ALVIN PLANTINGA

Edited by

JAMES E. TOMBERLIN

Dept. of Philosophy, California State University at Northridge

and

PETER VAN INWAGEN

Dept. of Philosophy, Syracuse University

(Caricature by Jack Harkema)

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SELF-PROFILE

1. Roots and Early Days

I was born November 15, 1932 in Ann Arbor, Michigan, where my father, Cornelius A. Plantinga, was then a graduate student in philosophy. My mother, Lettie Plantinga (neé Bossenbroek), was born near Alto, Wisconsin. On her mother's side her family had come to the US about the time of the Civil War; her father's family came some twenty years later. Both groups came from the villages of Elspeet and Nunspeet in the province of Gelderland, the Netherlands, then distinguished for prosperous dairy farms and now also for the Kröller-Muller Museum. My father was born in Garijp, a small village in Friesland. The Dutch think of Friesland as their northernmost province. Frisians, however, know better. Friesland has its own culture, its own flag, and its own language, a language closer to Middle English than to Dutch (in fact of all the Germanic languages, Frisian is closest to English). Among the Dutch, Frisians are half-seriously reputed to be unduly stubborn: there is a Dutch expression "Friese Stijfkop" which means (literally) "Frisian Stiff-head". In this respect, the Frisans may resemble the Ancient Jews, who are frequently referred to in the Old Testament as "a stubborn and stiff-necked people". Of course the Frisians themselves view the matter differently: what the Dutch call undue stubbornness, Frisians think of as courageous perseverance. Many Frisians claim that Friesland never surrendered to the Germans during either World War I or World War II. Whether this story is true I do not know. It should be added, however, that the Germans may not have *wanted* Friesland.

My father's grandfather was an illiterate Frisian peasant. According to family tradition he worked desperately hard all summer, losing ten to fifteen

pounds in the process. To compensate, he spent most of the winter sleeping, fishing in a nearby canal and presumably recouping his lost weight. My grandfather and his brothers were of roughly college age during the Boer War; they used to torment their father by reading him accounts of British atrocities — accounts they pretended to find in a newspaper but in fact invented out of whole cloth or grossly exaggerated.

Both sets of my grandparents — Andrew and Tietje (née Hoekstra) Plantinga and Christian and Lena (née Redeker) Bossenbroek — were reared in Calvinist churches originating in the so-called *Afscheiding* or secession of 1834. During the 1830's there was a sizeable religious reawakening ('The Reveille') in the Netherlands, as in much of the rest of Europe. Thoroughly disgusted with the theological liberalism, empty formalism and absence of genuine piety in the Dutch state church (the *Hervormde Kerk*) many congregations seceded from it to create the *Gereformeerde Kerken*, dedicated to the practice of historic Calvinism. The Seceders underwent a good deal of punishment and persecution at the hands of the established authorities; they were ready to risk their livelihoods and even their freedom for what they believed to be right worship of God. Participating in the life of the seceding churches was a strenuous matter. The idea that religion is relevant just to one's private life or to what one does on Sunday was foreign to these people. For them religion was the central reality of life; all aspects of life, they thought, should be lived in the light of Christianity. They also held (rightly, I think) that education is essentially religious; there is such a thing as *secular* education but no such thing as an education that is both reasonably full-orbed and *religiously neutral*. They therefore established separate grade schools and high schools that were explicitly Christian, schools in which the bearing of Christianity on the various disciplines could be carefully and explicitly spelled out. Later on under the leadership of the great theologian and statesman Abraham Kuyper (premier of the Netherlands from 1901 to 1905) they established a Calvinist University in Amsterdam: the Free University — so-called not, as one might expect, because it is free from the state or from the influence of modern secularism but because it is free from ecclesiastical control. Although the university was established by Calvinist Christians to be a Calvinist University, it is not controlled by clergymen, Calvinist or otherwise.

In the early years of this century, my grandfather, Andrew Plantinga, had a reasonably prosperous construction business in Friesland. For reasons that aren't entirely clear, he decided to emigrate to the United States. In 1913 he brought his family to this country, first to New Jersey, and later to

Sheldon, Iowa, a tiny farming village in the northwest corner of the state. There my father went to grade school. Upon moving to Iowa, my grandfather had become a farmer. Naturally enough, therefore, he hoped that his son would take to the strenuous life of Iowa farming in those days before World War I. These hopes were dashed when early on my father displayed a much more substantial interest in books than in things agricultural — an interest that sometimes got him into trouble. When cultivating corn under the sweltering Iowa sun, the custom was to rest the horses at the ends of the long rows; my father would take a book with him, begin reading at the end of the row while the horses were resting, and become completely absorbed in what he was reading. An hour or so later someone would notice him, with predictable results. He also found himself in frequent disputes about the topics treated in the books he read. Indeed, many years later his Iowa uncles once asked him how far he thought it was from the earth to the moon. When he replied that it was 240,000 miles, they roared with laughter, insisting that if there were a good road from Sheldon to the moon, they could get there in an hour and a half driving a model T Ford.

When it became utterly apparent to Andrew Plantinga that his son was not cut out for life on an Iowa farm, he decided to send him to high school. This was more momentous than it might seem. A child of the *Afscheiding*, Andrew believed that his son should go to a Calvinist Christian high school; and while Dutch immigrants in the line of the *Afscheiding* had established a few such high schools in America, there was none in northwest Iowa. So at considerable sacrifice Andrew Plantinga moved his family to Holland, Michigan, where he became a carpenter — a trade he practiced until he was well into his eighties. There my father attended Holland Christian High School. After finishing Christian High School (where one of his classmates was William K. Frankena) he moved on to Calvin College, which, as a result of the enthusiasm for Christian higher education I mentioned above, had been established in 1876 by the Christian Reformed Church. There he met my mother, although it would not then have been accurate to refer to her thus.

My mother's parents owned a farm in Wisconsin between Waupun and Alto, and as a small boy I spent most of my summers there. Those summers, from my point of view, were absolutely splendid; I still think a medium-sized family farm is about as good a place as can be imagined for a child — in the summertime, at any rate. There, of course, going to church was an extremely important part of life; there were two services on Sunday, one in the morning and one in the afternoon, and in my earliest days the afternoon service was in Dutch. Some of my earliest memories are of long, hot Sunday afternoons

in church, dressed in my sweltering Sunday best, listening to the minister drone on in a language I could barely understand, counting the tiles in the ceiling, while all along the cicadas outside were setting up their characteristic summertime din. As I saw it then, just getting outside would have been heaven enough. After church, the main topic was often the minister's sermon; and woe unto the preacher who got his doctrine wrong or was guilty of a "wrong emphasis"! Although most of the members of the church were rural folk who hadn't had the benefit of much formal education (my grandfather was lucky to finish the sixth grade), there was an astonishing amount of theological sophistication about. Many had read their Kuyper and Bavinck, and a few were considerably better at theology than some of the ministers in charge of the church.

At Calvin College my father, like William Frankena and many others, fell under the spell of William Harry Jellema and decided to become a philosopher. He therefore went on to the University of Michigan as a graduate student in philosophy. My brother Leon, now a professor of musicology at Yale, and I were both born there during that period. My father next moved on to Duke University, where he earned a Ph.D. in philosophy, studying with William Stern, Katherine Gilbert, and William MacDougall. Both Stern and MacDougall were psychologists as well as philosophers and my father earned a Master's Degree in psychology to go with his Ph.D. in philosophy. In those days, as in these, teaching jobs were hard to come by. Since he was having a difficult time finding a job teaching philosophy or psychology, my father spent another year at Duke getting a degree in education. Those must have been difficult times for my parents; for a while we four lived in one room in a private house. At that time the weekly family income was the $12.50 my mother earned at the Typing Bureau, of which $5.00 went for rent. Our diet ran to peanut butter, yams and oysters, all of which were cheap then in North Carolina. Although our family endured the very sort of grinding poverty that had driven some of their forebears from the Netherlands, my brother and I had no perception at all of being underprivelged.

In 1941, the year the United States entered the Second World War, my father finally got a job: at Huron College, a small Presbyterian College in South Dakota. I went through fifth and sixth grade in Huron. Fresh from studies of Kant, Hegel, and transcendental idealism at Duke, my father launched into his first teaching experience in introductory philosophy. Naturally enough he spent a good deal of time on Kant and Hegel, treating especially carefully Kant's doctrine of the Transcendental Ego. Huron College, at that time, wasn't especially distinguished for top-notch students (and many

of the best students were off fighting the Second World War). After six weeks or so my father noted what he took to be certain signs of incomplete comprehension on the part of some of the students and decided it was time for a test. On reading the tests he discovered, to his considerable chagrin, that one of the students thought the subject of discussion had been Kant's doctrine of the Transcontinental Eagle, a giant bird that flew back and forth across the continent!

After two years in Huron, my father moved to Jamestown College in North Dakota, where he taught Latin, Greek, Philosophy and Psychology, with an occasional foray into Sociology and Religion. Here I went to junior high and high school. Here also were born my younger brothers: Terrell, presently with CBS News, and Cornelius, Jr., now a professor of theology at Calvin Seminary. School in the Dakotas in those days left something to be desired. I think perhaps my major deprivation was in mathematics. I got the idea, in high school, that higher mathematics was not much more than extracting ever higher roots — square roots and cube roots in high school, and in college fourth, fifth and maybe even higher roots. As a result, sadly enough, I stayed away from mathematics in college and never came to appreciate its beauty and power until much later — some fifteen years later. My father tried to supplement what I learned in school by teaching me some Latin and introducing me to Plato's *Dialogues*. I found Plato utterly fascinating. My father's explanations of Plato's meaning along with his tales of life in college and graduate school added to the interest, and when I was fourteen or so I decided I wanted to become a philosopher.

After my eleventh grade at Jamestown High School, my father declared that I wasn't learning enough and that I ought to pass up my senior year in high school in favor of immediate enrollment in college. This didn't suit me at all; although I found Plato interesting, I found high school life even more interesting. In particular, I was a zealous participant in high school athletics. My contribution to high school football and basketball was distinguished for enthusiasm if not for excellence. I also took second place in singles in the high school state tennis tournament in 1948 (the first year it was held) and Alexander Burr (now a physicist at New Mexico State University) and I took first in doubles; the luster of this feat may have been dimmed, however, by the fact that in North Dakota then there were probably no more than a dozen boys who had so much as seen a tennis racket up close. I was reluctant to skip my senior year, which would have been my best year of high school athletics. Nonetheless I followed my father's advice — 'advice' is perhaps too weak a word for it — and in the fall of 1949, a couple of months before

my seventeenth birthday, I enrolled in Jamestown College. During that semester my father was invited to join the psychology department at Calvin College. Most graduates of Calvin find it hard indeed to reject such an offer. My father was no exception; he decided to leave Jamestown College for Calvin, insisting that I too should transfer to Calvin. I hadn't wanted to be in college anyway, that year, and I certainly didn't want to leave Jamestown, where I had strong attachments. Although I complied with my father's request, my mood was mildly rebellious. Needing some admission forms, I wrote to Professor Henry J. Ryskamp, Dean of Calvin College and a very distinguished man of 60 or so, addressing him as 'Dear Hank'. Today this seems trivial; at Calvin, thirty-five years ago, such a breach of etiquette was a colossal piece of impudence, not at all calculated, certainly, to improve my father's prospects in his new job. Nevertheless, in January of 1950 we left North Dakota for Grand Rapids, Michigan. I left regretfully. I suppose most Americans wouldn't put North Dakota at the top of their lists of preferred places to live; but I liked living there immensely. Now, more than thirty years later, I remember with delight and a sort of longing, the haunting, supernal beauty of the prairie on a June morning just after sunrise — the marvellous liquid song of the meadow lark, the golden sunlight, the air cool and delicious and laden with the fragrance of a thousand wildflowers.

Upon arriving in Grand Rapids, I enrolled at Calvin. During my first semester there I applied, just for the fun of it, for a scholarship at Harvard. To my considerable surprise I was awarded a nice fat scholarship; in the fall of 1950, therefore, I appeared in Cambridge. I found Harvard very much to my liking. I took an introductory philosophy course from Raphael Demos in the fall and a course in Plato from him in the spring. I still remember the sense of wonder with which I read *Gorgias* — with its graceful language, absorbing argumentative intricacy, and its serious moral tone relieved now and then by gentle, almost rueful witticisms at the expense of the Sophists. The spring semester I also took a course in logic — an extremely elementary and rather silly course, as it turned out. No one had told me that the man to take logic from was Willard van Orman Quine, and I had scarcely so much as heard his name.

2. Education

Calvin

During that second semester at Harvard I returned to Grand Rapids during the spring recess. Since Calvin's spring recess did not coincide with Harvard's,

I had the opportunity to attend some classes at Calvin. I had often heard my father speak of William Harry Jellema, his philosophy professor at Calvin in the late twenties and early thirites. Accordingly I attended three of Jellema's classes that week. That was a fateful week for me. I found Jellema so impressive that I decided then and there to leave Harvard, return to Calvin, and study philosophy with him. That was a decision I have never regretted; and Calvin College has been perhaps the major intellectual influence in my life.

In the first place, there was Harry Jellema — by all odds, I think, the most gifted teacher of philosophy I have ever encountered. When I studied with him in the early fifties, he was about sixty years old and at the height of his powers; and he was indeed impressive. First of all, he *looked* like a great man — iron grey hair, handsome, a vigorous, upright bearing bespeaking strength and confidence, a ready smile. Secondly, he *sounded* like a great man. Although he had grown up in the United States, there was a trace of European accent — Oxford, I thought, with perhaps a bit of the Continent thrown in. Jellema lectured in magisterial style, with the entire history of Western philosophy obviously at his fingertips. He seemed to display astonishing and profound insights into the inner dynamics of modern philosophy — the deep connections between the rationalists and the empiricists, for example, as well as the connections between them and Kant, and the contrast between their underlying presuppositions and those underlying earlier medieval and Christian thought. Although he was a man of razor-sharp intellect, Jellema wasn't first of all a close or exact thinker; his metier was the method of broad vistas, not that of the logical microscope. I came deeply under his spell; had he told me black was white I would have had a genuine intellectual struggle.

And of course I wasn't the only one. Jellema came to Calvin in 1920, the very year Calvin became a four-year liberal arts college; apart from a twelve year stint at Indiana University in the thirties and forties, he remained at Calvin for the next forty-three years. During that period a large number of bright students came under his influence. In the early days in particular, an extremely high proportion of the serious students at Calvin wound up either majoring or minoring in philosophy. This phenomenon was due in part to the widespread grass-roots interest in theology and theological argumentation I mentioned earlier. Many students in those days came to college with an already developed taste for theological disputation and a strong interest in philosophical questions. (When I was eleven or twelve, as I recall, I was sometimes involved in heated discussions about predestination, divine foreknowledge, human freedom. and allied topics. With respect to rigor, these

discussions compared favorably, I believe, with a good deal of contemporary theology.) But much was due to the intellectual power and magnetism of Harry Jellema. Given the size of Calvin — 300 students when my father was there as a student and 1300 when I was — a remarkable number of its graduates have gone on to careers in philosophy. Many had Frisian names ending in 'a': Bouwsma, Frankena, Hoitenga, Hoekema, Hoekstra, Mellema, Pauzenga, Plantinga, Postema, Strikewerda, Wierenga, and more. This has given rise to the law-like generalization that if an American philosopher's name ends in 'a' and is neither 'Castañeda', 'Cochiarella' or 'Sosa', then that philosopher is a graduate of Cavlvin College.

