of exultation and satisfaction, but nobody else ever had, in looking at it.

Grant: Is beauty perfection?

Williams: Yes.

Grant: Is a rose beautiful?

Williams: I do not believe beauty is in nature. Where in a rose is beauty? We often associate beauty with the sensations, but the sensations are just part of the process. A restful state is harmonious and a harmonious state by a little juggling can be called perfect, but if you analyze it, it lacks all the properties of the perfect.

Take, for example, a good dinner. If you go to a French or Italian restaurant in New York everything is perfectly cooked, and after you have eaten the dinner you will never hear from it any more. That is a physical

phenomenon which is quite desirable, and much to be preferred to a Chapel Hill dinner which requires two weeks and a bottle of calomel to remove. But it is not beautiful.

Grant: Does not a rose obey the laws of nature?

Williams: Yes, but that is not beauty. The beautiful goes beyond law into freedom.

Grant: What would you call a rose?

Williams: A rose is a combination of color and form that is arbitrarily fixed. The stem sticks in you. Blow it and it is gone.

Yellott: Then beauty depends on the intellect.

Williams: It is more than that. It is spiritual.

Yellott: Can you illustrate with the Madonna? Was that spiritual?

Williams: Yes, beauty is creative. The artist, by the use of paint and skill, almost created a woman on canvas. When you look at that work you do not see a picture, you see a mother.

Yellott: I fail to see the spiritual in that. Is not this experience likely to be emotional, not spiritual?

Williams: It is a perfect representation of beauty. It is like the Greek grape that the bird wanted to eat.

Yellott: Was that perfection? Does not a Greek follow laws?

Williams: Perfectly.

Yellott: And that is where its beauty lies?

Williams: Yes. When you acted that part in the play you never violated the type of the character you portrayed. I saw Edwin Booth one night and it was wonderful. The play was one long breath. He *was* Hamlet.

Porter: Were you not Hamlet too, Mr. Williams?

Williams: I was a little boy with my mouth open.

Porter: You were transported just as much as Booth was, were you not?

Williams: Yes, but I did not do the transporting; I just lost myself.

Porter: Would you concede that beauty is an individual proposition?

Williams: No, beauty is perfection. Emotion is only part of you. The beautiful comes always as the climax of an achievement. It is not a product, but the full, complete unfolding of the truth. Spontaneity, freedom is its mark. The stage of trouble where the law controls the object is passed and disappeared. The laws are all kept. No perfect thing violates a jot or tittle of the law, but it is unconscious of the law. So beauty or perfection is simply truth achieved.

Plato stopped here, with the concept of beauty. He said that beyond beauty there is nothing. I want to take another step that is not in the books, to show there is more.

The Desire for Perfection is Religion

To my mind beauty is the source of religion. Would you say that a man's expectation that the truth will be worked out ultimately is knowledge? I do not think it is knowledge. It is religion. The confidence that a man has in the final triumph of the truth and right is religion. One man may doubt that another man's ideal will issue into a state of perfection or beauty, but he does not doubt the triumph of his own ideal.

Mr. Porter's philosophy of life centers around his belief that there is a plan that is being worked out in

life. This state of mind is the essence of religion.

So far we have studied the individual and we have found him in all sorts of relations. We have represented all of reality as a circle which includes the individual. Now the question comes up: Can the individual have a relation to the totality of things? If not, then life is eternally piece-meal. I understand religion to be the faith that a man can have this relation to the totality of things. The individual is not only a man and related to everything, but he is in and of the permanent totality of things.

I can give you an illustration. The totality of things is like a power house, and the individual is the bulb which gives out light when the connections are made. The individual is in and of this power system. The power house does not shine; it is the bulb that does all the shining. The connection between the bulb and the power house is the essential thing. The great fathers call this relation faith. The relation does not belong to the individual. When the individual sees the relation there is the event that the Methodists call "getting religion". Nothing new is created, for the relation was there all the time. The Episcopalians use a much better term for the individual's discovery of this relation. They say a man is confirmed.

Essie: Can a man have true faith without seeing it?

Williams: Oh yes. When you were a year old you were just as much a member of your family as you are now.

Essie: How about the necessity, as Jesus put it, of "being born again"?

Williams: That is consistent, is it not? Birth is not creation; it is just a change of environment.

Taylor: Can a man intelligently answer a thing that he does not understand?

Williams: No, intelligence is understanding, but it is not necessary to understand religion. Jesus did not say "I am come that ye might be philosophers." He said, "I am come that ye might have life".

Taylor: Do you think Jesus could have found twelve men that would not have taken to the bushes?

Williams: I do not know, except that he did not. A real man never thinks about any misfortune to himself.

Penn: How is it possible to reconcile the events of history, with all the murders and tragedies there are, with a plan being worked out for the glory of God?

Williams: That is a good question, but the explanation has nothing to do with religion.

Penn: I thought that being big enough to see the relation is not a matter of intellect.

Williams: It is spiritual process. I had two great teachers at Yale, a professor and the wife of the janitor of the church I attended. She had six boys, each one a magnificent citizen. The father was the roughest man I ever saw, but the mother had brought every one of those six men up to splendid manhood. When I left I told her that I was not able to tell whether I had learned more from her or from the professor.

A great mother cannot be anything but religious. Wherever you find a great success you will find a great woman, and wherever you find a great woman you will find religion. She may not read very much, but she knows. There is the individual with a wide open channel to the power house. We professors try to have an artificial channel through a book, but of course that is a canned-goods performance. The great mother has a direct connection

with the power house, and she is too busy to fool with books.

Religion is Relation of the Individual to the Universal

Religion has been defined in many ways, as the relation of an individual to an institution, or as a characteristic of Christianity. Practically everything that touches human life has been worshipped at some time. None of these views is satisfactory. The institution is the expression of religion, but it is not itself religion. Religion is the relation to the totality of things. We call this totality God.

I think I can illustrate by a happening here on the campus last year. There was a great deal of excitement about changing the stipulation that the head of the Student Council must be a senior. I think it ought to be changed. The Student Council represents the university, and therefore the head of the Student Council ought not to represent any one class in the college; he ought to represent the whole. A man can be a genuine university man without being a member of any particular group. It is possible to relate oneself consciously to the university and to stand for that.

If religion is this relation to the whole, religion is going to touch every phase of your life. Some people think religion is a matter of the intellect, and that men must be orthodox in their observance of creed. Others think religion is moral, and that you are religious if you pay your grocery bill. Both are right, you see. Whatever serves to bring you into conscious relation to the totality of things will be part of your religion.

A learned scientist the other day sought to disprove

religion with the statement that death is the end of individual existence. He was conscious that he was in and of a physical system which was so tremendous that the end of it meant the utter disappearance of him. Science teaches that the environment triumphs, and so it produces an attitude of despair and of humility—negative virtues. A man would like to have his life count, but he knows perfectly well he cannot, for it will end today or next week or at some time beyond his control. If this does not prove that the individual is in and of the totality of things, I do not know what would prove it. The professor meant to deal religion a fatal blow, but to my mind he laid the biggest foundation.

You might say that there are two great divisions of religion: the metaphysical and the historical. Religion at the stage of the metaphysical is religion grounded in the nature of things, instead of in knowledge and purpose. The individual object belongs utterly to the universal; it is dependent. If the circumstances are favorable the object exists: if unfavorable, it disappears.

The college freshman provides a good example of the absorption that occurs in the first stage of relation. In the beginning the individual identifies himself so completely with the university that he has no individuality. He does nothing without direction from the university. He does not even get up unless the college bell rings. To say there is no relation between him and the university is wrong.

When the individual becomes conscious of his relation, that is, of religion, he enters the historical phase. He sets himself to guide his own activities, whereas before, when he was not conscious of the relation, he did not.

The History of Religion Shows Three Stages

The historical shows itself in three stages, as I see it: the sacrificial stage, the stage of law, and the stage of spirit.

The first stage, the sacrificial, develops from the simple offering to the more elaborate ritual, and culminates finally in human sacrifice. The object of sacrifice is to appease the force that conflicts with the desire of the individual. The problem is to get a different relation with the enemy. If you have a terrible quarrel with your girl, the best way to make reparations is to send her a nice present. When you become a scholar you have to sacrifice this, that, and the other in order to accomplish your aim. There is a great deal of this sort of life, and it comes to an elaborate finish in religion because the issues are more vital.

I have heard even the death of Christ spoken of as a sacrifice. God was angry and had to be appeased—a monstrous theory, I think.

The second stage in which religion shows itself is the stage of the creed, the law. The movement from the sacrifice to the law is a very interesting one. It is clearly set forth in the Old Testament, which is in some respects the most interesting book in the world.

If I were to make a list of the greatest men in the world, I would head it with Abraham, because he thought out this movement. Abraham was called upon to sacrifice Isaac, his son. This sacrifice was the law of the land. The act was imposed upon him; it was not an action that originated in his own heart. The problem that confronted Abraham was the same as that which confronts every civilization: What good is a dead corpse? If civilization

is to go forward it must get away from the sacrificial idea. Instead of killing his boy, Abraham dedicated him to God.

The sacrifice is an action in the sphere of religion. It is not a pure act because it springs out of fear. The purest action possible must spring from the self and it involves following a program. If you pursue a value consistently to the end, you attain it. That is what I call creed; the Jews called it the law and it was simply the plan that the individual adopted as his scheme of religion. Abraham had reached the point of seeing that the benefits of religion spring out of a dedicated life—the one who consciously sets himself the task of following a plan to the end. I do not think there was ever a greater advance made on the part of the human intelligence than that.

Green: I do not quite catch that. Does action take the place of flesh sacrifice?

Williams: Let me go over it again, Mr. Green. The individual is a live object in the totality of reality. His existence consists in action, but what sort of action? The first actions are isolated acts which are imposed from the outside, like those of an infant. A baby is fed, washed, and clothed; he does very little even on the instinctive level, nothing that is self-conscious. The pure act is intelligent; it is an act that springs out of you, is sustained by you, and is contained within you. This plan consciously controlling your action is a creed.

Most individuals stop in their development at the stage of law. Religion finds its ultimate expression in following the law, which is the work of God. This is a great stage, and I have no quarrel with any enthusiasm for it,

but I contend that there is something beyond the will of God which is law.

Study the life of Jesus: you will find there the spiritual process which is the third stage in religious development. The life of Jesus is spontaneous; law did not control his actions. It is like the life of a child. What laws does a child violate? He never eats any more than he wants; he never smokes cigarettes. The life of a normal child is a spontaneous life, and that is the ideal. Christianity, as shown in the life of Jesus, is not the life of law, although it keeps the jots and tittles of the law.

How does a man pass from the law stage to the stage of spiritual freedom? Nicodemus asked Jesus about this and Jesus deliberately threw him back on himself. He told Nicodemus that he had to be born again. Birth is nothing but changed environment. If the individual is dead before he is born, he is dead after he is born. Nicodemus was trying to run things with a pocket full of rules.