Jellema ordinarily arrived some ten or fifteen minutes late for class. (To redress the balance, he usually ran five or ten minutes over time, thus making it hard for us to get to the next class on time.) He would march in, throw a sheaf of notes on the desk, march over to the window, fling it open (no matter what the weather), and begin lecturing. He never appeared to *consult* those notes and we all wondered what they were for. Jellema's lectures were marvels of breadth and depth and subtlety; but they certainly weren't delivered in the style favored by experts in communication. There wasn't much by way of 'eye-contact', for example; most of the time he looked out of the window or over the heads of the students at the back wall. "Most of the time", I say: every now and then he would round on the class, pick some luckless victim, and proceed with merciless and unrelenting Socratic interrogation. It would then turn out that the victim at hand, though born and brought up in the bosom of the Christian Reformed Church and a devoted student of things theological and philosophical, hadn't the faintest idea of what, say, *theft* was, or *piety*, or belief in God. It often seemed that he chose as his victims those who displayed a certain smugness or unduly settled quality in their religious beliefs. Jellema's examinations, like his classes, were unique. When the time came for the final examination in Ancient Philosophy, he strode in, wrote "Give a connected account of Greek Philosophy" on the blackboard, and strode out; the last student to finish brought the blue books to the office. Since he wasn't there to conclude the exam, students tended to go on at inordinate length. I recall one exam (in the Kant course, I believe) that began at the usual time of 2:00 P.M. At dinner time, everyone was still writing away at top speed, so we left, had dinner, and returned. There were people still writing the exam at 9:00 P.M., and when the last person had finished he brought the exams over to Jellema's house. Of course the idea of consulting notes or books or cheating in some other way didn't so much as present itself as

even a reasonably live option; it would have been greeted with universal disdain as both foolish and degrading.

Calvin was a splendid place for a serious student of philosophy. I have spoken of Harry Jellema; but there was also Henry Stob, a contemporary of my father's and student of Jellema's; Stob was a gifted and powerful teacher of philosophy in his own right. Both Jellema and Stob thought it enormously important to study the history of philosophy; and at Calvin much of my energy went into studying Plato, Aristotle, Augustine, Aquinas, Descartes, Leibniz and Kant. They also emphasized the importance of foreign languages for even reasonably serious work in the history of philosophy. Most translations are simply inadequate. It often requires a good deal of philosophical insight and imagination to see what propositions a philosopher means to be asserting in a given passage — more insight than can be mustered by some of his translators. In other cases there may be no straightforward mistranslation, but instead a foreclosing of options. Sometimes there will be two or three plausible ways to translate a given passage, correlated with two or three plausible and very different construals of the philosophical claims being made. It is often important to be aware of these different possibilities — perhaps you have some hypothesis as to the author's views on some topic or other and one of these alternatives provides support for your hypothesis. There is ordinarily no satisfactory alternative to reading a philosopher in his own language.

Accordingly I spent a good deal of time studying French, German and Greek. (I had already learned a little Latin from my father and in high school.) I often found it difficult to maintain interest in first-year language courses with their endless lists of forms to memorize. There were some 500 forms for regular Greek verbs such as 'παύω' and 'λύω'; what was worse was that 'παύω' and 'λύω' seemed to be the only regular verbs, the rest all requiring separate treatment. I chafed at the discipline required by first-year language courses, resenting the fact that I had to spend so large a proportion of my college time learning what I could have learned more easily at the age of ten or twelve. I often did somewhat better after getting beyond the first course: in French for example, I received a C in my first semester at Jamestown College, a B+ in my second at Calvin, and an A in my third at Harvard. (Of course some may see here no more than a reflection of the level of academic standards at the three institutions.)

There is ordinarily no acceptable substitute for reading a philosopher in his own language; but of course there are exceptions. In Jellema's Kant course, Nicholas Wolterstorff and I bought copies of the Adikes edition of *Der Kritik*

der Reinen Vernunft. Kant's German was often extremely difficult. There were enormous long sentences with obscure pronominal references with (in typical 18th-century German fashion) the verbs piled up at the end of the sentence. Sometimes it seemed that a sentence would go on for about a page and a half with no verbs at all; then you'd turn the page and here would be a great throng of verbs waiting expectantly in line to be assigned to their proper clauses. What in fact we did was to read the German, keeping a surreptitious eye on Norman Kemp Smith's translation, which was then just off the press. (Jellema himself, of course, never bothered with a translation. When he wanted to refer to a passage he'd simply sight-translate the German.) Years later I was relieved to learn that German students, in studying Kant, very often use the Smith translation in preference to Kant's miserably obscure German.

Although Jellema and Stob were deeply concerned with the history of philosophy, their interest in it was by no means merely historical; they saw it, among other things, as a means to come to understand the contemporary intellectual scene. What they saw of that scene did not please them. Jellema himself displayed certain leanings toward Hegelian idealism, particularly in his first years at Calvin. The positivism, pragmatism and narrow analysis he saw dominating American philosophy seemed to him shallow, wrongheaded and fatuous. He found it hard to think of a graduate philosophy department he approved of, and thus hard to advise prospective students where to go. At one point, I recall, he thought it might be a good idea if I would go to Temple University, to study with Richard Kroner, the author of *Von Kant bis Hegel*.

At Calvin then (as now) the life of the mind was a serious matter. There was no toleration of intellectual sloppiness and little interest in the mindless fads that regularly sweep academia; rigor and seriousness were the order of the day. What was genuinely distinctive about Calvin, however, was the combination of intellectual rigor with profound interest in the bearing of Christianity on scholarship. There was a serious and determined effort to ask and answer the question of the relation between scholarship, academic endeavor and the life of the mind, on the one hand, and the Christian faith on the other. We students were confronted regularly and often with such questions as what form a distinctively Christian philosophy would take, whether there could be a Christian novel, how Christianity bore on poetry, art, music, psychology, history, and science. How would genuinely Christian literature differ from non-Christian? Obviously Christianity is relevant to such disciplines as psychology and sociology; but how does it bear on physics

and chemistry? And what about mathematics itself, that austere bastion of rationality? What difference does being a Christian make to the theory and practice of mathematics? There was general conviction that Christianity is indeed profoundly relevant to the whole of the intellectual life including the various sciences (although not much agreement as to just *how* it is relevant). This conviction still animates Calvin College, and it is a conviction I share. Serious intellectual work and religious allegiance, I believe, are inevitably intertwined. There is no such thing as religiously neutral intellectual endeavor — or rather there is no such thing as serious, substantial and relatively complete intellectual endeavor that is religiously neutral. I endorse this claim, although it isn't easy to see how to establish it, or how to develop and articulate it in detail.

Harry Jellema and Henry Stob, of course, took the same view of philosophy. They saw the history of philosophy as an arena for the articulation and interplay of commitments and allegiances fundamentally religious in nature. Jellema spoke of four 'minds' — four fundamental perspectives or ways of viewing the world and assessing its significance, four fundamentally religious stances that have dominated Western intellectual and cultural life. There was the Ancient Mind, typified best by Plato, then the Medieval and Christian Mind, then the Modern Mind, and last and in his judgment certainly least, the Contemporary Mind, whose contours and lineaments, though not yet wholly clear, are fundamentally naturalistic. He therefore saw all philosophical endeavor — at any rate all serious and insightful philosophy — as at bottom an expression of religious commitment. This gave to philosophy, as we learned it from Jellema and Stob, a dimension of depth and seriousness. For them the history of philosophy was not a record of man's slow but inevitable approach to a truth now more or less firmly grasped by ourselves and our contemporaries, nor, certainly, a mere conversation with respect to which the question of truth does not seriously arise; for them the history of philosophy was at bottom an arena in which conflicting religious visions compete for human allegiance. Philosophy, as they saw it, was a matter of the greatest moment; for what it involved is both a struggle for men's souls and a fundamental expression of basic religious perspectives.

Jellema and Stob were my main professors in philosophy; I also majored in psychology, however, taking some six courses in that subject from my father, from whom I learned an enormous amount inside the classroom as well as out. My third major was English literature; I studied with John Timmerman and Henry Zylstra, both genuine masters of their subject. And of course there were the other students. Plato Club, a student discussion club

devoted to philosophy, was especially stimulating; its meetings lasted far into the night and were the scene of enormously enthusiastic if undisciplined philosophical discussion. Of all the students from whom I learned at Calvin, I think I learned most from Dewey Hoitenga, Frank Van Halsema and Nicholas Wolterstorff.

In the fall of 1953 I met Kathleen De Boer. She was then a Calvin senior and had grown up on a farm near Lynden, Washington, a village 15 miles from Puget Sound and just four miles south of the Canadian border. Her family, like mine, was of Dutch Christian Reformed immigrant stock, having come to northwest Washington in the early years of this century. I'm not sure what she saw in me, but I was captivated by her generous spirit and mischievous, elfin sense of humor. The following spring we were engaged and in June of 1955 married. She has had need of that sense of humor. Over the years she has had to put up with a rather nomadic life style as well as my idiosyncracies: during the 27 years of our married life we have moved 18 times. She has also had to bear most of the burden of rearing our four children, especially when they were small. I say "burden", but the fact is we take enormous delight in our children: Carl, a graduate student in film at the University of Wisconsin, Jane, married to Jack Pauw and a student at Fuller Theological Seminary, William Harry, a senior at Calvin, and Ann, a freshman in high school.

In the summer of 1954 I accompanied Kathleen to Lynden. I had never been west of Minot, North Dakota and my first sight of the mountains — the Big Horns of Wyoming, the Montana Rockies, the Washington Cascades — struck me with the force of a revelation from on high. Splendidly beautiful, mysterious, awe-inspiring, tinged with peril and more than a hint of malevolent menace — I had never seen anything to compare with them, and thus began a life-long love affair with mountains. Lynden, so far as I was concerned, was the stuff of dreams. Mt. Baker, the northernmost of the line of great glaciated volcanic peaks rimming the West Coast, is in full view from Lynden; Mt. Shuksun, perhaps the most photogenic mountain in the contiguous United States, is ten miles east of Baker. And twenty miles east of Shuksun are the Northern Pickets, as splendid a mountain range as is to be found in the United States outside Alaska. The only way into the Pickets is by a twenty mile trail with perhaps 10,000 feet of elevation gain and loss. In those days the range was seldom visited; most summers no human being set foot on the Northern Pickets. Even today, despite the creation of the North Cascades National Park, the inaccessibility of the Pickets protects them from the hordes of tourists overrunning many other erstwhile wilderness areas.

My contact with the mountains began with trail hiking in the Cascades and fishing in its streams and lakes. That summer I often went hiking and fishing with my wife's relatives, most of whom were experienced and enthusiastic outdoorsmen. My first expedition with my new relatives was to Delta Lake, a small body of very clear and very cold water, high in the Cascades above Stevens Pass. I was young, strong and in my opinion a fine physical specimen; some of the others were considerably older and even a bit paunchy. Leaving the car at Stevens Pass, we set out. After some hours of hiking up and down mountainsides, carrying a heavy pack on my back, I found myself desperately struggling to keep up with my relatives. After another hour I was utterly exhausted; after still another mile I was overcome with a bone-grinding fatigue such as I had never felt in my entire life. Finally I couldn't walk another step. I took off my pack, dropped it across the trail, sat down beside it, and fell fast asleep. My new relatives continued on a ways; finally noting my absence, they retraced their steps to see what had happened to me. They found me fast asleep, my head pillowed on my pack. When I awoke, they were taking photographs of me and indulging in a lot of scurrilous remarks about soft, Eastern student types that couldn't even hike on a trail. Although all of this was in a spirit of good natured joshing, I was humiliated, and I resolved to get into shape. I began jogging and running that fall, some fifteen or twenty years before the great jogging craze of the seventies.

Mountains have been an important part of my life ever since. I've climbed in many of the main ranges of the United States, concentrating, perhaps, on the Grand Tetons and the Cascades. Among my favorite climbs are the Coleman Glacier Route on Mt. Baker, the Exum Route, the East Ridge and the North Ridge of the Grand Teton, and one of the East Face routes on Mt. Whitney. I've also done a little climbing in Europe (Mt. Blanc and the Matterhorn by the regular routes, a little rockclimbing in England, Wales and Scotland). The last few years I've turned more to rockclimbing, which is less prodigal of time and energy than mountaineering. My favorite rock climbs include Guides' Wall in the Tetons, Devil's Tower (regular route), and the Black Quacker Route on Mt. Lemmon, just north of Tucson. Although lately I've done more rockclimbing than mountaineering, my favorite climbing, if I had time, would still be mountaineering, perhaps in the Pickets in the North Cascades. An ideal climb would begin with a day-long hike to a remote camp near timberline. The next day's climbing would start at 3:00 A.M. with a climb to timberline, followed by a few hours of glacier climbing. Then finally there would be about a thousand feet of rockclimbing up an exposed ridge with a couple of decently hard 5.6 pitches near the top. The descent

would be by a different route from the ascent; there would be the unfulfilled threat of bad weather.

Michigan and Yale

In January of 1954 I left Calvin for graduate work at the University of Michigan, where I studied with William P. Alston, Richard Cartwright and William K. Frankena. The first semester I enrolled in a course in philosophy of religion and a seminar in the philosophy of Whitehead; both were taught by Alston (Nelson Pike was a student in the course). Alston's careful, clear and painstaking course became a model for the courses I was later to teach in the same subject. The seminar, however, was baffling and intimidating; try as I may, I couldn't make much sense of *Process and Reality*. I couldn't get a clear view of the main project of the work, and I also found many of Whitehead's central claims utterly opaque. The other students didn't seem to suffer from this inability to understand; they discoursed learnedly of actual occasions, ingression, concrescence, the consequent nature of God and all the rest. I began to consider the possibility that philosophy wasn't my metier after all. Before long, however, it turned out that the other students didn't really understand much more than I did; they just had greater facility in talking about what they found obscure. I still find it difficult to discuss an idea of which I don't have a reasonably solid grasp. This isn't a backhanded way of claiming that my standards for clarity are unusually high; the ability to play along with and discuss an idea one doesn't really understand is important and one I wish I had.

I also took a course in the philosophy of David Hume from Richard Cartwright. Cartwright was cool, elegant and splendidly acute; but the contrast between his way of approaching the history of philosophy and Harry Jellema's was extremely perplexing. Jellema's approach was magisterial; he easily ranged over the whole of western philosophy and often seemed to know what a given philosopher had in mind more clearly and firmly than the philosopher himself. Cartwright's approach presented an enormous contrast: instead of grand vistas from the top of the Grand Teton, he offered what I thought was a view through a microscope. Jellema made revealing though sometimes baffling comments that linked a philosopher to the inner dynamics, the fundamental mind-set of his age; Cartwright, by contrast, claimed he didn't even know what Hume meant by the terms most basic to his philosophy, and he went on to explain in considerable detail why Hume probably didn't mean A, B, C or any other reasonably plausible candidate

you might think of. Although I had great respect for Cartwright and his overwhelming argumentative prowess, I found his approach disturbing. It seemed in a way irresponsible, not taking the philosopher in question seriously enough, sometimes raising specious difficulties. Later I came to appreciate the force and claims of Cartwright's approach. The contrast between him and Jellema points to a real difficulty in approaching a course in the history of philosophy.

Jellema's method of relating the philosopher in question to the dominant mind-set of the age, linking him to his predecessors and successors, tracing the main lines of the most important aspects of his thought — the mountain top method, for short — is important, fascinating, and when properly done deeply revealing. It suffers from important defects, however. In the first place, it isn't often properly done. Jellema could do it as it ought to be done, but more people who try it fail miserably. Furthermore, it begets a certain lack of fidelity to the authors studied. Perhaps 'lack of fidelity' isn't quite the right phrase; it's rather that the mountain top method gives little sense of what the philosopher in question was actually *concerned with* as he did his philosophical work. For that enterprise, there's no substitute for close and careful line by line analysis of the text. Furthermore the effort to see what the author intends can't properly proceed without fairly extensive and detailed independent analysis of the topic in question. This often amounts to substantial work on the topic; serious history of philosophy cannot proceed in abstraction from serious philosophy. One can't understand Aquinas or Scotus on divine simplicity, for example, without a good deal of hard *philosophical*, as opposed to hermaneutical work. The same goes for Leibniz on Monads or Locke on *tabulae rasae* or Hume on the powers of the mind. But of course this procedure takes time. A serious look at Augustine on time or freedom isn't something that can be tucked into half a lecture, or even a couple of lectures. To see what Augustine is really doing here, students must engage the text, and must do the sort of philosophical work mentioned above; both are time-consuming. And it is crucially important to remember that the philosopher in question was aiming to get at the *truth* about the matter; the only way to follow him in his enterprise is to take seriously and independently examine the truth of what he says. But obviously it would take several years to treat most of, say, the major medieval philosophers in this way. And of course the mountain top method is also important. I have never been able to resolve this difficulty to my satisfaction, and in the courses I give in the history of philosophy what in fact I do is to make an uneasy compromise.

I also learned much from William Frankena — much at the time and much

later on. I admired his patient, thoughtful and considerate way of dealing with students almost as much as his analytical powers. There was (and is) much about Bill Frankena that is eminently emulable. Several years later, for example, I attended a conference on ethics held on the shores of Lake Michigan. Frankena was a mature and extremely distinguished philosopher; he read a characteristically clear and thoughtful paper. The commentator was Peter De Vos, then a graduate student at Brown. De Vos detected and acutely exposed a crucial ambiguity that pretty well vitiated the paper's main line of argument. And Frankena, rather than throwing dust into the air or claiming he'd been misinterpreted or carrying on in some of the other familiar ways, thought for a moment and then said, "It looks like you're entirely right. At the moment I don't see how to fix things, and I'll just have to go home and think about it." I found Frankena's quiet and simple words impressive and even moving, and in subsequent years have tried myself to react in the same way when my errors are exposed.

At Michigan I developed a lasting interest in the sorts of attacks mounted against traditional theism — the claim that it was incompatible with the existence of evil, the Freudian claim that it arose out of wish fulfillment, the positivistic claim that talk about God was literally meaningless, the Bultmanian claim that traditional belief in God was an outmoded relic of a pre-scientific age, and the like. All but the first of these, I thought, were totally question begging if taken as arguments against theism. I conceived a particular dislike for the dreaded Verifiability Criterion of Meaning; it seemed to me that many thesists payed entirely too much attention to it. Although I wasn't then aware of the enormous difficulties in stating that criterion, I could never see the slightest reason for accepting it. The positivists seemed to be trumpeting this criterion as a *discovery* of some sort; at long last we had learned that the sorts of things theists had been saying for centuries were entirely without sense. We had all been the victims, it seems, of a cruel hoax — perpetrated, perhaps, by ambitious priests or foisted upon us by our own credulous natures. At the same time, however, the positivists seemed to regard this criterion as a *definition* — in which case, apparently, it was either a proposal to use the term 'meaningful' in a certain way, or else an account of how that term is in fact used. Taken the second way, the Verifiability Criterion of Meaning was clearly wide of the mark; none of the people I know, at any rate, used the term in question in accord with it. And taken the first way it seemed even less successful. Clearly the positivists had the right to use the term 'meaningful' in any way they chose. But how could their using that term in some way or other show anything so momentous as

that all those who took themselves to be believers in God were fundamentally deluded? If I proposed to use 'positivist' to mean 'unmitigated scoundrel', would it follow that positivists ought to hang their heads in shame? I still find it hard to see how the positivists could have thought their criterion would be of any *polemical* use. It might be useful, perhaps, for bucking up a formerly committed but now flagging empiricist; but what sort of claim would the verifiability criterion have on anyone who had no inclination to accept it in the first place?

Although my time at Michigan was pleasant and instructive, I yearned for something more; philosophy there, it seemed to me, was too piecemeal and too remote from the big questions. I missed the insight and illumination conveyed by Jellema's lectures. The fare at Michigan, I thought, was a bit to sere and minute. I therefore asked Frankena where philosophy was done in the grand style of the German idealists. The ready reply was "Yale"; but he thought it might be a mistake for me to go there. Nevertheless I applied, was accepted, and went; and in September of 1955 I showed up in New Haven.

The contrast between Yale and Michigan was striking. In the first place, the Yale department was much larger; there were many more graduate students and many more professors. In the second place, the Yale department displayed enormous diversity: there were idealists, pragmatists, phenomenologists, existentialists, Whiteheadians, historians of philosophy, a token positivist, and what one could only describe as observers of the passing intellectual scene. My first year at Yale I took courses from Paul Weiss and Brand Blanshard along with a solid course in modal logic from Frederick Fitch. Blanshard's course was delightful and informative, and Blanshard himself always seemed to me a paradigm of intellectual uprightness. In Weiss's courses we worked on the manuscript of the book he was writing at the moment; and Weiss would defend and try to explain what he had written. Weiss was a person of great presence and great personal force. I very much admired his intellectual energy, critical astuteness, and dialectical quickness. I admired him even more for his refusal to bow to philosophical fad and fashion; who else would have had the *chutzpah* to found a journal named *The Review of Metaphysics* during the positivistic heyday of anti-metaphysical animus? In his class I would often seem to be on the edge of seeing something deep and valuable — a new and better way of looking at causality, for example, or an understanding of just why the notion of substance had presented such enduring perplexities. After class I'd go home to think about and try to write down what I'd learned. Sadly enough, I could never think of anything to write. There was that sense of illumination in Weiss's presence

but I could never say to my own satisfaction what it was I had been illuminated *about*. It was metaphysics in the grand style, all right, but the more I worked at it the less I could find in it. I couldn't see where the discussions started or how they went from there to where they ended. There weren't any discernable arguments; there wasn't any original problem or perplexity I could identify as the starting point of the train of reflections; there were just these puzzling propositions. For a year and a half or so I stuck with the project of trying to understand Weiss's work. Finally I gave up.

On balance, I didn't find Yale nearly as much to my liking as I had hoped. My main complaint is that there was scarcely any opportunity to learn how to do what philosophers do. Blanshard's seminars on metaphysics and epistemology, for example, were models of urbanity and, in a certain respect, of clarity as well. But they covered far too much ground and proceeded at far too high a level of abstraction. The seminar on metaphysics, for example, devoted each of its thirteen meetings to a different metaphysical problem or topic — causality, substance, the nature of mind, the mind–body problem, God, space and time, the problem of universals, and the like. Then any given meeting would canvass the main alternative solutions to the day's problem: on universals, for example, there would be Plato's extreme realism, Aristotle's moderate realism, Kant's conceptualism, some animadversions on nominalism, and then finally the idealist answer involving concrete universals, the solution Blanshard himself favored. As you can see, there wasn't sufficient time to gain a real understanding of any of these various positions. There wasn't time to consider arguments in real depth and detail; there were references to arguments rather than detailed and careful scrutiny of them. Worse, there wasn't time to make the fundamental ideas clear, or as clear as we were capable of making them. What, for example, is a concrete universal? How are we to make a genuine and viable distinction between the concrete and the abstract? Given the scope of the seminar, there would scarcely be time for such questions.

The problem at Yale was that no one seemed prepared to show a neophyte philosopher how to go about the subject — what to *do*, how to think about a problem to some effect. Fundamentally, it was that high level of generality that was at fault. There was too little descent from the lofty heights of generality to the level of particularity at which most important philosophical work takes place.

There was an even more disturbing and unsettling feature of Yale philosophy at that time. Of course I applauded the emphasis upon the history of philosophy, as well as the scorn for positivism and its repudiation of the

traditional concerns of philosophy. But there was something else at Yale almost as bad. If anyone raised a philosophical question (in or out of class, but especially out) the typical response would be to catalogue some of the various different answers the world has seen: there is the Aristotelian answer, the existentialist answer, the Cartesian answer, Heidegger's answer, and so on; perhaps there would be a codicil as to what the Mahayana Buddhists thought about the matter. But what I thought the most important question — namely, what is the truth about this matter? — was often greeted with disdain as unduly naive. The various answers suggested were treated less as serious attempts to get at the truth than as interesting intellectual tidbits — glorified cocktail conversation. This attitude fostered a considerable interest in what was merely quaint — Aquinas' view that a female child is conceived when the sperm is "weakened" by an east wind, for example, or Aristotle's ideas that the brain is essentially a sort of cooling agent to counteract the heat generated by the heart.

Although the positivist repudiation of philosophy was rejected, this attitude of irony and distance was very much in evidence. And despite its greater subtlety, it was as much a repudiation of philosophy as the more blunt declarations of the positivists. The great philosophers of the tradition were not, of course, trying to say something interesting or provocative or titillating; they were trying to tell the sober metaphysical truth. Nothing could be less true to their concerns than to forgo or forget the central matter of truth in favor, of say, wide learning as to what the possible answers to their questions might be. This attitude, I hasten to add, was much more characteristic of the students than of the faculty. Perhaps it was fostered, in part, by the enormous diversity of approach to be found at Yale. And of course the attitude in question was not shared by nearly all of the students. In particular, I must mention Charles Landesman. I learned as much from him as from any faculty member; and I greatly appreciated his cool, gently cynical attitude towards philosophy at Yale.

In the fall of 1957 I began teaching in the Directed Studies program at Yale. These were small classes of unusually bright students; my assignment was to teach them large chunks of the history of metaphysics and epistemology. This was my first teaching — I hadn't had a teaching assistantship and hadn't so much as graded a paper — and it was a harrowing experience. I spent most of the summer preparing for my classes in the fall; when September rolled around I had perhaps forty or fifty pages of notes. I met my first class with great trepidation, which wasn't eased by the preppy, sophisticated, almost world-weary attitude of these incoming

freshmen. Fortified by my fifty pages of material, I launched or perhaps lunged into the course. At the end of the second day I discovered, to my horror, that I'd gone through half of my material; and by the end of the first week I'd squandered my entire summer's horde. The semester stretched before me, bleak, frightening, nearly interminable. That's when I discovered the value of the Socratic method of teaching.

What was for me the most fateful and significant occurrence of that year, however, lay in a different direction. One day out of the blue I received a phone call from what seemed to be a sort of mad-cap eastern European who claimed his name was "George Nakhnikian". He said he wanted to hire me; he wanted me to come to Detroit and teach at Wayne State University. I had a job at Yale and reasonable prospects for permanence; furthermore I had barely heard of Wayne State (it was dimly associated, for me, with someone called "Mad Anthony Wayne"); and neither my wife nor I had an overwhelming interest in living in Detroit. On the other hand I was finding philosophy at Yale increasingly frustrating and was about ready to say my farewells to metaphysics in the Grand Style, at least as practiced at Yale. And this wild Armenian kept calling, making solicitous inquiries into the health of my parents as well as that of my son Carl, who had the measles, and urging me to meet him and his department for an interview. I finally did so, although I still had no real thought of leaving Yale, or if I did so, of going to Wayne. But after the interview Nakhnikian kept calling at a furious rate, expressing great admiration for Dutch Calvinism and great concern for my well-being, as well as that of my family and anyone else in the neighborhood. At last I bowed to the inevitable, agreeing to leave Yale for Wayne. It was one of the best decisions I ever made.

Wayne Days

Those far-off fabulous days at Wayne during the late fifties and early sixties were, from a philosophical point of view, perhaps the best thing that has happened to me. I came to Wayne in the fall of 1958, as did Robert C. Sleigh, who then looked like a skinny, crewcut sophomore. The people already there were Nakhnikian, Hector Castañeda, Edmund Gettier, John Collinson, and Raymond Hoekstra, a graduate of Calvin College and a former student of Harry Jellema. Castañeda and Gettier had come the preceding year; Nakhnikian had been there somewhat longer and Hoekstra and Collinson had been there much longer. I was to replace William Trapp, another Calvin graduate, who had retired the previous year. Nakhnikian had decided to

rebuild the department and change its direction. This wasn't at all what Hoekstra and Collinson had in mind; Collinson soon left, and while Hoekstra continued on, he had little to do with the rest of the department. So Nakhnikian, Castañeda and Gettier were the old hands; Sleigh and I were the new boys; and a couple of years later we were joined by Richard Cartwright and Keith Lehrer.

In those days the Wayne philosophy department was less a philosophy department than a loosely organized but extremely intense discussion society. We discussed philosophy constantly, occasionally taking a bit of time to teach our classes. These discussions were a sort of moveable feast; they would typically begin at 9:00 A.M. or so in the ancient house that served as our headquarters and office space. At about ten o'clock the discussion would drift over to the coffee shop across the street, where it would consume an endless quantity of napkins in lieu of a blackboard. Here it would remain until about lunch time, when it would move back to someone's office. Of course people would drift in and out of the discussion; after all, there were classes to teach. (The general attitude towards teaching seemed to be that it might be important, but it certainly did tend to break up your day.) What impressed me most about my new colleagues was that they seemed to have a way of *doing* philosophy. There wasn't nearly as much talk *about* philosophy — what various philosophers or philosophical traditions said — and a lot more attempts actually to figure things out. Gettier had come from Cornell and was at the start a vigorous defender of things Wittgensteinian; Sleigh had studied with Roderick Chisholm at Brown and tended to see things Chisholm's way; and Castañeda had considerable sympathy for the work of Wilfrid Sellars, with whom he had studied at Minnesota. The first two or three years at Wayne were given over to arguing out the differences between these approaches, and the main topics of discussion had to do with the principle areas of disagreement among those three philosophers.

One of the most important and persistent topics was Wittgenstein's alleged private language argument. Debate raged as to what this argument *was*, what its conclusion was, what is premises were, and whether it had any premises. For the first couple of years, Gettier defended the argument and kept producing ever more labyrinthine versions of it. After Gettier's latest effort, Castañeda would typically say something like, "Well, Ed, is not wholly clear", and go on to give four or five very complicated reasons as to why it wasn't wholly clear. The Private Language discussion lasted for at least a couple of years; at last we agreed that either there wasn't any argument of substance there at all, or that if there was, it was unusually well concealed.

A second central concern, intimately connected with the first, was the application and use of modal concepts in philosophical work. I found this especially revealing. Although I had taken an excellent course in modal logic from Frederick Fitch, I had never made the application to philosophical arguments and analysis, partly because of the level of generality at which philosophy went on at Yale: at that level it was often easy to overlook modal distinctions. But at Wayne (at first especially from Gettier) there was a great deal of talk about the modal behavior of propositions. We began to pay careful attention to the modal structure of philosophical arguments; we puzzled over the characteristic axioms of Lewis' S_4 and S_5 (I remember spending a couple of afternoons vainly trying to deduce them from what were substantially the axioms of von Wright's system M); we wondered about essential properties and about the connection between quantification and modality. At about that time Robert Sleigh pointed out a fallacy in an article in *Mind*. The author apparently took as premiss a proposition of the form *Necessarily, A or B* and *not-A*; he concluded, not merely that *B* was true, but that it was necessarily true. This, of course, is an obvious and elementary fallacy; but we soon found "Sleigh's Fallacy" and its near relatives all over.[1] For a while I kept a record of the cases of Sleigh's Fallacy I came across; a single issue of *Mind* would sometimes yield four or five. The fact is, I think, that this fallacy (perhaps in the form *Necessarily, If A then B; A;* therefore *necessarily B*) has played a large role in philosophical thinking on such topics as determinism and the connection between divine foreknowledge and human freedom. It is still a very popular fallacy and only good will prevents me from giving a long list of instances.