Whenever a boy comes here to the university from a home where there is a perfect set of rules, he goes to pieces. If there is real stuff in him he will get back on his feet, but at first he goes to pieces. In spite of the fact that the faculty will let him more alone here than anywhere I have ever been, it is the most law-abiding place I ever saw. The student's finding himself to be free within this system of laws is the discovery of spirit.

The Spiritual Life is Free

The spiritual life is, I think, higher than the law, because it keeps the law better than it is. This class is a good example of the process we are talking about. We never take attendance, yet there is no class in the uni-

versity that has anything like the average attendance that this class has. We keep the law better than any class in the university, but we do not have any law. There is the puzzle in it.

I had a letter from Tom Wolfe in which he said he was terribly bored with all the talk about culture. The advocates of culture claim it is the only way to get to heaven, yet a whole lot of it is as dry as the dead itself. You do not have to have culture in heaven. You will get a big credit if you have it, but nobody will bother you if you do not have it.

To be a Christian is to pass from the law to the spiritual, to freedom. I think the greatest speech on freedom ever made was made by St. Paul. He saw freedom because he passed out of the Jewish stage of legalism into the Christian life. The spiritual life is not obedience to law; obedience is slavery. The free, Christian, spontaneous life is not a licentious life, not one of debauchery. It keeps the jots and tittles of the law, because it is the source of the law.

The secret lies in the nature of law. I said law is the unity in action difference. Where there is nothing but variety there is no law. So the essential thing is the word unity. Law is not a bending to compulsion, power, force; the unity must be there. The moment force is introduced you want to go one way and I want to go the other way. There is a duality and the unity is broken.

Porter: You say that we in the university do not need law, and yet in the very nature of our system we must have law. Is that not a contradiction?

Williams: Last year a student wanted to establish a constitution for the Honor System. He got rather angry with me because I opposed it. It seems to me that if you

undertake to write out a code for a gentleman you will not make any headway at all.

Yellott: Does the fact that certain people seem to illustrate law spontaneously take away the fundamental fact that law is compulsory in society?

Williams: No, law is the most compelling thing in the world. But to be spiritual the compulsion comes from within. You cannot be different from what you are. If you are a lawyer you might become a great constitutional lawyer, but you could not for the life of you think that injustice is justice. The inhibition lies in your own intelligence.

The only thing that I know that illustrates law perfectly is a perfect man. If you want an illustration of law, do not take a pollywog; take an intelligence, the biggest you can get. The only perfect man we have ever had meets all the requirements so far as I know.

Essie: When you say that a man is perfect and you take his utterances as ideals, is that not law?

Williams: Yes, but it is spontaneous. Where do you find the unity that is in the action difference? In the intelligence. The variety is very rich in your existence day to day, and yet that unity has maintained itself through that variety. The ultimate source of law is your life.

Porter: Would you say that the ultimate source of our law is the university life, or would you make it broader and say life?

Williams: The laws of a community come out of the dominant individuals in that community. You must relate life to change, but there is in the process a suggestion of immortality. When spring comes in a little while the trees will begin to bloom, not because of the woods, but because that is their nature. In a way they are dependent

upon their environment, but a bad spring cannot stop their blooming.

The perfect life is free. The perfect man is the source of the law. Of course, action is more often governed by emotion than by intelligence. The perfect man renders unto emotion the things that belong to it and unto the intelligence what belongs to it.

"Hello," said Trotter, dismounting from his bicycle and coming over to my bench.

"Hello," I replied. "Are you riding because you want to or because you are compelled to?"

"It's a straight legal proposition, all right—I have business in town. But seriously, do you think a person can be free?"

"I don't know. We do have an illusion of freedom of choice."

"It seems to me it is just an illusion, though. Even if a person avoids direct compulsion there are a thousand indirect influences that determine his behavior."

"Yes, but somehow I do not think Professor Williams would deny that. I believe he has been describing the experience a person has when he has an insight into a process. In living it he is completely identified with it, spontaneously and happily."

"But could you not justify acceptance of any kind of process or program on that basis? If freedom is just the feeling of freedom, then it need not be associated with any particular political life, or economic situation."

"In a sense I guess you are right. Certainly this interpretation would allow for individuals to be quite different in their purposes—as we know they are in fact. But I do not believe you can ignore the truth in the situa-

tion. If processes do have a basis in objective reality, then recognition of that reality would constitute freedom."

"You mean that the peach tree is free when it bears peaches, not when it tries to bear pears—to paraphrase Professor Williams' illustration."

"Something like that, I guess."

"Do you suppose that the concept of spirit is an attempt to define human nature?"

"I think Professor Williams uses the term for that purpose."

"It seems to me to be a bad term, though. Does he mean soul?"

"No, I believe he means by spirit somewhat the same thing that the gestalt psychologists mean by integration of personality."

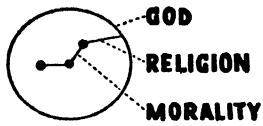
"Perhaps you are right. I wonder if he will explore the idea at the next lecture?"

CHAPTER XVIII

THE STANDARD

WILLIAMS: I am rather puzzled to know how to take the next step. We have seemed to discover that things are fundamentally related, and that this fundamental relation is illustrated in a perfect man. This seems to reach religion in its perfection. What else is there?

Suppose we illustrate with a diagram:



The dots represent individuals and the lines connecting them represent their relationships. A person's life is made up largely of these minor relations. The relation will be morality, but in one case it will be political, in another social. There is endless variety, and so a great many people say that there is nothing else but variety in the process. Your life is first this thing and then it is opposite. It is a circle which goes round and round forever, so the thing to do is to eat, drink, be merry, and die.

This philosophy was developed in the East. Buddhism

has it very clearly. The aim of man is to get out of this circle, for as long as he is in the circle, there is no achievement. The process is first the blade, then the ear, then the full corn; and then it starts all over again. The Eastern civilization says that the only change for an individual is simply to break his connection with this movement.

I suppose each of you is more or less an Easterner, especially if things have gone hard with you. You dream of the day you will be beyond the reach of mundane things. In tackling this problem the Western civilization ends in materialism and skepticism.

The Standard Comes out of Religion

I do not believe that the experience of the moment is all there is to the process. There is a standard in things and we get standard from religion. The idea that there could be a measure prevailing without any time limits or place limits is what I call the gift of religion. The essence of religion is that you have to deal with the universal. In so far as you and the universal are in relation, the universal is present in your experience, and it will maintain itself under varying circumstances and conditions.

I suppose all of you are familiar with the chemical symbol for water. Suppose you had 1000 parts of hydrogen and 100 parts of oxygen; what would result? The result would be H_2O, and the 800 other parts of hydrogen would be left out. What makes it that way? Dr. Bell told me that we do not know, and that the answer to that question is not chemistry. He started to say that it was a law, but it is not a law; it is a measure. Wherever there is water there is the measure, this formula. There are no exceptions to it anywhere. In other words, something

is there which does not belong to hydrogen or to oxygen, but it prevails wherever there is water.

The question whether water would be two parts H and one of O in each case would not arise in the chemist's mind. The scientist would wait until he had another specimen of water, for there is nothing about the water to give you the knowledge that the formula is authoritative.

All the departments of thought have their standards today. No mathematical process is complete until it is translated into something permanent, something invariable. About the only place the standard does not prevail is in religion itself, and in philosophy. When a man rises up to talk about authority in religion he begins to look for a place to get off.

Trotter: What has H_2O got to do with the relation between the individual and God?

Williams: I took it as an example because I knew that if I began to get authority in religion you would say it was dogmatism. We skipped dogmatism, you know, when we became sophomores. So I used chemistry.

A Standard is not a Law

Penn: Why is it not a law that water is always H_2O?

Williams: I do not know.

Penn: Suppose I find that it is a law: could you disprove it?

Williams: I would ask you what you meant by law.

Grant: Is gravitation a law?

Williams: There is no such law as gravitation.

Grant: Why is measure a better word than law?

Williams: The formula has nothing to do with H and

O; it is not in and of them at all. H and O cannot be analyzed any further.

Heffner: Would you mind telling me what a law is?

Williams: It is unity in action difference. The point about a law is that it is in and of action. If you could find action here in H and O, I would say that it is a law, but that is what chemistry has not been able to do.

Porter: Are you trying to find a proof that there is something beyond law?

Williams: No, something beyond the circle of endless change.

Porter: The very fact that some dispute the proof shows that your argument breaks down.

Williams: Exactly. I have not made myself clear. One difficulty is my inability to express myself, and another difficulty is your habit of expression. Your mind is not quite free to take this in. But I am certain that when you reflect on it your doubt will cease.

The Greeks used the standard. It goes far to explain their wonderful architecture. No Greek column was ever made haphazardly. If I were to give you the height, you could tell me what the circumference is, or vice versa. Nothing was left to the carpenter in Greek architecture. They saw the question of measure and they went to work to illustrate it.

Porter: Do you think our preachers use the standard now?

Williams: Yes, but they express it in a dogmatic and offensive way which people cannot accept. The standard is authoritative for all people; the only difference I find between individuals is the particular authority they set up.

Suppose I were to bring three plays up here to sub-

mit to the class. Some of you would condemn them all; some would consider one a possibility. How did you pass judgment on those plays? The basis for your judgments is nothing peculiar to you, nor is it a part of the play. It is your standard, and the standard you apply has nothing in common with the thing measured. It is quite external.

It seems to me you miss the point if you call that a law. When you measure calico you do not apply law; the law is applied at the factory where the calico is made. The yardstick is a measure, and it is not part of the material.

Porter: Is there no connection between the thing you measure and the standard?

Williams: There is no connection. To take again the example of water: The hydrogen and oxygen will not by themselves combine. There has to be a certain temperature, a certain spark, and that does not lie in the hydrogen and the oxygen. That seems to illustrate the existence of some other source besides the hydrogen and oxygen. I will admit that here the distinction is fine, but when we move further away it is pretty important.

Yellott: Would you say that the nature process is a tyrannical process?

Williams: Always.

Yellott: That means that the standard is imposed from without. Who is the Louis XIV of nature?

Williams: Mr. Porter told me it was God. He said there was a plan being worked out.

Yellott: I did not ask Mr. Porter; I asked you.

Williams: I have not gone as far as Mr. Porter. I do not know. Sometimes it seems that if you had a fine quality of hydrogen, and oxygen that was below standard, you would make a better grade of water by putting in three

parts of hydrogen and one half of one part of oxygen. But there is no case where that has been done. No cow has five legs, although it might be an improvement. No snake has any legs at all; and if he tries to get some, nature destroys him.