We naively thought of Sleigh as the discoverer of this fallacy. Later on, however, I found that G. E. Moore was aware of its application in philosophical thought; in his piece "Internal and External Relations",[2] he claimed that this form of reasoning underlay many of the arguments the idealists gave for their doctrine of internal relations. He then made heavy weather over arguing that this fallacy was indeed fallacious; in typical Moorian style he goes on for pages, pointing out repeatedly that

> Necessarily, if A then B

therefore

> If A, then necessarily B,

another form of Sleigh's Fallacy, is not the path of true philosophy. We were mildly astonished to discover that Moore knew of Sleigh's Fallacy (although

of course he didn't know its name); still later I discovered that awareness of Sleigh's Fallacy was stock in trade for every thirteenth-century graduate student in philosophy. The medievals referred to the difference between the premiss and conclusion of the above argument form as the distinction between "the necessity of the consequence" and "the necessity of the consequent"; this is just one instance of their very extensive store of knowledge of modality. Most of this knowledge was lost, calamitously enough, in the Renaissance and early modern rejection of 'scholasticism'. It is only in the last couple of decades or so that some of it has once more become part of the general lore of the philosophical community. It is obvious, I think, that a working knowledge of these modal matters is absolutely essential to clear thinking on most philosophical topics; nearly all philosophical topics, if pushed far enough, wind up crucially involving matters of modality. What is less obvious but equally true is that the same goes for theology; a certain amount of modal logic and of the lore and distinctions that go with it is essential for decent work on many of the main topics of theology. Here our contemporaries haven't anywhere nearly caught up with their medieval forebears. Of course what is needed is not technical knowledge of what modal logicians now actually work at. Theologians don't need to know, for example, which systems of quantified modal logic are complete with respect to which plausible semantics (and in fact I think the philosophical relevance of completeness proofs has been considerably exaggerated lately). What's needed is rather an understanding of the basic modal notions: necessity *de dicto* and necessity *de re*.

In those days in the old Wayne department, we came to appreciate the value of rigor in philosophical thinking, and the immense importance of clarity and penetration. We came to abhor sloppy thinking and we criticized each other's work mercilessly and at enormous length. Everything had to be written down — on blackboards, napkins, tablecloths, or whatever lay to hand — and then carefully scrutinized. For a while the preferred philosophical style was to give all arguments in the style of Copi's *Symbolic Logic*, with the argument form or other justifying reason given for each step and written to its right. In 1962 Castañeda organized a conference in the philosophy of mind[3]; among the visiting luminaries were Chisholm, Sellars, Ayer, Putnam and others. Sleigh began his comments on Chisholm's paper by writing on the blackboard (the small portable kind) an elaborate argument, carefully explaining to the assembled multitude how each step followed from preceding items. Near the end of his argument he was near the bottom of the second side of the blackboard and writing ever smaller; but since each line

was just half the size of its predecessor, it looked as if he would have plenty of room for as many lines as he pleased. He wrote down the last line, but seemed perplexed as to its proper justification. As he stood there scratching his head, tension mounted; we expected that line — * (23)" I believe it was — to follow by something very recondite — *dictum de omni et nullo*, perhaps, or eschatological modalization. Finally he came out with it: *modus ponens*!

Like other philosophy departments, we had a fair number of visitors. We ordinarily asked for the paper in advance; so maybe a week or so before our guest arrived, his paper would appear. The paper would then become a subject of intense and concentrated discussion and analysis; every possible objection (and more besides) would be explored with tenacious persistence. Objections would be formalized in Copi-style logic: on page 17 so and so says p; on page 24 he says q; from p and q it follows by existential instantiation, hypothetical syllogism, exportation, universal generalization and modalizing that r; but (by three or four other argument forms) r is incompatible with s, which appears on page 9 of the paper. By the time the visitor unsuspectingly arrived, his paper would have been taken apart several times and with respect to several different partitions. After the visitor read his paper, the attack would start — with Cartwright, perhaps, who would begin in a deceptively gentle vein by suggesting there was something in the paper he didn't entirely understand. What he didn't understand would ordinarily be something pretty complicated; perhaps the only way he could see to make the argument on page 14 valid was to add a certain principle P, which principle P when conjoined with something on page 15 yielded a proposition incompatible with, say, the Converse Barcan formula. It would usually turn out the author had never so much as considered principle P, and had little or no interest in the Converse Barcan formula. The discussion might turn to some other point for a bit, but then someone else — Castañeda, say, would return to the original topic and take up the assault from a slightly different angle.

This procedure would sometimes produce consternation and dismay on the part of the victim; one doesn't ordinarily expect that his audience will have devoted a week or so to a concentrated and communal effort at refutation. But occasionally the method backfired. Henry Kyburg once sent an advance copy of an extremely dense and closely reasoned paper on probability, a subject most of us knew next to nothing about. We worked especially hard on Kyburg's paper, reading Carnap, Reichenbach and others, and finally, after a lot of effort, found a sort of incoherence in the paper. In due course Kyburg himself arrived. He began the presentation of his paper by saying something like "I should warn you that there is an unresolved

incoherence in my line of argument. I'm working on it and have some suggestions, but haven't yet got the matter entirely clear." Then he gave a masterful account of the difficulty we had so laboriously uncovered, and added a couple of others for good measure. We offered him a job on the spot, and later (after I left) he joined the Wayne department. That same year Nicholas Rescher sent a paper, which was subjected to the usual treatment and didn't hold up well. When Rescher arrived, read his paper, and heard the criticisms, he thought for a moment and then said, "Well, it looks as if you fellows don't like this paper. I just happen to have another one here, perhaps you'll like *it* better." Whereupon he reached into his inside jacket pocket, pulled out another paper, and proceeded to read it. This one, of course, had not been subjected to the fine-toothed comb procedure and fared much better.

Life in the Old Wayne Department, however, wasn't all serious philosophy and high intellectual endeavor. There was also a substantial element of whimsey, much of which seemed to revolve, somehow, around Castañeda. Departmental meetings displayed a tendency towards a sort of amiable anarchy. George Nakhnikian, the chairman, took himself to believe in the Quaker consensus method of making departmental decisions. That he thought, would minimize the possibility of dissension in the ranks. Of course there wasn't always a consensus forthcoming; so when, after considerable discussion, there was none visible to the naked eye, George would simply declare "Well, the consensus seems to be so-in-so." This would stimulate Hector to a sizeable disquisition on the nature and logical properties of consensus. Occasionally Castañeda's whimsey assumed truly monumental proportions. I recall a department meeting in which we were considering making someone — I think it was Nicholas Rescher — an offer. Rescher had let it be known that he couldn't seriously entertain an offer for less than $9000 — considerably more than any of us was earning. After some discussion, George stated that the consensus was that Rescher had priced himself out of the market — *our* market, in any event; we therefore began thinking about other possible candidates. Castañeda took this opportunity to suggest that we make an offer to Nathan Pusey, then president of Harvard. Gettier said something like "Come on, Hector, be serious" — where upon Hector became *very* serious, arguing the case for hiring Pusey with great eloquence and at considerable length. He pointed out that Pusey knew some philosophy, and had even taught the subject at Lawrence University in Appleton, Wisconsin; we had heard no report to the effect that he had not done a good job. Furthermore, his appointment would give our department some "national visibility", a commodity of which it had an obviously short supply. Pusey had also

demonstrated a certain administrative talent, said Hector, so that he could be counted on to do his share of departmental committee work, and perhaps could even relieve George of part of the burden of the chairmanship; his experience as president of Harvard would stand him in good stead in dealing with the administration at Wayne. There were a few half-hearted remonstrations on the part of the rest of the department, but these only served to spur Hector on to greater heights. And he didn't subside until everyone else had lapsed into a sort of stunned silence.

Teaching, in the Old Wayne Department, also had its element of whimsey. Sleigh once taught the introductory philosophy course and devoted the entire semester to Aquinas' first argument for the existence of God in the *Summa Theologiae*. Somehow most of the topics in which Sleigh was then interested turned out to be relevant — set theory, modal logic, Carnap's probability theory and much else besides. Gettier acquired considerable fame as a teacher of logic, even though he had learned little or no logic in graduate school. One semester his teaching assistant — a graduate student in mathematics — prepared an exam for him. The exam involved problems in Copi-style natural deduction. The students took the exam, the assistant graded it and Gettier handed it back — but neglected to do the problems himself. Someone asked to see the first problem done, so Gettier strode to the board and began working away. To make a long story short, he hadn't been able to solve the problem when the bell rang, signaling the end of the period. Just then a student raised her hand and said "Professor Gettier, do you think it's fair to expect us to do five of these problems in one hour, when you can't even do one?" "Sure", said Gettier, and fled through the door.

In many ways the moving force behind the Old Wayne Department was George Nakhnikian. He displayed excellent judgment and unbelievable energy in assembling the department. He was fiercely loyal to "my boys" as he referred to us, and he did everything humanly possible to provide the sort of conditions in which we could develop and learn. I remain enormously grateful for those days at Wayne and I continue to have the most profound respect for the members of that early group. It was from them and in company with them that I learned how philosophy ought to be approached; it was in company with them that I learned the importance of genuine clarity and rigor in the subject, and something of how to achieve them. What we did best in those days was philosophical criticism. Finding counterexamples, refuting arguments, detecting unacknowledged assumptions, discovering ambiguities — these were our stock in trade. Gettier's two-page piece "Is Justified True Belief Knowledge?" is the *locus classicus* of the so-called

Gettier problem and has provoked a spate of pieces in response; in fact it is probably unique among contemporary philosophical articles in the ratio between its own length and the number of pages devoted to it by other philosophers. When Gettier first came up with it, however, it didn't seem especially earthshaking; it was just one more item in the steady stream of remarkably acute philosophical criticism Gettier and others produced. Of course there is more to philosophy than counterexamples and criticism, and perhaps our disdain for philosophical positions adopted without argument revealed a sort of uncritical foundationalism on our own parts. But searching and powerful criticism, high standards for clarity, rigor, and argumentative cogency — these form a necessary condition of high philosophical endeavor and an excellent first step towards it. These the Old Wayne Department had in abundance, along with boundless enthusiasm, enormous philosophical energy and mutual respect and affection. Detroit in the fifties and sixties seems an unlikely arena for a brilliant flowering of philosophical excellence: but there it was. I am delighted to have had the opportunity to take part in that brief but dazzling display.

I must mention one final benefit I owe to the Old Wayne Department. Cartwright and Sleigh had both been students of Roderick Chisholm at Brown; and for a while the Wayne and Brown departments had a series of home and away engagements in which we read papers and criticised each other's work. It was then that I began to study Chisholm's work; and I suppose there is no other contemporary philosopher from whom I have learned more over the years. Chisholm's clarity, penetration, patience and resourcefulness are of course widely appreciated; there are several topics, I think, on which his work is the best contemporary philosophy has to offer. But perhaps one of his most impressive qualities is a splendid capacity for growth and for learning from criticism. Although his desire not to be found in error is at least as healthy as that of the next man, he routinely seeks out and welcomes criticism, objections and refutations of his views. At the conference on philosophy of mind I mentioned (above, page 25) Chisholm read a characteristically clear and ingenious paper on the marks of intentionality. Sleigh then read a characteristically penetrating comment in which he demonstrated that Chisholm's proposal was indeed wanting. Rising to reply, Chisholm began by saying "I see that, ah, Professor Sleigh has, ah-um,demonstrated that my paper has at least one philosophical virtue: it is *falsifiable*." And a few days later he had an improved substitute. That quality in Chisholm is impressive and is one source of his capacity for constant growth.

Calvin

In 1963 at the age of 70 Harry Jellema retired from Calvin's philosophy department (and went on to teach for some 12 more years at Grand Valley State College). I was invited to replace him. I was flattered to be asked to be his successor but timorous at stepping into shoes as large as his; after considerable agony I decided to leave Wayne for Calvin. Many of my non-Calvin friends found it hard to see this as a rational decision. Wayne had a splendid philosophy department; I had found it educational and stimulating *in excelsis*; I immensely liked the department and my place in it and had rejected several attractive offers in order to stay there; why then, was I now proposing to leave it for a small college in Western Michigan? In point of fact, however, that decision, from my point of view, was eminently sensible. I had been an enthusiastic Christian since childhood and an enthusiastic Reformed Christian since college days. I endorsed the Calvinist contention that neither scholarship nor education is religiously neutral; I therefore believed it important that there be Christian colleges and universities. I wanted to contribute to that enterprise and Calvin seemed an excellent place to do so. Calvin, furthermore, is the college of the Christian Reformed Church, a church of which I am a committed if sometimes disapproving member; so there was an element of ecclesiastical loyalty at work. Most important, perhaps, I thought of scholarship in general and philosophy in particular as in large part a communal enterprise: promising insights, interesting connections, subtle difficulties — these come more easily and rapidly in a group of like-minded people than for the solitary thinker. The topics I wanted most to work on were the topics to which I'd been introduced in college: the connection between the Christian faith and philosophy (as well as the other disciplines) and the question how best to be a Christian in philosophy. Calvin was the best place I knew to work on these questions; nowhere else, so far as I knew, were they as central a focus of interest and nowhere else were they pursued with the same persistent tenacity. I therefore went to Calvin.

Except for occasional leaves, I have spent the last 19 years there. When I came, the other members of the philosophy department were Tunis Prins, Evan Runner, Clifton Orlebeke, and Nicholas Wolterstorff; the next year we were joined by Peter DeVos. The department has grown during my stay from that original group to its present contingent of 10 persons. What I have found most valuable at Calvin are two things. First, in the philosophy department there has been just the sort of communal effort at Christian

scholarship I was hoping to find. This community has manifested itself in part by way of day-to-day contact with colleagues: our Tuesday colloquia, however, have been even more important. These began in 1964 and nearly every Tuesday for the last eighteen years we have gathered to discuss and criticise each other's work. The first year, as I recall, we worked on my *God and Other Minds*; next was Wolterstorff's *Universals*. The original colloquists were Wolterstorff, Orlebeke, DeVos and myself; Evan Runner did not participate, and Tunis Prins, then in his fifties, came to a few of the early meetings but soon found the rest of us, a generation or so younger, a bit unduly earnest. In one session, for example, I outlined several versions of the Verifiability Criterion of Meaning — VC_1 to VC_7, perhaps, pointing out that each was either so narrow as to exclude as meaningless much that the positivists themselves took to be perfectly meaningful, or so broad as to exclude nothing whatever — not even Heidegger's oracular claim that the Not nothings Itself. Prins listened somewhat impatiently to the technical details. Finally he turned to me and said "You want to integrate Christianity and philosophy, right? Well, here's how you do it. After going through all these versions of the Verifiability Criterion, you tell your class, 'So, as it says in Psalms 13, v. 1–3, "There is none that doeth good; no, not one." ' "

Perhaps we *were* unduly earnest. In any event our discussions were typically painstaking and rigorous and sometimes very slow; we have often spent, say, five two hour sessions on a fifteen page piece. There was a good deal of wasted motion and lost time; but on the whole the results have been invaluable. Most of the publications by Calvin philosophers over the past fifteen years have been subjected to this close communal scrutiny; each I think, has emerged much stronger than it would otherwise have been. Among the most penetrating and helpful colloquiasts, over the years, have been de Vos, Wolterstorff, Del Ratzsch and Kenneth Konyndyk, presently the chairman of the Calvin philosophy department. And over the years I suppose I've learned the most from Wolterstorff. Our association goes back to our undergraduate days at Calvin in the early 50's; and when I came to Calvin as a faculty member in 1963, he was already there, having moved to Calvin after a couple of years of teaching at Yale. He and I have discussed philosophy regularly and often — in our Tuesday sessions and out of them — and in 1979–80 he and I (along with George Mavrodes, William Alston, David Holwerda, George Marsden, Ronald Feenstra and Michael Hakkenberg) were fellows in the Calvin Center for Christian Scholarship. I was impressed then, as before, with Wolterstorff's fertility of mind and imagination, and the ease and rapidity with which he can master a new and difficult topic. Much of my

work bears the imprint of his influence. In particular he has often pointed out significant alternatives to positions I was incautiously inclined to take and interpretations I was too quickly inclined to make.