I do not know anything more impressive than the biogenetic law. There is a stage in the development of the human embryo at which the biologist cannot distinguish it from a cat or dog embryo. Although they cannot be distinguished, the forms never get mixed up. The human embryo always becomes the human being, and the dog embryo always becomes a dog. The form controls the life.

Green: It seems to me that there is a fundamental element of conflict between the laws—or I should say standards—that govern the nature process and those that govern human relations.

Williams: Yes, you do not get rid of conflict, for that is a characteristic of life. Miss Yellott has remarked that the standard is very autocratic; that it is always operative everywhere. When you see it that way, have you not seen something universal? I think so. We use the universal, but I doubt if we can explain it. All the rivers find their explanation in the ocean, but what is the explanation of the ocean? I do not know.

Religion has for centuries been teaching that there are standards that remain fixed. The injunction "Thou shalt not lie" is a standard that applies in the moral sphere. It is the fashion today to scoff at standards, and to say that moral decisions are all a matter of circumstances. "Thou shalt not lie unless circumstances are very unusual." Men do this in an effort to be practical, but there is no foundation for it. Life is not that way.

The relation of religion is, I firmly believe, the deepest thing in life.

I spent twenty-five years trying to find some good thing we have that does not come from religion. Where, for example, do we get the notion that there is such a thing as a property right? There are a good many places in the world where this right does not exist. Those of you who are going to study law ought to work it out. Property rights in America are genuine rights, guaranteed by all the power of the national government. I was simply bowled over to find that the first time the idea of property rights was ever realized in the world it came from religion.

Taylor: It seems to me that what you have done is to identify the standard with the illustration of law.

Williams: Yes, I have. The standard is mixed up with law, and becomes identified with it, yet you are quite aware that it is not law. Our honor system is a good illustration. The very heart of the honor system is that the standard of honesty is illustrated in the life of the student. The individual will act in this manner no matter what the conditions are. This standard does not spring out of the law consciousness; it springs out of the spirit. The standard is a bigger notion than law, and yet it illustrates any law there is.

I would like to illustrate with you, Mr. Taylor, if I may. I do not want to be personal, but I take things from life here. When the Golden Fleece took issue with you, you did not appeal to any law, yet you said you could not do what they required. I accepted the standard of your conscience as a legitimate basis, and I told the Fleece that I thought they ought to take you in. You did not keep the law, and they were looking at the question

from the standpoint of law.

Taylor: The standard of the individual does not always harmonize with the system. But it seems to me that to act straight rather than crooked illustrates human nature in a most natural sort of way.

Williams: Yes, it illustrates the best in man, and that is his real nature. I have used this example in my Ethics class: Tonight at midnight my doorbell rings, and I am confronted by a giant with both hands full of guns. The man asks if Mrs. Williams is at home. If I say yes, he will go in and kill her, and yet I am afraid I would say yes. If I would lie, how much confidence would you have in me? The standard would not be a standard if it read: Thou shalt not lie except when the life of your wife is in danger.

Taylor: Do you believe that a stain can be wiped out?

Williams: No, sir. If you lie it is settled, and the impress is put upon you.

Taylor: How about your marriage vow to protect your wife?

Williams: The question is whether or not you will keep your vow not to lie.

Taylor: You have to break one standard or the other, do you not? Why not break the one that will do the least harm?

Williams: Is that what protection means? If I lie to this gunman I am breaking my vow, and I would not call that protection. If I do not lie, the man starts through my door and it is up to me to stop him. I may not be able to do that, but I do all I can. Have not I discharged my vow?

Green: What if you kill him? There is a commandment not to kill.

Williams: Yes. Thou shalt not kill except when your

wife is attacked, and then the fellow who kills the most is a hero.

Penn: Suppose a man told something that he thought was a lie at the time, but which turned out later to be the truth?

Williams: If I did that, what confidence would you have in me?

Penn: A lie seems to me to be a state of mind.

Williams: Are you not losing sight of the fundamental? Whatever situation comes up, there is a definite line of action that you take. If you do what you have figured out, is that not the right line of action for you?

Penn: You said that if you trusted your conscience you could not do wrong.

Williams: Yes, that is my philosophy. You may be wrong. The essential thing is not to think you are right, but to be right.

Penn: How is it that when standards conflict, you run amuck?

Williams: The problem of error does stand the philosopher on his head. The teaching of science has done some serious damage at this point.

With the scientist the influence of the environment becomes blind necessity, and that is fatalism. So it seems to me that science very clearly sustains religion in the contention that standards are authoritative. The result is that science is a brilliant illustration of the thing religion has stood for for several thousand years.

I suppose everybody in the room would protest against the infallibility of the Pope, except myself. I am quite sure the Pope is infallible every time he tells the truth. His infallibility is the infallibility of truth. Every man is infallible when he tells the truth.

When I was a boy I was taught that the standard was the Bible. The truth of the Bible is infallible and perfect. But that is different from saying that the words of the Bible are perfect, which is the usual interpretation. In a great many cases we do not know what the words are, for the original manuscripts are all lost. In the three versions that do exist, there are many contradictions. It is unfortunate to identify the standard with a book in that way, because when the student examines the book he cannot accept it as perfect, and then he says there is no standard at all.

Green: I do not understand that the Bible is perfect, but as a standard for religion it seems that the Bible is a perfect book.

Williams: I do not think any book is perfect. The perfection in the book is the truth in it.

Green: Is the disagreement in the truths or in something else?

Williams: There are a hundred thousand variations. Some are mere details, and many are serious omissions and contradictions.

Green: It occurs to me that you are showing the mix-up in modern people's minds. Is not the scientific conception that truth is relative an indication that we are passing through a stage, and that later we will go on to another conception?

Williams: I do not know, but I do want to interest you in this.

It is impossible to ignore the value of the Bible to the individuals to whom it serves as a standard. I had an aunt who would hurry through her duties on Sunday mornings so that she could read from her Bible. She would begin to read and in a little while her face would

shine. She would strike something that to her was a message from God. The picture of her very genuine and beautiful worship will live for me forever. If that is not a standard I do not know what would be a standard in her case. As my aunt read she would be exalted; her imagination would be quickened and she would have a very beautiful religious experience through allowing herself to yield to this authority.

The Standard is a Qualitated Quantity

The standard can be defined as a quantity that has been qualitated. The quality consists in the quantity remaining fixed. Quantity is very changeable. Cloth can be an inch, a foot, or a yard. But in a yard stick the change ceases and you have a quantity that is not subject to change. The standard is not selected arbitrarily, although the symbol is arbitrary. You can make a yard stick out of wood or steel, but let me see you make one out of water.

Taylor: Is the function of the international conference on weights and measures to qualitate quantity?

Williams: Yes, it is. The problem is to get a quantity that can be more perfectly qualitated than our quantity. If you are sick and the doctor prescribes three teaspoons of medicine three times a day, you will want the teaspoon to be exact.

Porter: Is it not true that the movement of life is from quality to quantity and then back to quality again?

Williams: Yes, it is sort of an explosion. Every now and then you will have this experience. The time comes when the standard is identified with a process. Conscience is a great standard, rigidly applied, but it is the very es-

sence of the process itself. It comes in at the finish of this movement.

Taylor: Will your standard arise from as many changes in life as you have?

Williams: Yes, there are two sorts of standards: One is the formal standard where the standard is external to the thing measured. In that case the standard is a quantity qualitated. But when you deal with living things the standard is just reverse; it is a quality quantitated. The emphasis in the formal standard is put on the quantity, whereas in the vital the emphasis is on the quality.

The Standard is Formal at the Static Stage

Now we are ready to understand Plato and the history of form. Plato said that in any action the reality is not the act but the form that controls it. This he called idea.

The assertion of the reality of form is what I understand by medievalism. Plato was the philosopher of medievalism and the institutional form of Christianity was the concrete illustration of it. The church established itself as a series of absolute forms. The individual who varied a hair's breadth from the form was lost; the man who died outside the church went to hell.

It is characteristic of the formal standard to exclude change. A man negates action when he submits to form; either he illustrates the form or he is lost. Everyone illustrates this. The only difference between individuals is in the form accepted. If a man is scientific, he will illustrate the scientific form; if he is religious, he will illustrate the church.

Conviction marks the presence of the form in your consciousness. To do what you consider your duty is what

we mean by function. I never argue with a man when he is acting from a sense of duty, for you cannot persuade a man to go against it. The duty may be unpleasant, but the action is yours, yet it is not yours. What you do is under the control of the form.

Cathey: It seems to me you are knocking out the roots of the individual.

Williams: Yes, in the Platonic sense, the individual has to go. The individual has to conform, you see. If he is a citizen of the state or a member of the Democratic Party, he must illustrate their forms.

Cathey: What is the difference between form and standard?

Williams: The form is the standard at work in the action. It is the same fundamental idea. The form gives unity to the action, for if there is one form there is one line of action.

Stout: What happens when the form does not control the action?

Williams: There are several answers. The non-conformer is considered a sinner, or he is considered a fool, for if he understood, he would obey. During the war a man in America would be put in jail for saying one thing, and one in Germany would be put in jail for saying another thing.

The kingdom of form sets itself up as real, over against the material world. The Mt. Sinai experience in the Hebrew movement is a clear presentation of the view. The picture of the forms delivered by Moses to the Hebrew people had no connection with the action of the people. Moses said the system of forms came direct from Jehovah. It was considered final and perfect. The life of the people stood over against this system of complete

and divine form, which became dogmatic, tyrannical. Moses, because he was interested in the form and translated it politically, was one of the great constructive men in the world.

In the dynamic stage we find science exploiting the material sphere, and denying the whole sphere of form and the Mt. Sinai authority. Science studies the world of action, which appears separate from the world of form. Science had to oppose medievalism, for it could not have been science if it had not. Moreover, when a man gets a foothold in science, he has to oppose the church. When I was a freshman here the good people of the state felt that if any boy allowed science to look straight in his face, he was ruined.

The Standard is Vital at the Organic Stage

A deeper view of form was given by Isaiah. Isaiah saw that the form is integrally related to the material, and that form arises only when quality is related to quantity. Instead of being pure, and therefore over against material, form has its existence in material, and material has its expression in form. Isaiah expresses this concept in the statement that the source of right living is a clean heart, and a clean heart is individual. The right living, right sort of man is the source of form. Study Isaiah if you want to appreciate democracy.

How did Isaiah pass from the static stage where form is considered complete and divine, to the organic stage where the individual is the source of the whole structure of things? He developed an understanding of the identity of form and material, which is the meaning of "content". I like to use the word "content" to express the unity of form and material which is in action. The clean heart

is not only the source of form; it is also the content of the spiritual life.

With Isaiah the insight into the clean heart as the source of form was a theoretical achievement; with Christ the theory became actuality. The Christ consciousness is the consciousness of actually being the source of form. His philosophy, "I and the Father are one, and ye are my brethren", expresses this consciousness. This human life suffered, illustrated and fulfilled the jots and tittles of the divine system of forms that came from Mt. Sinai.