A second attractive feature of academic life at Calvin — as, perhaps, at any medium size college — is the opportunity to make friends in other disciplines. If you have a question — about tachyons, or early Western Michigan settlers, or what the course of German history would have been like, had Hitler's father been aborted by his embarrassed and unwed mother and Hitler himself never been born — you always know someone to ask. The last five years or so Konyndyk and I have met fairly regularly with Thomas Jager and Paul J. Zwier from the mathematics department to study and discuss logic. After finishing *God and Other Minds*, I wanted to explore the suggestion that for each of us, the idea that there are other persons is or relevantly resembles a scientific hypothesis. To that end it seemed only fair that I should try to learn at least something about a couple of paradigmatically scientific theories. I chose physics, in particular relativity theory and quantum mechanics. Since I had studied little mathematics in college, I had a good deal to learn. I wanted to master about as much mathematics as a college major in the subject; I therefore explained to Paul Zwier just what I knew of mathematics and asked him about where I fit into the major program. "Somewhere before the beginning" came the gleeful reply. So I brushed up on algebra and analytic geometry and began attending the two year calculus and differential equations sequence; afterwards I did some linear algebra, modern algebra, and attended Zwier's course in complex analysis. At the same time I attended physics courses: first year college physics and then Mechanics and finally Modern Physics. The mathematics went well, as did much of the physics. Quantum mechanics, on the other hand, has remained a mystery to me; I was never able to make real sense of the subject. It was therefore heartening a bit later on to meet a couple of eminent physicists who said *they* really couldn't make sense of it either.

Perhaps my happiest association, over the years, has been with my friend Paul Zwier. We have carried on a thousand discussions and arguments — many of them, I regret to say, wholly frivolous — on topics in mathematics, physics, philosophy and theology. These discussions have taken place at basketball games, on the slopes of mountains, in boats, and while jogging, as well as in more orthodox locations. I have learned much from him about set theory, probability theory, the mathematics of quantum mechanics, the four color problem, Hilbert's program, the history of mathematics, and much else besides. And it has always been an especially great pleasure to best him soundly in tennis.

Now, between the first and second drafts of this intellectual autobiography, I find myself committed to leaving Calvin for the University of Notre Dame. If anything, this has occasioned even more surprise among my friends than my decision nearly twenty years ago to leave Wayne for Calvin. But once again the reasons are straightforward. First, my most successful teaching, I think, has been at the graduate level. (I confess this to my shame; the true test of a pedagogue is the ability to teach a good first course, a test I can't claim to have passed.) Calvin has no graduate students, although I have taught graduate seminars, during my stay there, at various other institutions.[4] At Notre Dame, most of my students will be graduate students. Second and more important, at Notre Dame, paradoxically enough, there is a large concentration of orthodox or conservative Protestant graduate students in philosophy — the largest concentration in the United States and for all I know the largest concentration in the world. During my 19 years at Calvin perhaps my central concern has been with the question how best to be a Christian in philosophy; and during that time my colleagues and I have learned at least something about that topic. I hope to be able to pass on some of what we've learned to the students at Notre Dame. And thirdly I am eager to take part in the building of a graduate department of philosophy that is both first rate and Christian. I find the prospect of leaving Calvin disturbing and in fact genuinely painful. At the same time I'm looking forward to Notre Dame with excitement and enthusiasm.

3. Research and Writing

So much for my background, education and fundamental intellectual influences. One of my chief interests has been in philosophical theology and in apologetics: the attempt to defend Christianity (or more broadly, theism) against the various sorts of attacks brought against it. Christian apologetics, of course, has a long history, going back at least to the Patristics of the second century A.D.; perhaps the main function of apologetics is to show that from a philosophical point of view, Christians and other theists have nothing whatever for which to apologize. My interest in apologetics has not been merely academic. I can't remember a time when I wasn't a Christian, and can scarcely remember a time when I wasn't aware of and interested in objections to Christianity and arguments against it. Christianity, for me, has always involved a substantial intellectual element. I can't claim to have had a great deal by way of unusual religious experience, although on a few occasions I have had a profound sense of God's presence; but for nearly my

entire life I have been convinced of the *truth* of Christianity . Of course the contemporary world contains much that is hostile to Christian faith: according to much of the intellectual establishment of the Western World, Christianity is intellectually bankrupt, not worthy of a rational person's credence. Many of these claims strike me as merely fatuous — the claim, for example, that "man come of age" can no longer accept supernaturalism, or Rudolph Bultmann's quaint suggestion that traditional Christian belief is impossible in this age of "electric light and the wireless." [5] (One can imagine an earlier village skeptic taking a similar view of, say, the tallow candle and the printing press.) Three sorts of considerations, however, have troubled me, with respect to belief in God, and have been a source of genuine perplexity: the existence of certain kinds of evil, the fact that many people for whom I have deep respect do not accept belief in God, and the fact that it is difficult to find much by way of noncircular argument or evidence for the existence of God. The last, I think, is least impressive and no longer disturbed me after I had worked out the main line of argument of *God and Other Minds*. The second has remained mildly disquieting; its force is mitigated, however, by the fact that there are many issues of profound importance — profound *practical* as well as theoretical importance — where such disagreement abounds.

But the first remains deeply baffling. Evil comes in many kinds; and some are particularly perplexing. A young man of twenty-five, in the flood tide of vigor and full of bright promise, is killed in a senseless accident; a radiant young wife and mother, loved and needed by her family, is attacked by a deadly cancer; a sparkling and lovely child is struck down by leukemia and dies a painful and lingering death: what could be the point of these things? Why does God permit them? There is also the sheer *extent* of suffering and evil in the world. Hume's catalogue of evils in Pt. X of his *Dialogues concerning Natural Religion* is no doubt hyperbolic; nevertheless the world contains a staggering amount of evil. There are earthquakes, famines, deadly diseases. Even more disturbing is the evil resulting from human error, hatred and wrong doing. In one extended battle during the Chinese Civil War, 6,000,000 people were killed. There are Hitler and Stalin and Pol Pot and a thousand lesser villains. Why does God permit so *much* evil in his world?

Sometimes evil displays a cruelly ironic twist. I recall a story in the local paper a few years ago about a man who drove a cement mixer truck. He came home one day for lunch; his three year old daughter was playing in the yard, and after lunch, when he jumped into his truck and backed out, he failed to notice that she was playing behind it; she was killed beneath the great dual wheels. One can imagine this man's broken-hearted anguish. And if he was

a believer in God, he may have become furiously angry with God — who after all, could have forestalled this calamity in a thousand different ways. So why *didn't* he? And sometimes we get a sense of the demonic — of evil naked and pure. Those with power over others may derive great pleasure from devising exquisite tortures for their victims: a woman in a Nazi concentration camp is forced to choose which of her children shall be sent to the ovens and which preserved. Why does God permit all this evil, and evil of these horrifying kinds, in his world? How can they be seen as fitting in with his loving and providential care for his creatures?

The Christian must concede he doesn't know. That is, he doesn't know in any detail. On a quite general level, he may know that God permits evil because he can achieve a world he sees as better by permitting evil than by preventing it; and what God sees as better is, of course, better. But we cannot see *why* our world, with all its ills, would be better than others we think we can imagine, or *what*, in any detail, is God's reason for permitting a given specific and appalling evil. Not only can we not see this, we can't think of any very good possibilities. And here I must say that most attempts to explain *why* God permits evil — *theodicies*, as we may call them — strike me as tepid, shallow and ultimately frivolous. Does evil provide us with an opportunity for spiritual growth, so that this world can be seen as a vale of soul-making? Perhaps *some* evils can be seen this way; but much leads not to growth but to apparent spiritual disaster. Is it suggested that the existence of evil provides the opportunity for such goods as the development and display of mercy, sympathy, self-sacrifice in the service of others? Again, no doubt some evil can be seen this way; and surely the bright and splendid life of a Mother Teresa is far more glorious, far more worthy of acclamation and applause, than all the great deeds of those whom we hail as the world's leaders. But much evil seems to elicit cruelty rather than sacrificial love. And neither of these suggestions, I think, takes with sufficient seriousness the sheer hideousness of some of the evils we see.

A Christian must therefore admit that he doesn't know why God permits the evils this world displays. This can be deeply perplexing, and deeply disturbing. It can lead a believer to take towards God an attitude he himself deplores; it can tempt him to be angry with God, to mistrust God, to adopt an attitude of bitterness and rebellion. No doubt there isn't any logical incompatibility between God's power and knowledge and goodness, on the one hand, and the existence of the evils we see on the other; and no doubt the latter doesn't provide a good probabilistic argument against the former. No doubt; but this is cold and abstract comfort when faced with

the shocking concreteness of a particularly appalling exemplification of evil.

What the believer in the grip of this sort of spiritual perplexity needs, of course, is not philosophy, but religious counsel. There is much to be said here and it is neither my place nor within my competence to say it. I should like, however, to mention one point that I believe is of special significance. As the Christian sees things, God does not stand idly by, coolly observing the suffering of his creatures. He enters into and shares our suffering. He endures the anguish of seeing his son, the second person of the Trinity, consigned to the bitterly cruel and shameful death of the cross. Some theologians claim that God cannot suffer. I believe they are wrong. God's capacity for suffering, I believe, is proportional to his greatness; it exceeds our capacity for suffering in the same measure as his capacity for knowledge exceeds ours. Christ was prepared to endure the agonies of hell itself; and God, the Lord of the universe, was prepared to endure the suffering consequent upon his son's humiliation and death. He was prepared to accept this suffering in order to overcome sin, and death, and the evils that afflict our world, and to confer on us a life more glorious than we can imagine. So we don't know why God permits evil; we do know, however, that he was prepared to suffer on our behalf, to accept suffering of which we can form no conception.

The chief difference between Christianity and the other theistic religions lies just here: the God of Christianity is willing to enter into and share the sufferings of his creatures, in order to redeem them and his world. Of course this doesn't answer the question *why does God permit evil*? But it helps the Christian trust God as a loving father, no matter what ills befall him. Otherwise it would be easy to see God as remote and detached, permitting all these evils, himself untouched, in order to achieve ends that are no doubt exalted but have little to do with us, and little power to assuage our griefs. It would be easy to see him as cold and unfeeling — or if loving, then such that his love for us has little to do with our perception of our own welfare. But God, as Christians see him, is neither remote nor detached. His aims and goals may be beyond our ken and may require our suffering; but he is himself prepared to accept greater suffering in the pursuit of those ends. In this regard Christianity contains a resource for dealing with this existential problem of evil — a resource denied the other theistic religions.

A. *The Problem of Evil*

A Christian or other theist, therefore, may find that evil presents him with a problem: the problem of maintaining an attitude of love and trust towards

God in the face of the evil his own life or the world at large may contain. But this problem — a pastoral or religious or existential problem — is not what usually goes under the rubric 'the problem of evil'. The latter has to do instead with arguments for the nonexistence of God or — what is quite another matter — for the irrationality or impropriety of believing that there is such a person as God. It is these arguments — 'atheological arguments' as we might call them — in which I've been interested. Going all the way back to Epicurus, philosophers have held that the existence of evil (or of the amounts and varieties of evil we do in fact find) furnishes the premises for a cogent atheological argument. Until recently, nearly all philosophers who held this view endorsed a *deductive* version of the atheological argument from evil: they claimed that there are true propositions about evil — propositions conceded to be true by the theist himself — that entail that there is no God, or at any rate no God as conceived by classical theism. The simplest and most popular version of this claim is that theism is inconsistent, in some sense, and is hence irrational.[6] Thus, for example, J. L. Mackie:

I think, however, that a more telling criticism (of theism) can be made by way of the traditional problem of evil. Here it can be shown, not that religious beliefs lack rational support, but that they are positively irrational, that the several parts of the essential theological doctrine are inconsistent with one another.[7]

Here we must note that there are at least two claims invoved: (a) theism in some sense is inconsistent, and (b) theism is irrational. Now of course the term 'irrational' bears a good deal of looking into; but initially, at any rate, (a) and (b) are quite different claims. For it is possible that a view or position be necessarily false but nonetheless entirely rational. Consider an analogy. Suppose the fact is nominalists are mistaken and there exist properties, sets, numbers, possible worlds, propositions, the whole lot. Suppose, furthermore, that this is a necessary truth: it is necessary that there be such things as the number 17 and the proposition *there are prime numbers greater than 17*. It by no means follows that the nominalist is irrational. Indeed, it could be that nominalism was the rational position and realism irrational even though realism is necessarily true and nominalism necessarily false. For it could be both that realism is necessarily true and that there are unimpeachable arguments from powerful intuitions for nominalism, with nothing similar for realism. So (a) and (b) are quite distinct claims. Nevertheless to show that (a) is true or to provide a strong argument for it would be a step towards showing that (b) was true; at any rate, anyone who was apprised of a demonstration or good argument for

(a) (and accepted it as a good argument for (a)) would have a strong reason for rejecting theism.

My first problem was that most of the atheologians seldom bothered to state their claims with any precision; they simply declared that there was an incompatibility or contradiction between

(1)   God exists and is omniscient, omnipotent and wholly good

and

(2)   There is evil

and left it at that. It is obvious initially, however, that (1) and (2) aren't explicitly contradictory; neither is the denial of the other. It is also clear that they aren't logically contradictory — i.e., inconsistent in first order logic; clearly enough one can give a model — in the natural numbers, if you like — in which they both come out true.[8] It is thus trivially easy to show that (1) is consistent with (2) in the same sense in which, say, the denial of Euclid's Fifth Postulate is consistent with the other postulates, or in which each of the Continuum Hypothesis and its denial is consistent with the axioms of Zermelo-Frankel set theory. So there isn't any explicit or logical contradiction here; what, then, did the atheologian have in mind when he claimed that (1) and (2) are inconsistent?

Presumably what he meant (or would have meant on further reflection) is that the denial of the conjunction of (1) and (2) is necessary in the broadly logical sense, so that there is a necessary proposition — necessary in the broadly logical sense — whose conjunction with (1) and (2) is inconsistent in first order logic. Most of the atheologians hadn't seemed to notice that their position required the provision of such a proposition. The exception was John Mackie, whose piece 'Evil and Omnipotence' (*Mind*, 1955) was perhaps the clearest and most explicit development of the atheological claim. Mackie did notice that

the contradiction does not arise immediately; to show it we need some additional premises, or perhaps some quasi-logical rules connecting the terms 'good,' 'evil,' and 'omnipotent'. These additional premises are that good is opposed to evil, in such a way that a good thing always eliminates evil as far as it can, and that there are no limits to what an omnipotent thing can do (200–201).

These "additional premises", of course, had either to be necessarily true, if the aim was to show that (1) and (2) are inconsistent, or essential to

theism, in which case some wider set of propositions accepted by the theist would be broadly inconsistent. In *God and Other Minds*, what I said was that the atheologian needs to provide a proposition that meets two conditions: (a) its conjunction with (1) and (2) is inconsistent in first-order logic, and (b) it is either necessarily true, or essential to theism, or a logical consequence of such propositions. (It was clear that the pair Mackie suggested didn't meet either condition, and in fact it is extremely difficult to find any propositions that are at all plausibly thought to meet these conditions.)

But the fact is the atheologian bent on *showing* that theism is inconsistent must do *more* than simply exhibit a proposition (supposing that in fact there were one) that meets conditions (a) and (b) above. Suppose realism is necessarily true and nominalism necessarily false; and suppose the realist proposes to argue his case by putting forward

(3)   If nominalism is true, then nominalism is false

as a proposition that meets (a) and (b) — that is, is necessarily true and in conjunction with nominalism logically entails an explicit contradiction. If realism is in fact necessarily true, then (3) meets the conditions in question; but of course this doesn't by any stretch of the imagination put the nominalist out of business. Suppose Bertrand Russell had not given the argument he did give for the thesis that Frege's set theory is inconsistent; suppose instead he had simply announced that

(4)   If Frege's axioms (1)–(5) are true, then 0 = 1

is necessarily true, and in conjunction with Frege's axioms (1)–(5) logically entails an absurdity: then he would have told the truth but shown nothing at all. What is needed in this kind of context is not simply the provision of a proposition that in fact meets these conditions, but one such that there is good reason to think that it does, and the good reason must be such that the person under attack ought, somehow, to be able to see that it *is* a good reason, at any rate once it is called to her attention. It must have some sort of *claim* on her.

The same holds with respect to the atheological argument from evil. To accomplish his project, the atheologian must do more than simply provide a necessary proposition that in conjunction with theism logically entails an explicit contradiction. Indeed, he doesn't succeed in his project just by virtue of providing a proposition that meets the conditions in question and is furthermore such that he *justifiably believes* (is within his intellectual rights in believing) that it meets them. Return to the nominalist case; suppose

realism is necessarily true and that the realist is within his rights in believing that it is. Then, no doubt, he will be within his rights in believing that (3) meets the conditions in question. But of course it wouldn't follow that he had shown that nominalism is necessarily false; nor would it follow either that he had shown that the nominalist is irrational, or that in fact the nominalist *is* irrational. For even if the realist is within his rights in believing that realism is necessarily true, the nominalist may be within *his* rights in believing nominalism is true.

Similarly then, for the atheologian: to show that (1) and (2) are inconsistent (and that theism is consequently irrational) he must come up with a proposition that meets conditions (a) and (b) and also meets another condition hard to state with any exactness. Perhaps we can make a try as follows. What he must find, I think, is a proposition such that a person who didn't take it to be necessary (after sufficient thought and reflection) would thereby reveal either that he didn't understand the proposition or that he is in some way intellectually deficient. Perhaps his intellect is clouded by passion or wishful thinking; perhaps he isn't thinking straight, being crazed by strong drink; perhaps in some other way he isn't doing as well as can be expected of a normal, well-disposed human being. And of course the atheologian hasn't even made a decent first step in *this* project. Nothing any atheologian has ever produced along these lines has shown even the slightest promise of meeting this standard. And yet this is the standard he must meet if he really means to show that theistic belief is inconsistent and in consequence irrational.

Of course there is another, weaker project lurking in the neighborhood; instead of trying to show that the theist is irrational — that his belief is somehow unreasonable or contrary to reason or such that it wouldn't be held by someone who is thinking straight — the atheologian might try to find a proposition which is inconsistent with the conjunction of (1) and (2) and is *plausibly supposed* to be necessarily true. If he could find such a proposition and if he did himself think that it *was* necessarily true, then perhaps *he* would have a reason for thinking (1) and (2) inconsistent. But of course it wouldn't follow that the theist was in some kind of difficulty here, or that his views were somehow defective. In *God and Other Minds* I didn't clearly distinguish these two projects; but what I was in fact arguing is that even this weaker project is extremely difficult and that no atheologian has given us even the slightest reason to think it can be done.

My first project, then, was to explore the ways in which the atheologian might argue that (1) and (2) are incompatible, and to point out that this

is enormously more difficult than the atheologians seemed to suppose. But I next began to wonder if there wasn't something stronger that could be done here — some way of arguing that the (1) and (2) are in fact consistent. In this connection I began thinking about the Free Will Defense. The central idea of the Free Will Defense is simplicity itself and has occurred to nearly every thoughtful theist (by the time I was seventeen I had devoted a fair amount of thought to it). This idea is as follows: It is possible that God (who is omnipotent, omniscient and wholly good) thought it good that there be significantly free creatures — creatures free with respect to morally significant actions — but wasn't able to create such creatures in such a way that they always exercise their freedom to do good; for if he *causes* them always to do only what is right, then they don't do what is right *freely*. If so, then it is possible that there be evil even though God is omniscient, omnipotent and wholly good. In 'The Free Will Defense', the first piece I wrote on the problem of evil, my project was to refine and clarify these intuitions and to give rigorous and explicit statement to the argument they suggest for the consistency of (1) with (2).

I knew in a vague sort of way that theistic thinkers had appealed to free will in responding to the problem of evil, but I had never come across an explicit free will defense. In fact they aren't easy to find. Augustine sometimes seems to give something like a free will defense; there are passages in which it is reasonably plausible to interpret him as holding that it wasn't within God's power, despite his omnipotence, to create free creatures and also cause them to exercise their freedom in such a way that they do only what is right. Augustine isn't entirely clear on this matter, however. He also displays a considerable list towards theological determinism, and towards theological compatibilism: the view that human freedom and divine determinism are compatible.

In any event, I first encountered the Free Will Defense not in the work of theistic apologists but in the writings of such atheologians as Anthony Flew and John Mackie. In fact the name 'Free Will Defense' was first used, as far as I know, by Flew;[9] at least that is where I first came across it. It seemed initially obvious to me that the protagonists to this dispute weren't nearly clear enough as to the logical structure of the debate: in particular they were confused about what a *defense* should be expected to do.

In Flew's piece, for example, the question is clearly whether the existence of the evil the world contains is *logically compatible* with the existence of an omnipotent, omniscient and wholly good God. He begins his piece by quoting John Stuart Mill's reference to "the impossible problem of reconciling

infinite benevolence and justice with infinite power in the Creator of such a world as this." (Mill goes on to complain a bit peevishly that "The attempt to do so not only involves absolute contradiction in an intellectual point of view but exhibits to excess the revolting spectacle of a jesuitical defence of moral enormities."[10]) But in considering the Free Will Defense with respect to this claim of inconsistency, the first point Flew tries to make is that "by no means all of the evil in the world can be traced back to an origin in human wickedness, nor shown to make possible any higher order goods. The obvious and least disputable example is animal pain before the emergence of *homo sapiens*" (p. 146). If the question is one of *consistency*, however, this response is entirely beside the point. The Free Will Defender need neither claim nor believe that all the evil in the world is in fact a result of the misuse of free will on the part of God's creatures; all he needs to claim is that this state of affairs is *possible* in the broadly logical sense.

There are at least two quite different projects the theist can undertake with respect to the existence of evil. The first is to give a *theodicy*: to answer in some detail the question "what is the source of the evil we find, and why does God permit it?" This question, as I said above, is extremely difficult, and as far as I know no one has told us the answer. The other project is to give a *defense* — an argument for the proposition that (1) and (2) are in fact consistent in the broadly logical sense. This is a vastly less formidable undertaking. Since, as it seemed to me, the protagonists to the debate kept confusing these two projects, I set out to try to disentangle them and to state the Free-Will Defense as a *defense* against the charge of contradiction. Once that charge had been disposed of, there would be time to go on to some of the other complaints of the atheologian — that, for example, the theist has no very good account of the origin of evil, or of God's reasons for permitting it, or that the existence of the amount and kinds of evil we find in the world makes it unlikely or improbable that there is an omnipotent, omniscient and wholly good God.

My first aim was to try to get straight the logical nature of a defense. If A accuses B of contradicting himself in asserting both P and Q, what sort of recourse does B have? What sorts of arguments are available for the claim that P and Q are in fact consistent? One answer is provided by a simple theorem of modal logic:

(5) $\quad (\Diamond(P \& R) \& ((P \& R) \to Q) \to \Diamond(P \& Q)$.

One way to show that P and Q are consistent is to find some other proposition R such that P and R are consistent, and such that P and R together

entail Q. This is just a special case of a more general method: find a possible state of affairs such that if it were actual, then P and Q would both be true. Now it is important to see that R need not be true, or probable, or plausible, or accepted by the scientists of our culture circle, or congenial to "man come of age," or anything of the sort: it need only to be such that its conjunction with P is possible and entails Q. R can do its job perfectly well even if it is extraordinarily improbable or known to be false.

. This point has proven hard to communicate. The Free Will Defense as I developed it involved the existence of Satan and his cohorts — malevolent nonhuman persons who are responsible for some of the evil the world contains. Many philosophers (both in and out of print) have complained that it is extremely implausible, in our enlightened day and age, to suppose that there is any such thing as Satan, let alone his cohorts. Plausibility, of course, is in the ear of the hearer, and even in our enlightened times there are plenty of people who think both that there are non-human free creatures and that they are responsible for some of the evil the world contains. Furthermore, whether or not one finds the view in question plausible or implausible will of course depend on what *else* one believes; the theist already believes in the existence of at least one free non-human person who is active in history: God. Accordingly, the suggestion that there are other such persons — that human beings aren't the only sorts of persons God has created — may not seem at all implausible to him. It certainly doesn't seem particularly implausible to *me*, and the disdain with which it is met in some quarters seems to me to tell more about those quarters than about the suggestion. Flew, for example, scornfully comments as follows: "To make this more than just another desperate *ad hoc* expedient of apologetic it is necessary to produce independent reason for launching such an hypothesis (if 'hypothesis' is not too flattering a term for it)".

But this is an error. R doesn't have to be plausible, and we don't have to have any evidence for it, independent or otherwise. Since this point has proven unduly unappreciated, let me belabor it a bit. Suppose you have a bright but impetuous student who has been reading epistemology and become enamored of various "High Accessibility" principles. In particular, he embraces this claim: if a person is rationally justified at a time t in believing a proposition p, then he *knows*, at t, that he is rationally justified in believing p. You remonstrate with him as follows: first, you observe that

P   In 1879, W. K. Clifford was justified in believing that ship owners should not send their ships to sea without checking their seaworthiness

is consistent with

R   In 1879, W. K. Clifford had never thought about epistemology and had not acquired the concept of rational justification, so that he didn't believe that he was rationally justified in believing that ship owners ought not to send their ships to sea without checking their seaworthiness.

Next, you point out that P and R together entail

Q   In 1879, W. K. Clifford did not know that he was rationally justified in believing that ship owners ought not to send their ships to sea without checking their seaworthiness.

"If so," you conclude (perhaps a bit pedantically), "P and Q are consistent, so that your principle isn't true." Now suppose your student responds as follows: "Look," he says, "this is ridiculous! By 1879 Clifford had been lecturing and writing about epistemology for years. In fact in 1879 he published his *Lectures and Essays*, containing that famous piece 'The Ethics of Belief'. How could he have done that, if he had never thought about epistemology and hadn't so much as acquired the concept of rational justifiability? Your R is utterly implausible. No informed person could believe it."

Of course he's right; R *is* utterly implausible. But that fact has nothing to do with the question whether it properly serves its function. In the same way, the plausibility or lack thereof of the Free-Will Defender's R has nothing to do with the question of the success of the Free-Will Defense. Some people seem to think that if you employ an implausible R, then somehow you are committed to it: they seem to think that your claim — that P and Q are jointly consistent — is no more plausible than the R you use to establish it. But that is a confusion.

Of course plausibility has much to do with *other* projects lurking in the neighborhood. One might, for example, try to *explain* the existence of evil, or of nonmoral evil, from the theistic perspective; one might try to explain why it is that God permits the various sorts of evil we do in fact find. Here questions of plausibility are indeed relevant; a good explanation will neither be unduly improbable nor unduly implausible.

Again, one might propose to argue that the conjunction of (1) with (2)

is not improbable with respect to some such relevant body of information as "what we all know" (or "what science has shown" or what 20th century Westerners believe) by finding an R whose conjunction with (1) is not improbable and entails (2); then, of course, questions of probability will also be relevant. But if your aim is just to show that (1) and (2) are compatible in the broadly logical sense, these considerations do not arise.

A second comment: the Free Will Defense obviously presupposes a libertarian or incompatibilist conception of freedom. If freedom were compatible with causal determinism, then God could have his cake and eat it too: he could create significantly free persons and cause them always to do only what's right. A crucial contention of the Free Will Defense is that it is not within God's power (because it is not possible) to cause to be actual such states of affairs as *Eve's freely refraining from taking the apple*. Many philosophers endorse a compatibilist analysis of freedom, according to which it is perfectly possible that some of my actions be free, even though all of them are causally determined by causal chains extending back to events entirely outside my control. And of course if compatibilism is correct, the Free Will Defense fails. In *God and Other Minds* I proposed to handle this matter as follows. Suppose we concede for purposes of argument that compatibilism is correct: our conception of freedom is in fact such that freedom and causal determinism are compatible. Let's suppose it is possible both that I be free with respect to some action and that it be determined by causal laws and antecedent conditions outside my control. Then we can easily construct a new concept of freedom: call it 'freedom*'. A person is free* with respect to a given action if and only if he is free (i.e., free in the ordinary sense) with respect to that action and furthermore that action is not causally determined with respect to him. Then the Free Will Defender can proceed as before, substituting freedom* throughout for freedom *simpliciter*. And of course it is obvious that a person could not be free* with respect to an action that he was caused to perform by God; and equally obvious that God could not create persons who were free* with respect to morally significant actions and then cause them to go right with respect to those actions.

I now think this way with the difficulty is too short. A crucial part of the free will defense is the contention that it is possible that a wholly good God consider it valuable that there be moral good — good, that is, that results from the moral activity of free creatures freely doing what is right — and is willing to put up with evil in order to achieve this end. The claim is that there is a degree or amount of moral good such that it is possible that God, who is wholly good, would prefer a universe that contained that much moral good

and some suffering and evil, to a universe that contained neither the moral good nor the evil. (As I pointed out above, on the Christian view of the matter, there is a degree of good such that in order to achieve it God was prepared not only to put up with suffering and evil in his universe, he was prepared to suffer himself, and to subject his son, the second person of the trinity, to what the Heidelberg Catechism calls "inexpressible anguish, pains, terrors, and hellish agony".) And this supposition certainly seems plausible. But what seems plausible is that God should think it valuable that there be free creatures who freely do what is right — where, of course, 'free' has its *ordinary* signification. If we redefine the term 'free', then it might turn out that it wasn't at all plausible to hold that God would greatly value good resulting from the 'free' (in the redefined sense) actions of creatures.

In fact it might turn out to be impossible that there be free creatures in the new sense. And this is just what the canny compatibilist should maintain about my 'free*'. He should maintain, not merely that freedom is compatible with determinism, but that the former *entails* the latter. He should hold that the proposition *S is free with respect to A* entails that *S* is causally determined with respect to *A* — that there are causal laws and antecedent conditions that together entail either that *S* performs *A* or that *S* does not perform *A*.[11] And perhaps he could back up this claim by insisting that if *S* is not thus determined with respect to *A*, then, necessarily, it is merely a matter of *chance* that *S* does *A*, in which case either *S* doesn't really do *A* (*A* is instead something that happens to him), or at any rate *S* doesn't do *A* freely. If he were right on this score, then it wouldn't be possible that there be free* actions or agents; in which case, obviously, The Free Will Defender couldn't usefully employ the notion. (Alternatively, the Compatibilist might hold that it's being a mere matter of chance that *S* do *A* is incompatible, not with *S*'s performing *A*, but with *S*'s being *responsible* for performing *A*, so that it becomes implausible to think it possible that God should especially value good resulting from free* actions.)

Now I don't think these contentions come to much; but they do show that one can't dispose of the compatibilist challenge to the free will defense as easily as I supposed. The focus of discussion, clearly, must be on the compatibilist claim that if an action isn't causally determined with respect to a given person, then it is a matter of mere chance that he performs it. There isn't space for a proper investigation of this notion here; but in brief my answer would go along the following lines. Presumably the objector means to hold that it is a characteristic of actions generally, not just of human actions, that if they are not causally determined with respect to their

agents, then it is a matter of chance that the agent in question perform the action in question; and presumably he will hold that this is a necessary, not a contingent truth. But I find this wholly incredible. God, for example, performs free actions; and surely it is not the case that he is causally constrained to perform the actions he does. Of course an appeal to what God does and doesn't do may not move the atheologian; but presumably he will concede that it is *possible* that there exist a being answering to the theistic conception of God as a person who freely performs and is responsible for actions with respect to which he is not causally determined. And if he insists that the theistic conception is impossible just *because* it involves the idea of a person who is free but not causally determined, then his real quarrel with theism is not that God's existence is incompatible with that of evil; it is instead that God's existence is impossible *simpliciter*. The fundamental question here is the viability of the concept of a person as an ultimate source of action; what is at stake here, fundamentally, is the conception of agent causation. I think that conception is entirely viable and is in fact part of the notion of personhood. Furthermore agent causation, I think, is conceptually prior to event causation in that the latter can be understood only in terms of the former. I can't, however, argue these points here.