The antagonism that results when the world of form is set apart from the material world is resolved on the organic level by the life of Christ and the philosophy of Hegel. The Hegelian philosophy, which is nothing but a translation of Jesus' life into thought, is the effort to find the unity. Both science (materialism) and formalism are recognized with equal frankness. Since that is difficult to see, most students of Hegel find in him absolute materialism or absolute idealism. Both are there.

The greatest thing about Hegel is the dialectic process. The antagonism between form and action gives way to a unity where form and action meet on a higher level. The form changes, but all that was of value in the lower level is retained. Neither reality is rejected.

Last week we had a remarkable visitor, Dr. Sherwood Eddy. He shot more questions at me than I have had in many a day, and at the end he thanked me and said he had gotten something. He deals with a thousand men a year, while I deal with one man. How is it that I could tell him something? To my mind the reason was the dialectic process, not me. I think he will rewrite a chapter in a book he will publish, from the standpoint of Hegel instead of Aristotle.

To see form in action and to see action illustrating form is to open the door to modern life. Neither standard nor process is abolished; each has its existence not in itself but in its other. The form is the identity that exists in the many expressions, or actions. That does not mean that the form is the material, but that it is *in* the material.

The vital standard is perfection, which has no limits at all. The individual who is perfect will illustrate his standard under any and all conditions. A great many people will make truth the highest standard, and there are others who make the external standard the highest. You must study both to see where each belongs. If the question is a vital one, you ought to use the inner standard, principle. If it is an outer question, concerning society or politics, then the standard is external.

What is a principle? It seems to me that a principle is a quality that has quantitated itself completely; that is, the quality is not interrupted by any quantity limits. If the quality can only maintain itself within certain limits, it is not a principle; it is a law. The student who behaves himself so long as he is sure that the devil is across the street is obeying law, but the man of principle will live the clean life without regard to the devil. He has the standard within himself.

Porter: The standard always seems to become dogmatic when it becomes formal, so that the individual has to appeal again to his own conscience and break away from the form, and so on round the cycle.

Williams: That is the way it swings. The individual conscience reacts against the system, and fights all organization. Then the individual discovers that he cannot get along without an organization, so he forms an organization which outdoes the other one. Luther was hardly

dead before the dogmatism of the Lutheran Church was worse than the dogmatism of the Catholic Church.

My statement of this will not do for you, of course. I want you to make your own analysis. When a young man passes out of form, he usually says there is no form so he can do as he pleases. That is an illusion, for there is no action apart from form. The option is not whether you keep the forms of your fathers or have no form; the option is between this form or that one.

Penn: If that is true, then liberty does not lie in any one fixed set of forms.

Williams: Exactly. We have taken the position that liberty is identified with a certain form of government. Of course, liberty always expresses itself in forms, but the forms may change as the conditions change, preventing the identity of the value with the forms.

Why should the form become divorced from the value? I do not know. There are a hundred people in the penitentiary now whose opinions do not suit the government. When Mr. Debs got out of the penitentiary he said that he had not changed any of his opinions. It seems to me the authorities ought to have put him back in, if they ought to have put him in in the first place.

Porter: It seems to me this cuts the ground from under penalties.

Williams: It does. The only time Jesus inflicted punishment was when he got a big stick and drove the money-changers out of the temple, and I do not believe he did that.

Porter: It looks like form is a dead thing, then.

Williams: It is, by itself, for it becomes tyranny. Freedom illustrates perfect law, which is not license at all.

The ground of freedom is the identity of the group in the object.

Penn: The world certainly seems to be going astray and not applying the philosophy of Christ.

Williams: When we look at the world in the large, we generally have to revise the popular estimate. I doubt if the newspaper estimates will be permanent.

If a person knows what to do in a certain situation, he has in himself the content of that position. Many students come to me when they are puzzled, and in order to help them I have to be able to suggest a wise course of action, which means to suggest the forms. Of all the boys I have talked with, the only boy I have been unable to advise was the boy who was in love with one girl and engaged to another. What ought he to do? You cannot love twice, and you cannot marry a girl whom you do not love. In this case I had to surrender. I do not know what he should do.

Helping a man to gain insight into his problem is a different process from controlling him by imposing your will or the forms of society upon him. The first is an educational process based upon the principle of freedom or self-government; the second is based upon the static philosophy in which form is authoritative. One man has no privilege to control your life, nor to pass sentence upon it. You might as well talk about a 4 sending a 5 to hell. Both are numbers, the same sort of thing. Neither can have control over the other.

Taylor: It seems apparent to me that the Negro has fundamental rights that we have to recognize, but I do not believe social intercourse is one of them. The Negro has no right to inflict himself on me. I have a right to

choose my friends.

Williams: You come from Sparta, do you not?

Taylor: Yes, sir.

Williams: Suppose a fifteen year old boy in Sparta meets you at the bus depot and invites you to ride with him so that he can talk to you. He is an ambitious fellow and wants to be a debater. Although he does not know you, he tries to learn something of the university and of debating from you. I do not think that because you are a college graduate and he is not that you have any right to refuse to ride with him.

Taylor: I think Lincoln expressed the whole problem in a nutshell when he said that because he did not want a woman as a slave was no reason to presume he wanted to marry her. Does one white man have any right to impose himself on another?

Williams: Yes. Should you tell a boy who wants to talk to you that he is stupid and should ask some freshman?

Taylor: But if I do not like a man, I do not have to associate with him.

Williams: You would not have to if the other fellow does not want to associate with you. If you have a right to shut him out, he has an equal right to pull you in. Social prejudice is generally defended on grounds of superiority.

Taylor: I think the argument of superiority is fallacious, but it seems to me the argument on the ground of personal rights is unanswerable.

Williams: There is no basis for aristocracy. At the game Monday a very interesting incident occurred. A young Negro fellow brought his girl from Durham, paid

the admission fees, and sat down on the far side of the stadium. Someone saw them, and said, "Take them out". The cry took fire and there was a great explosion. The Negro couple had to leave and stand by the railing to watch the game. That statement by the student expressed the content of the student consciousness, which was opposed to social equality. That statement became the form of the crowd.

That couple did not do a thing that other couples would not do. But because they were not of the same kind as the majority they could not have freedom. Freedom of action belongs to white men, but those of a lower kind are like dogs, without freedom.

If that is a wise form in which to express our action, it will stand; if not, it will change. Even in a mass meeting if the intelligent individual states a way to act that has real content—uniting form and material—the crowd will follow him.

The question of immigration provides another illustration of the relation of form to material. Some men take the position that immigration should be prohibited. Civilization perfects certain forms and then wants to keep possession of them forever. Other men favor immigration, holding the view that where you have life you have change, movement. A state of stagnation never produces great men. The big animals live in the open, not in stagnant pools. The home of the whale is the ocean.

Penn: Suppose these opponents of immigration agree with you but say that they want to cut off these muddy streams that are coming in from the ocean?

Williams: To cut off a stream makes it more stagnant

and more muddy. The only way we know to clear a muddy stream is to let it flow into the ocean.

Penn: That muddies the ocean.

Williams: No, you cannot muddy the ocean.

CHAPTER XIX

SPIRIT

I CALLED TAYLOR *over to my table at dinner that night.*

"Do you remember our discussion about the universal?" I said.

"I do."

"Does it strike you that a principle is the same as a universal?"

"I believe it is, now that you call my attention to it. Professor Williams defined a universal as reality which has no limits, did he not?"

"Yes, and he said that a principle is a quality that is not interrupted by any quantity limits. It looks to me as though a law is a standard which is limited to the particulars or institutions which express and enforce it, whereas a principle is a universal standard."

"That is an interesting idea. You imply that standards are all universal."

"They must be universal. In order to apply to all individuals or elements (as in a chemical formula), a standard would have to be universal."

"Could you say that law is a dynamic expression of the universal and that a principle is an expression of the universal as organic?"

"Well, I believe Professor Williams uses the term

organic to apply to a third sphere or stage which is a synthesis of static and dynamic."

"This would be philosophy, which regards universals as the highest achievement of relation by intelligence."

"Yes, and of quality and quantity as well. I wonder what principle, or universal, Professor Williams will find in human nature?"

Williams: We have found the standard in studying the life process. In human life perfection is applied as the standard which evolves out of the process and directs, but does not destroy, the process. Years ago I wished that I could get through with the business of eating breakfast. I have eaten breakfast for over sixty years and so far as I can see I have accomplished nothing toward abolishing the habit. I expect to repeat the performance tomorrow morning and every morning until the game is called.

The standard is always an objective which functions to deepen our thought. Even when the standard is internal, it is a notion of control over action. The time comes when the notion of control becomes absorbed in a vital unity which I would like to call essence. The essence is the source out of which all variety comes. While the standard is something that controls the action, the essence is the source of the action.

Suppose we illustrate with a football game. In a football game one team of men makes an effort to proceed toward one goal while an equal effort is made by another team of men to prevent it. There is one set of rules which both follow; there is one signal which both obey. What sort of game would there be if there were two sets of

rules? The teams would not meet, and there would be no unity.

Instead of the word essence you might use the word soul. I do not use the word soul because it is usually used to distinguish between the body and the part of the individual which is not physical. There is no such dualism in essence. The essence means the unity of the individual which is the source of action, thought, and feeling. This I call spirit. We can begin now to see the definition of spirit that is coming. Eventually we are going to reach the stage where the game and the players are one, and that is freedom, which is a characteristic of spirit. Here we are laying the foundation.

Taylor: It seems to me that your illustration of the football game is good if you do not carry it too far.

Williams: No illustration is perfect, of course. I have seen some people who had a conscience trying to keep on good terms with their conscience, but when it comes to the expression of spirit you get beyond that. Your action is a spontaneous outburst from the one source.

The Objective Standard becomes Subjective

To pass from the standard to spirit is one of the great revolutions in life. It is what happened to St. Paul. His experience is described as the result of a light that shone from heaven, but that is a great pity, I think. It fails to tell what actually happened to the man.

Luther said the only way you can make this movement is through faith. The first time I ever heard the word faith described it scared me to death. This was the situation by which faith was illustrated: Suppose you were at the top of a ten story building and the whole lower part

of it was on fire, with all chance of escape cut off. You hear a voice coming through the smoke telling you to jump, although you cannot see a thing. If you have faith, you will jump; if not, you will be burned to death. I do not know whether I would jump or not under those circumstances. Where would I jump, and how?

Jesus said that to move from the standard to spirit you must be born again. You can keep every regulation laid down by the authorities and still not live the kind of life we are talking about. Illustrating the standard will of itself never lead you into anything else, for spirit is a different sort of thing.

The miracle, faith, and rebirth—the three approaches used by the Christians to explain the discovery of spirit—are examples of the descriptive method, rather than of the analytical, which we are trying to use. Just what is the method of passing from perception to conception? The concept is an expression of the essence as it maintains itself in these varieties. When you analyze, you will find that the standard gives you the kind of action you are to follow. If you follow this you identify yourself with the standard, and the process becomes vital. When you and right action become one, the standard is identical with you and the objective authority has been absorbed.

If you have a guide book which tells you the way to Durham you will get to Durham by following it, but when you get to Durham, what further need have you of the guide book?

Let me give another illustration. I was taught that the Protestant movement came about as a protest against Catholicism, but I do not believe that for a minute. My notion is that it was the product of Catholicism. It worked this way: The Roman Church is a system to get the in-

dividual into the perfect life. If the system works, will not the individual illustrate the perfect life? If he does, then he can control himself; he will be a good man.

Last night at debate practice the question of government ownership of the coal mines came up. The main problem is: How do you pass from government to property? If government is defined to be a quantitated quality, and business is another quantitated quality, the two will not relate. Things which are fixed and crystallized will stand over against each other and cannot be connected. People believe this is true and that you will never get those two together. The question is not the possibility of organizing the coal mines, for one man or group can take the mines and succeed where another will fail. The issue does not emerge in the realm of results.

Now if the government is the same sort of thing that a Christian is or that an Honor System is, and if democrats are right in believing that the government is simply the people expressing its life in an orderly way, then there is nothing that the government will not do. The only limitation is that what it does must be part of the life of the people. If the interests of the people are involved, you cannot keep the government out of the process. The government will take charge to see that these interests are expressed in an orderly way.

Porter: Do you think the affirmative side of that debate—resolving that there should be government ownership of the mines—can win if there is proper opposition?

Williams: If the affirmative side puts the case of the government as I see it, it will win; if not, it will lose. The government will express anything that is in and of the interests of the people.

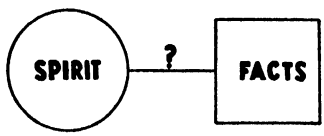
Porter: That sounds nice, but it is a far cry from the relation our government organization has to business today.

Williams: That is the practical question which must be dealt with by the second speaker, following the statement by the first speaker of the basic issue. If the second speaker does not back up the first man, the negative will win, for a skillful man will raise a mountain of difficulty as to actual contingencies.

If a man understands the spirit, he has laid hold of the important part. The intellectual process begins with facts which we can see, smell, and touch, and yet this world is like a fleeting show. In studying this process we have found the standard, and then we have traced the standard into an essence, and the essence turned out to be not something that controls facts, but the source of facts.

Does Spirit Oppose Facts?

Now we are in danger of finding two worlds on our hands: the world of facts and the world of spirit, whether you call it the transcendental world, the *ding-an-sich,* or the world of soul. Is it possible to make any connections? This is, I suppose, the most troublesome question in all intellectual life.



One way to settle this problem is to deny the existence of one of these worlds. A great many people deny that there is any spirit. If you limit your intellectual

machine to the senses then you will never get to the spirit, for you cannot see, smell, or taste it. On the other hand, theology says there is only the one absolute spirit, God, and everything else must be explained in terms of it. Theology denies the reality of the manifestations, and science denies the reality of anything but nature. Truth is the unity of the spirit and the manifestation.

The denial of relation between the two is also the basis for skepticism. David Hume analyzed the intelligence and came to the conclusion that it could not reach beyond the facts. Most young people pass through this stage, and it is fatal if they stop there. But until a person does question authority he cannot get out of the first stage at which one or the other, but not both, is considered the sole reality. Hume knocked the notion of causation for a loop when he analyzed the process and found association of ideas at its base.

The state of mind of the prodigal, who believes spirit is everything and that he is spirit, is also a skeptical state of mind. He denies that there is anything else but spirit. Spinoza's philosophy is built on the reality of the absolute existence, which excludes the reality of the variety which comes out of it.

The philosophy that comprehends the relation of the facts and the spirit is the philosophy that nothing is beyond the reach of intelligence. The power of intelligence is the power of seeing, in a moment of insight, the structure of things. In the deepest sense, then, truth is a revelation; in a superficial sense it is a product. If John Locke were right that the movement of the intelligence is simply the stamp on your mind made by ideas, you could not get beyond the facts. But if you can get a concept of the

way a thing is made, you see truth and it is permanent.

Taylor: If a fact is a report of the senses, what do you get spirit with?

Williams: With the understanding. The scientist will take facts and analyze each one into elements, but you cannot analyze spirit, for it exists in itself. Its content is not dependent on something else.

Stout: It seems to me you have explained the reason why a man cannot be good without forming a contact.

Williams: Exactly. Life is an intricate quantity of relations. You cannot budge without straining one of these relations. The monk wants to go off and hide, but Jesus was wiser. He said to serve, and he did not say whom to serve, for the relations will be limitless. It is an illusion to think you can live a theoretical existence. Out of the spirit will come the standards which will control these relations.

Essie: The results seem clear enough but the process of understanding it is illusive.

Spirit is a Unity

Williams: Hegel explains it this way: The process of growth in a tree is exactly like the process of the intelligence. First there is a simple homogeneous root which begins to express its life by growing down and up. It spreads out, contradicting itself by becoming something else, but all the time maintaining its unity in the variety. If you analyze the tree, you will find facts which stand apart and against each other; if you get an insight into the process as a whole, you find spirit. The question is not simple. If it were, I suppose people would not differ so.

The old adage, a tree is known by its fruits, is all right.

It is one way of studying, but you will not get anywhere that way. Take the issue of free trade versus a protective tariff, for example. When Mr. Cleveland was President he issued his free trade proclamation. Mr. Blaine took the opposite position in his campaign for election.

One day at breakfast an ardent Blaine supporter showed me the headlines and presented Blaine's position. In New England the laboring man has an average bank account of $7.00, while in England he has only 75 cents. Since New England has protection and England has free trade, protection is to the laboring man as $7.00 is to 75 cents. Therefore the gospel for America is protection. My reply was that the laboring man in Italy has never heard of a bank account, under a high protective tariff.

Of course you have to have facts, but you cannot settle anything on the basis of facts. The intelligence is the capacity to go to the inside of things and see how they are. The knowledge that you get is reliable. It is truth.

Spirit is a Dialectic Process

The doctrine of evolution affirms that the form of the apple is not imposed on it by God. We have been taught for generations that all forms come from God, so it is not too surprising that we find the Kentucky legislature passing a law last week forbidding the teaching of evolution. It is fairly simple to see the source of a shadow, I think. I never heard anybody say that the form of a shadow was imposed by God. But when it is a question of an apple there is difficulty. The apple form is so different from the tree form that it is no wonder that people fail to relate the two. In animal life it seems comparatively clear that the characteristics of the individual come out of his

heredity. The Old Testament says that if the parents eat sour fruit the sin runs to the third and fourth generations.

The point I want to bring out is that we have a movement that is not produced by anything outside, but which comes from within. The process is self-contained and it comes from spirit, which shows itself in stages. First there is the shadow, then the plant, then the animal life. Not until reality reaches the stage of the human life does the individual emerge as distinct from other individuals in the species. There is nothing about an apple to name, for there is nothing about it that does not come out of that variety of apples. It is a Magnum Bonum apple if it comes from the Magnum Bonum tree. The color, form, taste—everything is general.

The life process of the individual is to maintain his ideals, to illustrate spirit. The moment of negation seems to stand over against the individual, but the expression of essence is the absorption of the objective, in integration around the ideals of that individual's life.

I said in the first lecture that it was very difficult to define logic. Today we are ready to make this definition. Logic is the process of tracing the identity of essence through the appearances that look to be utterly different. Where the identity breaks down, the logic ceases. If you can trace the logical moment in your problem, your doubt disappears. Intellectually you can attain the same certainty that the chemist reaches in his analysis of water.

Now let us see if we can gather this up and exhibit the basis for the dialectic process. Here is an apple tree that expresses itself in an apple. You can eat the apple, but not the tree, so the differences come out of the apple life. The essence contains in itself the positive element.

It sprouts, grows, differentiates itself, and yet maintains itself in its development.

Jesus was very fond of talking about God as his authority, instead of the church system. His appeal was a direct appeal to God, and the thoughtful young men were attracted by it. For an individual Jew to go around the great system of the synagogue to establish connections with God was blasphemy. One young man said he would like to see God, but Jesus said he could not do it. The only way to see God, said Jesus, is to look at himself.

If the only way man can see God is by looking at the individual, there must be in the individual about all there is. Jesus not only said that is the way, but that it is the only way. Seventy years passed before anybody understood this. The first three gospels of the New Testament neglected it, but it is the very heart of the fourth gospel. Was Jesus right about this? If the individual is nothing, it seems to me that He was not right; but if the individual is real, you will see universality when you look at an individual.

Theology has used the terms Father and Son. Can you think of a father apart from a son, or a son apart from a father? What is the father but the son, or the son but the expression of the father? The unity is as deep as anything can be, yet neither is the other.

When you see the individual as in and of the essence, God, you have seen the ultimate in religion. Christianity will develop. The absolute essence expresses itself in the object, and the object is this absolute essence.

I suspect that there are three or four people in this room who hold the theory that there is a difference between the natural and the spiritual. A great deal has been done to destroy that difference. Any object, any natural

thing, is made up by what it is and the opposite. But the spiritual is what it is because of itself in itself. The life process is one of unity in and through variety. The distinction between the natural and the spiritual has been greatly overworked. Men have insisted that there is an ultimate difference. There is a difference, but I do not believe it is ultimate.

Mr. Boettcher expressed the natural view of things in the first talk I ever had with him. When a man dies that is the end of that man. From the point of view of nature that is true. Now if Mr. Boettcher is right that any object analyzes into its opposite, will that not be as true in one direction as another? This would mean that—if in your structure you come from something else—you would dissolve back into those things when you die, and also that your acts while you live will not be yours but will depend upon the circumstances. Then there is no such thing as freedom, for freedom is action that is not a product.

Einstein says there is nothing in nature but relativity, and I think he is correct. I understand this to mean that the object disappears completely when it is destroyed. The elements of nature are not annihilated, but the object disappears. It is not that way with the essential.

Appearance is the Moment of Negation

Where there is no unity there is no thinking, for the process of thinking is just this process of seeing the identity. Hegel uses an expression which is most unusual, but it is exactly right. He calls appearance the *sein* of the negation. The appearance is the negation of the self, yet all that is, is the existence—*sein*—of the self. In a shadow everything except you is negated, yet the shadow is not

you. If everything that is in appearance is essence, there is an identity between appearance and essence which we call ought. What else can there be in appearance except essence? Why ought a man to be good? Because the good is his essence. Why ought a scientist to be scientific? Because analysis is the way the mind functions.