The central insight of the Free Will Defense is that while there may be many possible worlds that display a better balance of good and evil than does the actual world, it is possible that it was not within the power of God to actualize any of them — even though he is omnipotent.[12] No doubt, for all we know, there are possible worlds in which there exist significantly free creatures — creatures free with respect to morally significant actions — all of whom always do only what it right. It is possible however, that God, even though he is omnipotent, could not have brought any of these possible worlds into actuality; it is possible that it was not within his power to do so. But then there must be possible worlds such that it was possibly not within the power of God to bring them into actuality — even though he is omnipotent. The heart of the Free Will Defense is the argument that this is indeed so. In *God and Other Minds* I tried to carry out the argument in terms of the idea of *possible persons* — possibly exemplified sets of properties including the property of being a person. What I did there, I think, is substantially correct, although not as explicit and penetrating as it should be. In *The Nature of Necessity* I approached the matter from the point of view of some ideas about possible worlds and essences — ideas that arose in quite other contexts but proved useful for the statement of the free will defense.

The free will defender, therefore, claims that even though God is omnipotent, there are possible worlds he could not have actualized. But how shall we understand 'actualize' here? As we have seen, God cannot cause to be actual such states of affairs as *Eve's freely refraining from taking the apple* — states of affairs, that is, that involve some creature's freely taking or refraining from some action. But if he cannot cause that state of affairs to be actual, then he cannot cause to be actual any conjunctive state of affairs of which it is a conjunct. More generally, say that a state of affairs *S* *includes* a state of affairs *S** if and only if it is impossible that *S* be actual and *S** not be actual — if and only if, that is, the state of affairs *S and not-S** is impossible: then if it is not within the power of God to cause a (contingent) state of affairs *S* to be actual, it will not be within his power to cause to be actual any state of affairs that includes *S*. It is then obvious that there are plenty of possible worlds such that it was not within the power of God to cause them to be actual: all those possible worlds that include a state of affairs consisting in some creature's freely performing an action. So if we use 'actualize' to mean 'cause to be actual', then it is clear that it was not within his power to actualize a possible world that contains moral good but no moral evil — because it is not within his power to actualize a world containing moral good.

Of course this fact should not be sufficient to induce the atheologian to fold up his tent and silently slink away. For the intuitive question here, as he will be quick to point out, is just whether *in some way or other* God could have brought about a world that contained moral good but no moral evil; it is not necessary that he be able to *cause* such a world to be actual. And what the Free Will Defender needs to play the role of *R* (above, p. 42) is a proposition to the effect that there wasn't any way at all in which God could have brought about such a world. Hence he cannot content himself with pointing out the obvious fact that there are possible worlds God could not have *caused* to be actual. Furthermore, the atheologican continues, in bringing about a state of affairs *S* — an entire possible world, perhaps, or or some smaller state of affairs — God is not limited to causing *S* to be actual. It isn't possible that God cause to be actual *Eve's freely refraining from taking the apple*; but perhaps something else nearly as good is possible. For there are *counterfactuals of freedom*: counterfactuals of the sort *if Eve had been free with respect to the action of taking the apple and condition C obtained, then she would have freely refrained from taking it*. Suppose this counterfactual is true. It was within the power of God to cause Eve to be free with respect to the action of taking the apple; if it was within his power

to do this and also to cause *C* to obtain, then there was indeed something he could have done to bring it about that Eve freely refrain from taking the apple: cause her to be free with respect to that action and cause *C* to be actual.

The atheologian thus appeals to the idea of counterfactuals of freedom in order to argue that there is something God could have done to bring it about that Eve freely reject the apple. More generally, in this way he claims that for every possible world *W* (at least for every possible world that includes his own existence) there is something God could have done to bring about its actuality. To simplify matters, let's adopt the following definitions. Let us say that God *strongly* actualizes a state of affairs *S* if and only if he causes *S* to be actual and causes to be actual every contingent state of affairs *S** such that *S* includes *S**; and let's say that God *weakly* actualizes a state of affairs *S* if and only if he strongly actualizes a state of affairs *S** that counterfactually implies *S*. (Strong actualization is thus a special case of weak actualization.) Then God could have weakly actualized a state of affairs *S* if and only if there is a state of affairs *S** such that (1) it was within his power to strongly actualize *S**, and (2) if he had strongly actualized *S**, then *S* would have been actual. Then the atheological contention is that each possible world is such that it was within God's power to weakly actualize it; and the Free Will Defender must show both that there are some possible worlds God could not have weakly actualized, and that it is possible that among them are all the worlds containing moral good but no moral evil.

At the 1971 Eastern Division meetings of the American Philosophical Association I gave a version of the Free Will Defense that explicitly conceded what I have been representing as the atheologian's contention: that there are counterfactuals of freedom (or, what comes to the same thing, that counterfactuals of freedom have a determinate truth value); in particular, there are counterfactuals of the sort

(7)   If God had strongly actualized *S*, then *W* would have been actual

where *S* is a state of affairs such that it is possible that God strongly actualize it and where *W* is a possible world including creaturely free actions. This contention, I think, is not implausible. (It is also hard to see how the atheologian can dispense with it. How can God be reproached for not having created a better world if there is no state of affairs he could have strongly actualized such that if he had, a world containing moral good but no moral evil, say, would have been actual?)

The argument I gave, however, was unsound; David Lewis (who was then

writing his *Counterfactuals*) quite correctly pointed out that it presupposed that the counterfactual connective is transitive. (My making this error was particularly galling when I remembered, a bit later, that much earlier at Wayne I had seen that the counterfactual connective is not transitive and had filed away some examples to prove it.) My efforts at repair resulted in the argument as found in chapter IX of *The Nature of Necessity*.

At a Council for Philosophical Studies Summer Institute (held at Calvin in 1973) I gave a version of the Free Will Defense in which I took it for granted both that there are counterfactuals of freedom and that God's omniscience includes his knowing their truth values. Anthony Kenny was present at the institute and declared that I was a 'Molinist'. I wasn't sure whether that was commendation or condemnation; but as it turned out the whole subject of counterfactuals of freedom and God's knowledge of them had been debated and explored at length in the 16th century. The Jesuit Louis de Molina and his followers held that God did indeed have knowledge of counterfactuals of freedom (they called it 'middle knowledge'). Their Dominican opponents, led by Bañez, declared that God did not have any such knowledge.[13] An interesting project would be to develop in detail a version of the Free Will Defense that does not involve either middle knowledge or counterfactuals of freedom.

In *The Nature of Necessity* I again assumed or conceded that there are counterfactuals of freedom and argued that there are many possible worlds God could not have actualized. That argument was complicated, messy and hard to follow; fortunately it can be simplified.[24] First, let's say that a state of affairs S is a *largest state of affairs God strongly actualizes in W* if and only if W includes God's strongly actualizing S and S includes every state of affairs God strongly actualizes in W. That is, it is necessary that if W had been actual, then God would have strongly actualized S; and S includes every state of affairs S^* such that necessarily, if W had been actual then God would have strongly actualized S^*. (I assume that if God strongly actualizes states of affairs $S_1, S_2, \ldots$, then he strongly actualizes a state of affairs that includes each of the S_i.) Obviously, for every world W in which God exists, there is a largest state of affairs God strongly actualizes in W: call it 'T(W)'. We can now prove what I shall call "Lewis's Lemma":

(8)   For every world W in which God exists, God could have weakly actualized W only if $G(T(W)) \to W$.[15]

That is, if W is a possible world God could have weakly actualized, then the counterfactual

If God had strongly actualized T(W), then W would have been actual

is true.

The argument for Lewis's Lemma goes as follows. Suppose W is a world God could have weakly actualized; then there is a state of affairs A such that God could have strongly actualized A and such that if he had, then W would have been actual — i.e., $G(A) \to W$. W includes God's strongly actualizing T(W): hence

(9) $G(A) \to G(T(W))$

(by the principle $A \to B$; $B \Rightarrow C$; hence $A \to C$).
Now since W is a possible world, it is *maximal*; hence either W includes $G(A)$ or W includes the complement $\overline{G(A)}$ of $G(A)$. Perhaps it is obvious that W includes $G(A)$; but we can also argue for it as follows. By hypothesis, $G(A) \to W$; $G(A)$, furthermore, is a possible state of affairs; but then it follows that $\sim(G(A) \to \overline{W})$ (by the principle $\sim(\Diamond A \ \& \ (A \to B) \ \& \ (A \to \overline{B}))$. Hence $G(A)$ does not include $\overline{W}$; accordingly (by contraposition), W does not include $\overline{G(A)}$; so (by maximality)

(10) W includes $G(A)$.

Now T(W) includes every state of affairs God strongly actualizes in W; hence T(W) includes A, and $G(T(W))$ includes $G(A)$. Thus

(11) $G(T(W)) \to G(A)$.

From (9) and (11) and the hypothesis that $G(A) \to W$, it follows that

(12) $G(T(W)) \to W$

(by the principle $A \to B$; $B \to A$; $B \to C$; hence $A \to C$). So if W is a world God could have weakly actualized, then God's strongly actualizing T(W) counterfactually implies W — which is what was to be demonstrated.[16]

But given Lewis's Lemma it is easy to show that there are possible worlds God could not have weakly actualized. For consider a world W in which, say, Eve freely refrains from taking the apple, and consider T(W). T(W) does not include Eve's freely refraining from taking the apple (if it did, then in W it would be the case that God strongly actualizes *Eve's freely refraining from taking the apple*, which is impossible). It is therefore possible that God should strongly actualize the very same states of affairs that he actualizes in W, and Eve freely *take* the apple. But if God strongly actualizes a state of affairs S and strongly actualizes no state of affairs S^* that properly includes S, then God strongly actualizes his strongly actualizing no state of

affairs that properly includes S. Accordingly, there is another possible world W^* in which Eve freely takes the apple and in which God strongly actualizes the very same states of affairs he strongly actualizes in W. But then $T(W) = T(W^*)$. By Lewis's Lemma it was within God's power to actualize each of W and W^* only if both $G(T(W)) \rightarrow W$ and $G(T(W^*)) \rightarrow W^*$ are true — that is (given that $T(W) = T(\overline{W^*})$) only if both $\overline{G(T(W))} \rightarrow \overline{W}$ and $G(T(W)) \rightarrow W^*$ are true. Since W and W^* are mutually exclusive, the above counterfactuals can both be true only if $\underline{G(T(W))}$ is impossible. By hypothesis, however, $G(T(W))$ is possible; hence either $\overline{W}$ or W^* is such that it was not within the power of God to actualize it. Accordingly, there are possible worlds including God's existence that he could not have weakly actualized. And now we can go on to argue (as I did in *The Nature of Necessity*) that possibly all the worlds containing moral good but no moral evil, and all the worlds displaying a better mixture of good and evil than the actual world contains — all these worlds are among the worlds God could not have weakly actualized.

Note two further features of this version of the Free Will Defense. In the first place, this formulation clearly assumes that there exist counterfactuals of freedom. It does not assume, however, that God knows the truth value of such counterfactuals; it does not assume that God has middle knowledge. Indeed, it does not assume that it is *possible* that God have middle knowledge. In fact I believe that God *does* have middle knowledge but there is no premise in the above argument to the effect that he does.[17] A second feature: note that this formulation of the Free Will Defense does not presuppose that for any counterfactual of freedom $A \rightarrow B$, either $A \rightarrow B$ or $A \rightarrow \overline{B}$ is true. Indeed, strictly speaking the present argument doesn't depend upon the assumption that *any* counterfactuals of freedom are true; it could be, for all the argument presupposes, that all such counterfactuals are false. (What follows from the premisses of the argument is that if that were so, then no possible world containing free creatures is one that God could have weakly actualized.)

So much for the Free Will Defense as a response to the claim that (1) and (2) are incompatible. It is my impression that this claim isn't nearly as popular now as it was twenty-five years ago, when it was the stock in trade of nearly every atheologian who wrote on the problem of evil. By now, however, I think most atheologians are inclined to concede that there is good reason to think this claim false. The contemporary atheological claim is, instead, that the existence of God is *improbable* or *unlikely* with respect to the existence of evil, or at any rate with respect to the amount and kinds of evil the actual world displays. The objector claims, therefore, that (1) is unlikely or improbable given

(13)   There are 10^{13} turps of evil

where the *turp* is the basic unit of evil —.equal, as you may have guessed, to 10^{-13} (the evil in the actual world). Most atheologians who find a problem for theism in the existence of evil now make this sort of claim; but none, so far as I know, has worked out an argument for it or developed it with sufficient rigor and precision to enable us to see whether it should be accepted. Part of the problem, of course, is that the entire question of the nature of probability is monumentally difficult; it bristles with paradox and mystery; it is frought with confusion, darkness and despair. And hence it is profoundly difficult to construe the atheological claim. Is it to be understood as a claim, somehow, about *relative frequencies*? Perhaps the relative frequency of truth among propositions of some sort? Is it to be interpreted as a claim about *subjective* probabilities — i.e., a claim about degrees of belief on the part of someone or other? Is it a claim about what degrees of belief would be *rational* here? If so, what determines and how do we tell which degrees are rational? Is the claim to be understood as to the effect that there is a sort of quasi-logical relation that holds between (1) and (13), no matter what anyone thinks or believes? In 'The Probabilistic Argument from Evil' (*Philosophical Studies* 1979, pp. 1—55) I explored some of these possibilities and concluded that none offers much by way of comfort to the atheologian intent on arguing that there is a difficulty for the theist here. I am not satisfied with that piece, however, and plan to make this question a topic for future work.

There is a wholly different way of proceeding here. Suppose we stipulate, for purposes of argument, that (1) is in fact improbable on (13). Let's agree that it is unlikely, given the existence of 10^{13} turps of evil, that the world has been created by a God who is perfect in power, knowledge and goodness. What is supposed to follow from that? How is that to be construed as an objection to theistic belief? How does the argument go from there? It doesn't follow, of course, that theism is false. Nor does it follow that one who accepts both (1) and (13) (and, let's add, recognizes that (1) is improbable with respect to (13)) has an irrational system of beliefs or is in any way guilty of noetic impropriety. For it *could* be, obviously enough, that (1) is improbable with respect to (13) but probable with respect to something else we know. I might know, for example, both that

(14)   Feike is a Frisian and 9 out of 10 Frisians can't swim,

and

(15)   Feike is a Frisian lifeguard and 99 out of 100 Frisian lifeguards can swim;

it is plausible to hold that

(16)   Feike can swim

is probable with respect to (15) but improbable with respect to (14). If, furthermore, (14) and (15) are all we know about Feike's swimming ability, then the view that he can swim is more acceptable for us than the view that he can't, even though we know something with respect to which the former is improbable. Indeed, we might very well *know* both (14) and (16); we might very well know a pair of propositions *A* and *B* such that *A* is improbable on *B*. So even if it were a fact that (13) is evidence against (1) or that (1) is improbable on (13), that fact isn't of much consequence. But then how can this objection be developed? How can the objector proceed?

Presumably what he means to hold is that (1) is improbable, not just on (13) but on some appropriate body of *total evidence* — perhaps all the evidence the theist has, or perhaps the body of evidence he is rationally obliged to have. The objector must be supposing that there is a relevant body of total evidence here, a body of evidence that includes (13); and his claim is that (1) is improbable with respect to this relevant body of toal evidence.