The scientist says that you cannot introduce the ought in science, but it seems to me that to deny the ought is to eliminate the intelligence. The intelligence is uncompromising in its particular ought. If the apple tree is to be an apple tree, let it bear apples, not cantaloupes. Kant's categorical imperative means just this: you can side-step anything except your own nature. The ought comes out of your structure, and it comes categorically.

Porter: Do you allow any ground for inconsistency?

Williams: No. When a person does what he ought not to have done, he never gets it out of his system.

Porter: Is this the basis for morality?

Williams: The doctrine of essence and appearance is the basis for morality.

Essie: Suppose a man should marry a woman he did not like, and later seeks a divorce. Is there any ought there?

Williams: I do not know what a man is to do if he is engaged to one girl and in love with another. He will do violence to his nature no matter what he does. It is a dramatic situation and no one has ever found any escape from a head-on collision.

Brown: When does the object reach the point where it maintains its essence as against the influence of the environment? A child is easily persuaded.

Williams: It would be very convenient if you could put the blame for fallacious judgment on the environ-

ment. You cannot, even though environment is an influencing factor. It is never all right to be a fool. At the same time, the child cannot make the kind of decision an adult must make.

Porter: I do not see that you have established a reason why a man should not satisfy his appetite.

Williams: That is not a moral question. Every man ought to eat when he is hungry, but he never ought to eat someone else's meal.

I think the preachers have done their cause a lot of harm by teaching that if a man repents in the last few minutes of his life and asks God to forgive him, God will wash him white as snow and he will go to heaven. Would you do what you ought if you had such a chance to wipe out a life of knavery? I know of no philosophy of life other than one grounded in the structure and process of the individual which will give you any satisfaction or that has any wearing qualities. I ground the moral life not in the church or state or God, but in your own life.

Toy: How would you define success?

Williams: Success always comes from within. It means the unfolding of your content, of your spirit. Any gap in this process is fatal, for it is a vital unity. The speaker in chapel yesterday said that salvation lies in the utter abandonment of self, for as the Bible says, "he who loses his life shall gain it". There is a great thought in this philosophy, but the ultimate is an achievement not an abandonment. To abandon yourself is only half a truth.

The identity of the individual is not a mark which comes from outside. It is a vital thing, and it exists in difference, in its appearance. The law of identity is the only law I know in thinking, and we are going to talk about it again and again. There is in life a great tempta-

tion to take what the other fellow says. Most of the so-called thinking is of this type. It is formal, and it deals with results. Approached in this way the totality of things is the unity. God is just everything put in one basket. It is all right to put everything into one basket, and even to call it unity if you want to, but it is a formal unity. Thinking of this type ends in dogmatism, for you can admit no inquiries at all. The attempt to impose a formal unity ends in persecution.

There is just one thing that disturbs a thinker, and that is a bigger thinker. A thinker, in exploring the truth, sees that truth is unity, a vital unity. The greater the variety there is in the process, maintaining itself, the bigger is the success of the individual.

I have insisted for years that Thomas Jefferson was not a great statesman. Why? Although he saw one thing clearly, he left out one important element. He saw that government was lodged in the people, but he thought the Federal Judiciary ought to be subservient to Congress. The great men of the world have been those who have seen the vital unity. Moses saw a unity between religion and the social life and organized a state. Solon's great vision was law. Aristotle and Hegel saw the unity in thinking and became great philosophers. But the individual who saw unity in a perfect human life is the greatest of all—Jesus.

If I have made myself clear in this doctrine of spirit we have the material for a synthetic judgment, that is, an *a priori* judgment. When you see a vital unity you do not produce it. Truth comes to you in the moment of insight, and what you see is the unity.

CHAPTER XX

THE DIALECTIC

WILLIAMS: The discovery that the individual is ultimate is the discovery of spirit. Now it emerges that the great symbol is the trinity, not identity. Reality is not one; it is three in one, and each of the moments is real and ultimate. The individual—as appearance—is valid reality as well as the universal—spirit—and the particular, which is relation.

It is very unusual today to hear a man talk about the trinity. It is much easier to stop with the doctrine of the essence. That is the Jewish point of view. The essence is everything and all the variety is simply a manifestation of this one essence. If there is nothing but absolute existence, then there is no relation because there is nothing to be related. The individual in himself is nothing, and it is only as the individual absolutely loses himself in some great cause that he can have a great life.

But Jesus' statement was richer. He said, "I and the Father are one and ye are my brethren". If you are divine, what ought you to be? You will illustrate the spirit that is you. We distinguish between the essence as appearance and as non-appearance. Aristotle calls it potentiality and actuality. Whatever is in appearance is not God; it is the son of God. It is one of the manifestations of this essence

we call the absolute. In order to have identity there must be difference. The potentiality develops into actuality as the individual grows from nothing much into an ultimate being.

It is quite different in the case of an inanimate object. If I take a piece of chalk and want a small piece, I break it. Chalk has no capacity in itself to change. Any change must come from the outside, so that the stick of chalk is due as much to me as it is to the chalk. We have found the essence to be that which has absorbed this negation. It is the source of its own action. The apple seed is not the cause of the tree, and the tree is not the cause of the apple. No appearance has its explanation in another appearance. Both are the appearances of the essence we call apple life. A piece of chalk or a table has its being (*sein*) in its form; a living object has its being in its essence (*wesen*).

The seed, the apple, and the tree have direct connection with the essence of the apple life, and this is the basis for democracy. One citizen is the same sort of man as another citizen, so there can be no grades of citizenship. One man cannot have property rights in another individual.

Dr. Hamilton and I scrap constantly about what the national government is. There are two concepts. One holds that government is made up of powers delegated by the thirteen original unities. North Carolina gave up a hammer; South Carolina donated some nails; Virginia threw in some planks; and all were put together into a national government. The other view, which was espoused by Daniel Webster, is that government is a vital thing. There never were thirteen isolated governmental units in this country. They never were separated and the

unity which underlined all expressed itself in the variety. Each locality was simply its way of representing the national life; one was the same sort of thing as the other.

No two appearances are equal. One appearance is never substituted for another. I am a teacher of philosophy in the university. I am not the university, and the university is not the teacher of philosophy. When I stop teaching nothing will happen to the university. So long as the university exists there will be philosophy taught, for this appearance will exist. Still, nobody in the world will teach philosophy the way I do. My individuality consists not in myself but in the way I represent my essence.

Reality is Three in One

To see that the individual is genuine is one of the most difficult problems in philosophy. The difficulty is shown by the history of Christian philosophy from the time of Christ to the Council of Nicaea. Theology wrestled with this problem which Jesus had brought, up. First theology affirmed the reality of the individual, and then denied it. The significance of the utterance of the Council of Nicaea was that it held that the individual is individual and at the same time Verigod of Verigod. The decision was that Jesus was the same substance as God. But although the church has established this orthodox statement of the principle, it has insisted all along, with varying intensity, that Christ, being divine, is not like other individuals.

The three views of the relation between essence and appearance are illustrated by three types of intelligence. One demands absolutism; spirit is everything. Another is based on the reality of appearance. Still another issues

into cooperation, believing that both spirit and appearance are real and integrally related.

The circuit of tree life illustrates these three relations, if I might use it again as an example. What makes the apple seed crack? A sprout comes out of the seed and the seed disappears. Is there not something in the seed that is more than the seed? The seed is in and of a process that is bigger than itself. The tree grows out of the seed, and the tree expresses itself not in a tree, but in an apple. The relation of the seed to the tree is different from the relation of the tree to the apple, for the seed disappears, while the tree does not lose anything when the apple appears. The first is the reverse relation, and the second is the relation of cooperation. Furthermore, the apple expresses itself not in apple, but in seed, so the relation of the apple to the seed is still different from the relation of the seed to the tree and the tree to the apple. This is the direct relation, illustrating that the process is contained within the apple itself.

I do not want to overwork this illustration, but when you look at it pretty closely I think the steps are there. The seed yields to the sprout and the tree takes its place, but the seed is not destroyed. It always reappears at the right time, when the circuit of tree life comes to that point again. Your individuality is the way you appear as essence, illustrating at different times the direct relation, the reverse, and the reciprocal.

Porter: You do not allow anything at all for environment.

Williams: The environment does not come in here. The apple tree will go through its cycle in North Carolina and in South Carolina.

Bradshaw: Is it a necessity of essence that there is

difference in its manifestations?

Williams: Yes, the appearance is a moment in the process of the essence.

Bradshaw: Then the essence necessitates the individual, instead of contradicting him?

Williams: Exactly. When you have the one, you have the other, or that much of it. Have we not really got three things to consider: The moments in the process, the essence that is contained in the appearances, and then the larger whole of the life that includes both?

Bradshaw: I can see the connections between the moments of the process, but I do not see why the essence has to have any process. Why could not the essence stay essence?

Williams: There is a difference between the essence and the appearance, between the process and the forms. Here is the basis for the trinity.

Taylor: What about the Aristotelian method that illustrates everything by two?

Williams: There is one more that Aristotle did not see.

Taylor: Then it depends on who analyzes it?

Williams: It seems so. The discussion going on in the New York Times between the evolutionist and the non-evolutionist is a good illustration. Each side is sure that it is correct, and it is, so far as it goes. Appearances are not products of the essence and the essence is not the product of appearances. You can limit the material that you take and reach either analysis.

Studying philosophy is like taking an ocean trip. If you are just learning to swim and find yourself in the middle of the ocean, what will you do? In the ocean it is mighty hard to touch bottom.

Mr. Green has been in the middle of the ocean. He is sensitive, and he is an industrious student. He left school last semester without taking the examination, and he came up to me in an humble sort of way when he came back. I said to him that he was out on the ocean and when he dropped anchor he did not touch anything. He agreed, and I told him that it was all right and that he should come ashore when he could. It was his trip and, and I would be there waiting for him when he came. He has got to make the voyage or else drown philosophically.

Is that a wise procedure or not? It would have been easy for me to become furious when he failed to take the examination, for I want him to go to Europe next year to study philosophy. But I knew his state of mind exactly. I have been in it myself. For about five years the bottom was out of everything for me. I would fight anything, especially orthodoxy. But there are plenty of good people who would have negated him completely. That is an expression of power, and it is not intelligent, not spiritual.

Political and Economic Life Illustrates the Dialectic

The genuine individual will appear in every field, in business or politics or what not. I suppose most of you share the popular prejudice that all big business ought to be hung. I do not share the opinion that business is demoralizing. On the contrary, I believe that the big business man is as fine an exhibition of character as there is in this country. Of course, the history of business is a great deal like the history of preaching; it is very disappointing in places. But wherever you find a big business man, you find a man whose characteristic is honor.

Business is an exchange of values. I have a dollar, and

you have a hat. I like your hat and want it; you want my dollar, and the hat is worth a dollar. We can do business there, and when we get through I have your property and you have mine. A negation by each of the other is involved in the process, so we have the situation of the object maintaining itself in its contradictory.

Any exchange is based on equality of values, so you find that business is a levelling process. Wherever there are business people there is a free people. I do not think it was an accident that the movement for freedom started in the North. The South was aristocratic; it did not contain a commercial, trading people. You do not find anything like a town meeting, where everyone had equal rights, in the South. About a dozen families have inherited all the honors and powers.

Porter: Are you ruling out the possibility of imperialism in business?

Williams: I do not think imperialism has any place in business. The trust is in its beginning very much like the church and the state. Its power may be abused by the individual in charge, but it cannot become great or remain so by being wicked and imposing on the people. Business organizations in their final stages are like a democratic state: owned by the people who do the work, and controlled by an elected head.

There is the same difference between an empire and a federation of states as there is between a monopoly and a cooperatively organized concern. An empire requires a government to express itself by a process of negation. Local governments have to be abolished and this has to be done by war. Could England have become an empire if there had been no French government?

Taylor: I do not quite see where that is necessary. If

you had only one political government, could you have an empire?

Williams: The national political life cannot extend itself into an empire just by being a big nation. Imperial life involves negating the political organizations of different peoples.

Taylor: What happens when a group of states come together by voluntary action to form a super-state?

Williams: That is a confederation. Here the moment of negation is absorbed in a new synthesis. A new form of government has come out of the essence. This seems to be quite an advance on the vegetable life, where the same form and content maintain themselves throughout the process. Out of the negation of the French government comes the English empire, and out of the negation of the empire comes the American form of government. The American democracy is not entirely new as to form and content, but it has distinct advantages over the British. So the essence maintains itself in its negation.

The question then is: Is a revolution a false move or is it a genuine contribution? If you are orthodox, you will say the negation of the essence is bad, but if you are logical, you will find a deeper basis, in which each of these movements finds itself.

The essence, like anything else, has in itself its own moment of negation, so there will be two assertions. Take the government as an example. The government is a particular; that is, it is a relation of the individual to the universal. Consequently, there will be two parties, one emphasizing the individual in the relation, and one emphasizing the universal.

Several years ago I attempted to study the political parties to see whether the Republicans or the Democrats

had made a bigger contribution to the country. The first fifty years in the life of our nation were administered by the Democrats and the second fifty years by Republicans. Which fifty years would you cut out of American life? It would be a serious gap to cut out either period.

Stout: I do not quite see why the essence must negate itself in the first place. The American colonies could have remained a part of the British Empire.

Williams: Yes, that is what King George said.

Stout: Why did not the same process work out with regard to Canada?

Williams: I do not know. South Carolina said it wanted to continue its process and negate the United States, but Lincoln thought it would not be a good negation.

Stout: The circumstances influence the happening of the negation, do they not?

Williams: One boy will defy his father at thirteen; another will be obedient at thirty-five. If you want to, you can call the ones who fail "pulled green". I would say that rebellion against rules at the age of thirteen is premature. The question of when an essence ought to submit to control is the question that made the Socratic philosophy. The intelligence is the source of law and order; therefore, if it grows, it reaches the point where it realizes itself.

Porter: What happens when there is a false appearance?

Williams: In the process of life the failure of the negation to assert itself is called treason, and its success is called progress. A contrary thing is the only thing that makes any progress.

The Student Council was telling me that they had a

man who saw gambling going on, but who refused to give the council any information even though he was not gambling. What possible basis is there for this movement of the intelligence? Here is a man who claims to be conscious of the essence, so he claims exemption from the duties of the essence. If all men acted like this one, there would be no self-government here. Of course, an infant is not conscious of responsibility for the health of the community in which he lives, but the child must grow into it.

"Professor Williams," I said, when we had seated ourselves in his study, "how can essence contradict itself?"

"Essence must contradict itself in order to have action. The essence expresses itself first in this appearance and then in that appearance. The essential thing is that the essence must maintain itself in the appearance."

"Then essence or spirit is action?"

"It is nothing until it is action. If essence is not identical with itself in its appearance, it is theory, abstraction. Pragmatism is, as I understand it, the philosophy that truth comes out of action. The way to learn about a thing is to do it. If you want to build a wheelbarrow, put the wheel where the handle is, the bottom on top, and the top on the bottom. After doing it for a while, you will get a wheelbarrow—the truth will come out."

"Is there no such thing as pure action?"

"Let us use the Socratic method of analysis. When the essence maintains itself in its appearance, what do you have: the action, or the essence in the action? When you build a wheelbarrow, do you proceed blindly to build, or do you need the plan, the material, and the act, relating plan and material? To my mind action is

always the expression of something. There is no pure act, which we would have to have to support pragmatism."

"What about the one? Is it not pure negation, and therefore pure action?"

"The one is a good example of the fact that the moment you bring in action, you have content. My own philosophy is that you never find a theory divorced from the act. Pragmatism, the doctrine of pure action, and Platonism, the doctrine of pure ideas, are half truths. We are going to talk about action and form, two moments in the dialectic process, tomorrow."

CHAPTER XXI

TRUTH

WILLIAMS: Miss Penn said last night that she did not understand the dialectic. Why? You cannot take hold of a thing too big for your hand. It is the same with the mind; you feel around until you can get some corners and edges to grab hold of.

Let us consider the problem of form. Form origin- do not stop, you will get a circle. The circle is the appear- in three ways, illustrating the three types of relation.

First, form illustrates the direct relation. In the static stage the action of the object is controlled by the form. The circle is a good illustration. In drawing a circle you start out by quantitating, drawing a curved line. If you do not stop you will get a circle. The circle is the appearance, the form, and it comes about through your control of the action of the chalk.

Secondly, the action opposes the form and expresses the reverse relation in the dynamic stage. The struggle of Dr. Poteat to teach evolution at Wake Forest College illustrates this stage in the process. Evolution is the scientific expression of the reality of process; it throws all of the cultural and religious forms into discard.

In the third place, the action and the form come to-

gether in a unity that is vital. At this stage, which we have called organic, the content is the identity of the form with the material. The unity that is the content maintains the genuine variety that is in the process. The unity of form and material is called beauty in the emotional process, goodness in the volitional, and truth in the intellectual.

The achievement of the perfect in art and in religion occurs when the individual reaches the stage of synthesis of the form and the material. The artist consciousness arises when the form is spontaneously expressed and is identical with the action.

I was very much interested in the editorial in the Greensboro newspaper about the Carolina Playmakers. The editorial said that Mr. Green, Miss Lay, and Mr. Stout had passed beyond the stage of the amateur. What is the difference between the amateurish product and the artistic? Technically I do not understand it, but the logic of it lies in the process we are discussing. The plays written by those writers fit the form to the material. When you see the plays performed you are not distracted by either the form or the material, but you are carried along by the movement, the content of the play.

Green: How does the form become united with the material?

Williams: You wrote one of the plays. How did you do it?

Green: I do not know.

Williams: When the form is so merged in the material that it does not appear as form, there is beauty. There is not a person in the room who will admit any criticism of his girl, for to him she is perfect. When someone asks you what you think of his girl, he means for you to praise

her, although he calls for criticism in order to appeal to the intelligence. So do not fall into that trap. It is the nature of the perfect to be beyond criticism, and the emotions never connect with anything but the perfect. Ugliness does not start up the emotions.

It is possible for the individual to reach an expression of life that ignores either the emotions, or the intelligence, or the will. Many men can become integrated through exercise of any one of these faculties; a few men can express themselves in two; but it is rare for any man to develop in all three.

What does it mean to be a university man? It means to express the content of the university process, and this is done in one of three ways, for there are three forms of the university activity. A man may become the finest student, the best athlete, or the best president of the Y.M.C.A. there has ever been in the history of the university. Ever since I have known the university I have known one of those types.

When a man becomes the perfect embodiment of an ideal he is immortal. If he is absolutely devoted, so that the ideal is incorporated in him, he may lose his individuality. That is the antinomy in the process. There is a stage in any movement, such as Christianity or Buddhism, where martyrdom occurs. The martyr loses his physical existence to become tremendously important as the hero and saint of a movement. This individual's consciousness of the ideal in himself is so vivid that his attitude is one of being willing to sacrifice himself.

But sacrifice is negation; it is not the expression of spirit. The power of Christianity does not lie in the failure, the death, of Jesus; it lies in his life. The value of the individual does not begin when he has quit. It lies

in what he does. Death cannot stimulate life, and a man's problems are problems of life, not of death.

The unity that is the content of any individual's life is the expression in action of principle. The act is the individual's, and yet it is the realization of principle, which is universal. The action is form-giving. Both the form and the action, the universal and the individual, are real.

This analysis should make the story of the Garden of Eden mean something to you. Adam and Eve reached the point in their deliberation where they had to be independent. They made their own decision and carried it out. The problem of their life became how to relate themselves to God. This is the problem of all human beings. Religion has no real meaning until it reaches this logical level. When the individual sees the necessity for relation, the form of his action springs out of himself.

Relation Can Only Be Seen by Thinking

The reason I am a student of philosophy is that I have a notion that the only way this relation is made is through thinking. Theology is an effort to think out and express in orthodoxy this whole relation. At best the Bible is a book, and I never have experienced a book doing anything. Men have to read it, and read it with intelligence. That is philosophy.

My notion is that all thinking is trinitarian. There are two genuine moments, and the relation between them, which is also genuine. This philosophy is opposed to skepticism, which admits the gulf between the universal and the individual, and denies that the gulf can be bridged. To skepticism any connection is a miracle and

cannot be proved or understood. That was the position of Hume.

The school of David Hume held that a judgment is simply a report of the impressions that are received through the senses. To this point of view goodness is a fact, exemplified by a person, not a universal principle, something that men share in common with each other. The point is, are good and John simply identical, or is good a universal? If you have the capacity to see a vital unity in a variety of manifestations, you have formed a judgment that goes beyond the report of the senses.

Kant was a dualist. He said in his first Critique that the gulf between the individual and the universal could not be bridged intellectually, but he had to make the bridge, and he did it by will. The second Critique ends with truth incarnated in action. The life of the individual is a genuine form, and as it develops it expresses that form uncompromisingly. The outcome is character. That is the categorical imperative.

Bradshaw: You say that thinking is the way to salvation, but the usual method is the emotional way. Do you think many are saved?

Williams: It is like this: Saying that the way to get to Europe is to go on a ship does not mean that if you do not build the ship you cannot get to Europe. My contention is that if you keep on thinking, you will work it out. I am quite sure that the church and the Bible have led Christians into the other world, but they, too, are products of the intelligence.

Hegel says the best illustration of spirit is the judgment, and out of this he develops his famous doctrine of the thinking process.

A judgment, if you will think about it, is a move-

ment beyond the sphere of sensations. A judgment is always a classification, and it may be either an induction or a deduction. Take the judgment: *John is good. John* is an individual; *good* is a class. If you see goodness in John, the judgment is a report of what you see. The two terms are not different in kind, for if they were you could not make that statement. As long as there is a relation between them the judgment is correct, but if the relation is not present, there is a fallacy.

Most intelligences stop at the point of contradiction. If there are two, the individual and the universal, then the problem is to select which one of the two is real. Is it possible to go beyond that? Can you accept both positions and find them in a deeper ground?

Let us use the apple life in illustration once again. I suppose nobody in the room ever saw an apple that was not a product of a tree. The apple has no direct relation with vegetable life. The tree is a particular, analogous to the church in human life, and the apple is the individual, analogous to the individual Christian. The apple has no connection itself; there has to be a tree. The tree is not the cause of the life, but is the agent through which this free life functions. If the channels are wide open, then the circle goes round and round. If you cut the tree, the process ceases. Similarly, the individual cannot be a Christian on an island by himself; the scholar cannot develop by himself.

The relation between the individual and the universal is what we call the particular. The temptation is to abolish one and to get a unity that way, but that cannot be done.

The difference between liberalism and non-liberalism lies here. The liberal holds that the other fellow is dif-

ferent from himself and that he has a perfect right to be different when both are after the same thing. Orthodoxy is the opposite of this. The non-liberal requires formal unity and will allow no recognition of any fundamental difference. That is why in a war all thinkers must be put in a penitentiary. In a national crisis there is no time for thinking, but after war is over the thinker may be turned out to take up his position again.

Thinking is Unifying

The function of thinking is to see the unity without damaging difference. In thinking there are two great schools: the deductive school, which begins with the unity in the universal and moves to the individual, and the inductive, which begins with the individual and moves to the universal. The point to consider is that in each case what they do is to see the unity, the vital unity. It does not make any particular difference from the standpoint of logic whether you begin with the individual or the universal.

Boettcher: It seems to me that your idea of permitting every man freedom of action to do what he wants to do is very pretty but very impractical.

Williams: Where does arithmetic cease and algebra begin? When I was a student here I ruined a pencil working over a mathematical problem, but I could not work it. Finally I went to Professor Graves, and before I had stated the problem he had worked it. The trouble was that I was trying to work it by arithmetical methods, and it was an algebraic problem.

You can say that whenever the expression of your life conflicts with the expression of my life there is a conflict, but I do not think that gets you very far. It seems

to me that there is a limit to conflict, and that the limit is fixed in the syllogism. The trouble is, Mr. Boettcher, that the individual is the universal. Why should you limit the individual? Practically, of course, we build penitentiaries, but that does not satisfy the fellow in the penitentiary. He will not admit that he ought to be there. One gets to be pretty sympathetic with Kant and the doctrine of antinomies. You can handle them, but you do not do it with a gun.

The individual turns out to be a process. It is the circular system that is the explanation. You as the expression of the process can be nothing but the process, which is universal. Therefore you in your action must be controlled absolutely by the universal. There is the logic of the principle, you see. There again is the contradiction. There is no individual in the individual illustrating principle.

The universal appears first as form which is over against the object; then the object has the form as content. So the object, beginning as nothing, created out of nothing, becomes itself the reality, the absolutely permanent. This we call character. There is the dialectical movement, and you get a unity of opposites. Character is a vital principle in an individual. Character is the achieved unity of the individual and the universal.

Take a factory, for example. It is the function of the factory to produce, and production gives a form to the material. The object that is produced is a unity of the form and the material. Neither exists without the other. There is no such thing as an idle factory, a dead process, except by courtesy. An idle factory would be a house with machinery in it. A river that does not flow is not a river; it is a lake.

The Goal is Freedom

Penn: I want to ask you, Professor Williams, what are we driving at?

Williams: We are not driving.

Penn: Where are we going?

Williams: We are not going anywhere. Even though you eat a big dinner tonight you will have to do it over again tomorrow. It is life, and it is a process. Mr. Taylor asked me the same question last night, and Tom Wolfe asked me the same question when he was here.

I would define progress in this way: When the form becomes identical with the material so that the action is spontaneous, there is progress. If the form stands against the material, it is authoritative and objective. If this form is abolished, all form is not abolished. For instance, when the American colonies threw off the forms of the English government they took on other forms, which came out of themselves. That was a birthday; it was progress.

When form is over against you, you are conscious of being controlled by it; but when form becomes spontaneous, it becomes progress. The step forward that we work for is this point where the individual consciously identifies life with principle, with the universal.

Penn: It looks as though you have identified progress and freedom.

Williams: I have. Is that not the way history talks about progress? The converse is true also: In proportion as you get away from freedom, you get away from progress.

The life of the individual must work itself out according to itself. Consciousness of that is the first step

in freedom. Contrariwise, many will hold that control is everything, and that the relations are necessary. There are these two great schools: freedom and necessity. Many people try to relate everything by causation.

Truth is Dialectic

What I am trying to do is to find a place for the relation we call truth. Let us review the various sorts of relations with which we have to deal.

In the first place, the relation between form and material is a mechanical relation. You can examine a marble, for example, and you find it is a product. The factory plan is stamped on it; the form is imposed from outside. You may have knowledge of the factory process, but the marble has not that unity we call knowledge. The relation is an external one.

In an organism such as the human being the relation between the form and the material is an internal one. No part of the organism—the eye, nose, mouth—has any existence in itself; it is only in the whole that the part functions. Conversely, any change in the part affects the whole. The unity is there. With the marble there is a question whether there is any unity, any individuality; with the organism there is a question whether there is anything else but individuality.

How is the organism related to the outside world? Is there anything in nature which controls the organism? The organism has in itself the power to unfold and to develop, but what directs that development? Can an ambitious rabbit lengthen his tail or his legs if he desires? If not, what is the trouble? There is an order in nature, but where does this order come from?

I suppose a scientist would say that the syllogism has

its explanation in the type. What is the type? If you feed your dog and a lion the same food they will not stay together. What is it that sends the lion on his road and the dog on his road?

The type is the way the thing is made. The type exerts supreme control over the organism. I think that is what the sentence in the New Testament means: "Thou canst not by taking thought add one inch to thy stature."

If there is nothing in the universe but facts and experiments, why is it impossible to become as big as an elephant? Granted that there is a type, how would you describe the relation between the organism and the type? Is it causation?

Take the university as an illustration. The university is not the cause of your action. The university is not a product, and you are not a product. The relation between the student and the university is a reciprocal relation. Each has a genuine existence, and yet this existence is in and of the other. One does not exist apart from the other, and yet neither is the other. It is cooperation, a very different thing from the relation you call causation.

Essie: Is a thing what it is because of itself, or because it is nothing else?

Williams: Both. From the standpoint of the organism it is what it is because it is an organism, but from the standpoint of the type it is what the type is. If you had been born in Gates County you would have been a member of the Golden Fleece. In other words, you are what you are because of the type, not in yourself. To me the question is not whether there is any type, but whether there is anything else but the type. The type is so much deeper than the organism.

How does the individual get knowledge of the type? The authorities differ. The scientist says that you begin with the organism and infer these laws that control. Then there is another school that says your intelligence has the capacity to see the type just as the eye has the capacity to see the organism. The problem is: If all knowledge comes through sensation, how do you get knowledge of that which cannot produce sensation?

Taylor: It seems that you are in a dangerous position about reciprocity, and that you need some third factor.

Williams: Yes, the trinity. Can we go beyond the type and the organism?

Taylor: Relation seems to me to be the third factor.

Williams: Yes, but there are different kinds of relation. Truth is not causation; it is just truth—unity in structure difference. The scientist will talk about the facts of the organism, and then he will explain all this in terms of nature. What is the explanation of nature? The scientist will tell you that nature is ultimate.

What is the nature process? It is not causation, it is not reciprocity. Is it not the dialectic process? The ultimate means that system which is complete in itself. It is the many within itself; it is absolute unity. That is exactly what I understand by the dialectic. What we know is truth.

Intelligence is Creative

Kant said that the judgment functions in two ways: It is regulative and it is constructive. I want to use the words "descriptive" and "constructive". The descriptive process is what we call the scientific attitude. The scientist wants to hold in leash every interest and every desire, and he wants to watch with complete indifference the

plant life process. He watches the organism and describes the type.

The artist illustrates the constructive process. To be creative is a power of the mind in addition to the power to imitate, to describe. In the artistic the attitude is the constructive attitude. A church and a school, for example, are creations of the intelligence. You do not find them in nature. When the intelligence varies, then the type varies.

A number of times this year I have been asked what instinct means. Now we can answer this. Instinct is the unconscious type process. The animal is controlled by the type and its action illustrates that control but is not conscious of it. The spider does not understand why he spins his web. The animal illustrates the type, but has not the power to understand it.

The power to understand is to see the relation between the type and the organism. That power is not in the eye. The senses have no such power as that. The senses get an object; they do not get a relation. The power of the intelligence to understand, to form concepts, is the second power; the power of sense perception is the first power. Animals react to the pull of the type, and their actions are quite superior to many actions that are conscious. But only in conscious human life do we find intelligence creating new types.

I will make a prophecy that when your class has its twentieth reunion you will come back to find that the girls of the university have developed a system of self-government. It is going to be something new in the state. They will have created a type.*

*They have. (The editor)

When intelligence reaches a new level it forms a new concept. It is possible for the intelligence to get at genuine knowledge because it has this creative power. To a certain extent things are the way your mind works. You cannot change a right angle triangle and still have a right angle triangle. There have not been any funerals in the multiplication table in a long time. If you could change the intelligence, you might get a new multiplication table, but until you do, it will stand.

Lay: How can there be a realistic school of art?

Williams: That is the only kind there can be, I think. A great artist does not move in skill but in constructiveness.

I think we are prepared now to give a preliminary definition of education. Education is the conscious effort of the organism to find itself in its type.

Essie: How do you become conscious of the type?

Williams: I do not know, Mr. Essie. The origin of consciousness is very puzzling. Some scholars make it fundamental; some make it a product. I never have worked that out with any satisfaction.

Essie: It seems to me there must be some cause of it. We started with the intelligence and we came back to it.

Williams: That is all there is to it, as I see it. We began with a piece of paper, an object outside of you, and we reached the point of mathematics where the intelligence constructs its object. When human life reaches this point of constructive, intelligent activity, civilization begins. Civilization is to me simply the career of types. A people that has no intellectual vigor produces no civilization.

The logic course is just a movement from this little

object to the type stage, and it is like a winding stairway. There are no gaps. What I want is for you to see that for yourself.

Porter: You have shown that there is an individual and a type. But I do not understand the context of the type.

Williams: This is principle, the universal. We call a principle in intelligence, *truth;* in emotion it is *beauty;* in action we call it *righteousness.* Those three make up logic, as I see it. The individual studies in order to know; he acts; and he falls in love with beauty.

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