Suppose we step back a moment and reconsider the overall structure of the probabilistic argument. The objector's claim is that the theist is irrational in accepting belief in God because it is improbable with respect to (13), the proposition that there are 10^{13} turps of evil — a proposition the truth of which the theist acknowledges. As we have seen, however, even if the existence of God *is* improbable with respect to (13), no trouble, so far, follows for the theist; there may be many propositions *A* and *B* such that even though *A* is improbable on *B*, we can nonetheless accept both in perfect propriety. What the objector must be supposing, then, is something like this. For any theist *T* you pick, there is a set T_s of propositions such that for any proposition *A*, *T* is rational in accepting *A* only if *A* is not improbable with respect to T_s. And the objector's claim is that the existence of God is improbable with respect to T_s, for all or at any rate most theists.

Suppose we say that T_s is the theist's *evidential set*. This is the set of propositions to which, as we might put it, his beliefs are responsible. A belief is rationally acceptable for him only if it is not improbable with respect to T_s. Now so far we have not been told what sorts of propositions are to be

found in T_s. Perhaps these are the propositions the theist *knows* to be true, or perhaps a largest subset of his beliefs that he can rationally accept without evidence from other propositions, or perhaps the set of propositions he knows *immediately* — knows, but does not know on the basis of other propositions. However exactly we characterize this set T_s, the presently pressing question is this: why can't the belief that there is such a person as God be itself a *member* of T_s? Perhaps for the theist — for some theists, at any rate — belief in God is a member of T_s, in which case it obviously won't be improbable with respect to it. Perhaps the theist is entirely within his epistemic rights in *starting from* belief in God; perhaps that proposition is one of the ones with respect to whose probability he determines the rational propriety of *other* beliefs he holds. If so, the fact, if it is a fact, that theistic belief is improbable with respect to the existence of evil doesn't even begin to show that the theist is irrational in accepting it. This line of thought, therefore, leads directly to my next topic: what sorts of beliefs, if any, is it rational or reasonable to *start from*? Which beliefs are such that one may properly accept them without evidence, i.e., without the evidential support of other beliefs? And why can't belief in God be among them?

B. *Calvinist Epistemology*

The central topic of *God and Other Minds* is "the rational justification of belief in the existence of God as he is conceived in the Hebrew-Christian tradition" (vii). I argued, in brief, that belief in God and belief in other minds are in the same epistemological boat; since belief in other minds is clearly rational, the same goes for belief in God. What I wrote there still seems to me to be substantially true, although now I see the issues in a broader context and (I hope) more clearly. But even though the topic of the book is the rational justification of theistic belief, there is almost no consideration of the protean, confusing, many-sided notion of rationality. The atheologian claims that belief in God is *irrational* — because he thinks it conflicts with such obvious facts as the existence of evil, perhaps, or because there is evidence against it, or because there is no evidence for it. When he makes this claim, just what property is it that he is ascribing to theistic belief? What is rationality and what is rational justification? What does it means to say that a belief is irrational? These seem to be prior questions, and I've been thinking about some of them since finishing *The Nature of Necessity* in 1973. In 1974 I wrote 'Is it Rational to Believe in God?' which I read for the first time at Cornell in the spring of 1975. There I argued that belief in God can be

perfectly rational even if none of the theistic arguments work and even if there is no non-circular evidence for it; my main aim was to argue that it is perfectly rational to take belief in God as *basic* — that is, to accept theistic belief without accepting it on the basis of argument or evidence from other propositions one believes. (And here I was apparently anticipated by James Tomberlin; see his 'Is Belief in God Justified?', *Journal of Philosophy* 67 (1970).) Here too, however, I didn't look carefully into the question of what this notion of rationality *is*. Just what is it the objector is objecting to when he claims that belief in God is irrational? This question has received little attention, either from the detractors or the defenders of theism.

Furthermore, it isn't easy to see just what is going on here. In *God and Other Minds*, I assumed that the proper way to approach the question of the rationality of theistic belief is in terms of argument for and against the existence of God. Once it was clear that this approach is inconclusive — because there aren't any really cogent arguments either for or against the existence of God — I began to consider explicitly the evidentialist objection to theistic belief: the objection that theistic belief is irrational just because there is no evidence or at any rate insufficient evidence for it. There are published versions of this objection;[18] but it has been enormously more popular, I think, than one would judge from the published accounts. In the 1950's and 60's I heard it a thousand times if I heard it once. *God and Other Minds* provided a partial answer, or at any rate a discussion-directing response: I seem to have little non-circular evidence for the existence of God, but little more by way of non-circular evidence for the existence of minds other than my own. (If we are satisfied with circular evidence, of course, there will be plenty in both cases.) I am obviously rational in believing that there are other minds; so why am I not similarly rational in believing that God exists? This still seems to me a good question to ask in this context, and a good way to get into the broader question of what sorts of beliefs are properly basic.

Still, it doesn't address the deeper question: what is it for a belief to be rational, and with what fault is the atheologian charging the theist, when the former claims the latter is irrational? The most important thing to see is that the relevant atheological contention is a *normative* contention. The atheologian appears to suppose that there are norms for belief — norms to be met, obligations to be fulfilled, duties to be done; and he seems to suppose that the theist without evidence is flouting the norms for proper or correct belief. People have duties, responsibilities, or obligations, he thinks, with respect to their believings as well as with respect to their actions — or, if believings are actions, their other actions. Blanshard puts this clearly:

... everywhere and always belief has an ethical aspect. There is such a thing as a general ethics of the intellect. The main principle of that ethic I hold to be the same inside and outside religion. This principle is simple and sweeping: Equate your assent to the evidence.[19]

And according to Michael Scriven,

Now even belief in something for which there is no evidence, i.e., a belief which goes beyond the evidence, although a lesser sin than belief in something which is contrary to well-established laws, is plainly irrational in that it simply amounts to attaching belief where it is not justified. So the proper alternative, when there is no evidence, is not mere suspension of belief, e.g., about Santa Claus; it is disbelief. It most certainly is not faith.[20]

Of course it is not only atheologians that speak of intellectual duties or requirements. According to Roderick Chisholm, — himself no atheologian — "We may assume that every person is subject to a purely intellectual requirement: that of trying his best to bring it about that, for every proposition he considers, he accepts it if and only if it is true."[21]

And so far what the objector says seems plausible enough; no doubt there are intellectual obligations or responsibilities. Perhaps intellectual obligation is a species of a more general moral obligation; or perhaps it is *sui generis*. Furthermore, perhaps there are both intellectual and non-intellectual obligations with respect to belief. And in this case, as in the case of moral obligation, we shall have to distinguish *prima facie* duties from *ultima facie* or all-things-considered duties. We might then take it that a person is irrational in believing *A* if and only if *S* is flouting his all things considered intellectual duty in believing *A*. Of course this suggestion can be broadened to take account of the fact that a person may have an obligation with respect to a proposition that doesn't consist simply in an obligation to believe it or to refrain from believing it. For example, he may have obligations with respect to means and methods of forming and fixing belief: he may have an obligation, not to *succeed* in refraining from believing without evidence, say, but to *try* to refrain from believing without evidence. However exactly we take it, on this account irrationality consists in failing to meet one's intellectual obligations. The theist who has no evidence, adds the atheologian, is irrational in just this sense.

There is, however, quite another way of construing the claim that a belief (or believer) is irrational: the atheologain may be holding, not that the theist without evidence has violated a *duty*, but that his noetic structure is defective, or blemished, or somehow flawed. Perhaps the theist who believes without

evidence is like someone who is unaware that he suffers from a disorder in which everything looks yellow, no matter its real color;[22] he visits a museum of contemporary art and forms the belief that contemporary artists are unanimous in favoring yellow. This person may be within his rights in coming to this conclusion; perhaps there is no duty or obligation he is violating. Nevertheless his noetic structure is in some way flawed or defective. Now perhaps the antheologian means to say that belief in God without evidence is like the belief of such a person: it violates no duties, but nonetheless suffers from a defect or blemish. (If the atheologian takes this line, his attitude towards the theist should be one of compassion rather than censure.)

Perhaps these are the most plausible suggestions as to what the atheologian means by 'irrational' when he holds that the theist without evidence is irrational. But someone might have one of these conceptions of rationality and irrationality in the back of his mind, and also have some convictions as the general and fundamental conditions under which a belief is in fact rational in that sense: he might accept some *principles of rationality*. He might believe, for example, that a belief is rational only if formed or acquired in accord with some particular method of forming belief. Perhaps he thinks that a belief is rational (in one of the above senses) only if acquired in the course of following the policy of believing just those propositions that have been discovered by broadly scientific means. Alternatively, he might think that a belief is rational for S if and only if it stands in a certain relationship to propositions that are self-evident or incorrigible for S. Then he might, confusingly, use 'rational' just to *mean* 'meets C' where C is the favored condition; for example

(1) S's belief that A is rational $=_{def.}$ S formed the belief that A in the course of following the policy of believing B if and only if B has been discovered by broadly scientific means,

or

(2) S's belief that A is rational $=_{def.}$ A is supported by propositions that are self-evident or incorrigible for S.

Of course if one *defines* 'rational' in the style of (1) or (2), then it becomes an open question whether every belief I have a right or even a duty to accept is rational for me; perhaps many of the beliefs we have a right or obligation to accept are irrational for us, in the sense of (1) and/or (2). A theist might thus acquiesce in (1) or (2) as a definition of the term 'rational for S' and then go on to maintain that many of the beliefs we have a right or an obligation

to accept are not rational for us. She would then be entirely within her terminological rights, even though someone who confused a principle of rationality with a definition of 'rational' might confusedly see her as holding that we ought to accept some beliefs we don't have a right to accept.

The evidentialist objector, therefore, should be construed as holding that the theist who believes without evidence thereby violates an intellectual obligation or at any rate displays a flawed noetic sturcture. And here, presumably, we are to take 'evidence' in such a way that a person has evidence for a proposition p only if she knows or rationally believes another proposition q which supports p, and furthermore believes p on the basis of q. If the theistic proofs were successful, they would provide evidence, in this sense, for the existence of God, for someone who believed their premises. But why suppose the theist *needs* evidence to be rational? Suppose he doesn't have any evidence; suppose in fact there isn't any. How does it follow that his belief is not perfectly rational? Taking the concept of evidence as above, there are clearly plenty of propositions one can properly believe without evidence. Surely the objector does not mean to suggest that *no* proposition can properly be believed without evidence. For if you have evidence for every proposition you believe, then (granted certain plausible assumptions about the evidence relation) you will believe infinitely many propositions. So presumably *some* propositions can properly be believed without evidence. Well, why not the proposition that God exists?

A historically important answer to this question is proposed by *classical foundationalism*, an enormously popular and historically momentous way of thinking about rationality, evidence, justification, knowledge and allied topics. Classical foundationalism has been popular ever since Plato and Aristotle. Its near relatives remain perhaps the dominant ways of thinking about these topics. A protean and many-sided picture, classical foundationalism includes among other things a specification of the sorts of propositions that are properly basic: the sorts of propositions that can rationally be accepted without evidence. At the risk of considerable oversimplification, we may say that ancient and medieval classical foundationalists tended to hold that a proposition is properly basic for a person S if and only if it is either self-evident to S or, to use Aquinas' term, "evident to the senses" for S. On the other hand modern foundationalists — Descartes, Locke, and Leibniz, for example — agree that self-evident propositions are properly basic; but they reject perceptual propositions as properly basic in favor of more cautious claims — claims about one's own mental life. For example:

(3)   it seems to me that I see a tree

(4)   I seem to see something green

or, as Roderick Chisholm puts it:

(5)   I am appeared to greenly.

Propositions of this latter sort seem to enjoy a kind of immunity from error not enjoyed by those of the former. I could be mistaken in thinking I see a pink rat; perhaps I am hallucinating or the victim of an illusion. But it is at least much harder to see that I could be mistaken in believing that I *seem* to see a pink rat, in believing that I am appeared to pinkly (or pink-ratly). Suppose we say that a proposition with respect to which I enjoy this sort of immunity from error is *incorrigible* for me. Then perhaps the modern foundationalist means to hold that a proposition is properly basic for *S* only if it is either self-evident or incorrigible for *S*. In 'Is Belief in God Rational?' I argued that classical foundationalism thus construed is self-referentially inconsistent.[23] Classical foundationalism, therefore, does not give us a good reason for supposing that belief in God is not properly basic.[24]

Shortly after writing 'Is Belief in God Rational?' I began to reflect on a widely known but rather puzzling fact. Suppose we think of natural theology as the attempt to prove or demonstrate the existence of God. This enterprise has a long and impressive history — a history stretching back to the dawn of Christendom and boasting among its adherents many of the truly great thinkers of the Western World. One thinks, for example, of Anselm, Aquinas, Scotus and Ockham, of Descartes, Spinoza and Leibniz. Recently — since the time of Kant, perhaps — the tradition of natural theology has not been as overwhelming as it once was; yet it continues to have able defenders both within and without officially Catholic philosophy.

Many Christians, however, have been less than totally impressed. In particular many Reformed or Calvinist theologians — Abraham Kuyper, Herman Bavinck, Karl Barth, John Calvin himself — have for the most part taken a dim view of this enterprise. A few Reformed thinkers — B. B. Warfield, for example — endorse the theistic proofs in a tepid sort of fashion; but for the most part the Reformed attitude has ranged from indifference, through suspicion and hostility, to outright accusations of blasphemy. And this stance is initially puzzling. It looks a little like the attitude some Christians adopt toward faith healing: it can't be done, but even if it could it shouldn't be. What exactly, or even approximately, do these sons and daughters of the Reformation have against proving the existence of God? What *could*

they have against it? What could be less objectionable to any but the most obdurate atheist?

The answer, I think, is that these Reformed thinkers were really rejecting one of the central tenets of classical foundationalism. This rejection was groping, implicit, inchoate, to be sure, but it was a genuine rejection nonetheless. They made no objection to the claim that a rational set of beliefs displays a broadly foundationalist structure;[25] but they wholeheartedly rejected the idea that a proposition is properly basic for a person only if it is self-evident or incorrigible or evident to the senses for him. In particular, they were prepared to insist that a rational noetic structure can include belief in God as basic.[26]

Now of course I cannot claim that these Reformed thinkers were clearly or explicitly rejecting classical foundationalism; they never discussed the matter in these terms. But they may profitably be seen, I think, as implicitly holding the following three theses. First, a theist who takes belief in God as basic thereby violates no epistemic norm or obligation; nor does the fact that he thus believes in God show that at some previous time he violated an intellectual obligation. He is not, therefore, irrational in the sense of (1) (above, p. 58) by virtue of taking belief in God as basic. Second, the theist who believes without evidence does not thereby display a defective or blemished or flawed noetic structure; taking belief in God as basic is also perfectly rational in the sense of (2).

There is a third claim these Reformed thinkers implicitly make. Consider an analogy. A person may learn from guide books and testimony that Devil's Tower in Wyoming is the home of hosts of pigeons. He is then entirely within his epistemic rights in this belief; furthermore, his noetic structure is neither deficient nor blemished by virtue of his thus believing. On the other hand, his epistemic situation would be even more favorable if his belief were based, not on second-hand report, but first-hand experience — if, for example, he knows a pigeon when he sees one and has himself often seen large flocks of pigeons flying around the Tower. Someone may have heard from a teacher that arithmetic is incomplete; he may believe it on that basis. His belief is then neither defective nor contrary to his epistemic obligations. Nevertheless, there is a better way: his noetic situation would be improved if, instead of relying upon the testimony of others, he proved it for himself. Similarly, someone might hold that theistic belief without evidence isn't necessarily defective, but isn't as good, from an epistemic point of view, as it would be if it were based upon proofs or evidence. I say this *might* be held. The fact is, I think, that it *has* been held, and by a substantial number of theistic thinkers, among

them Thomas Aquinas. However, the Reformed thinkers I mentioned implicitly reject this claim: belief in God on the basis of evidence — the sort of evidence suggested by natural theology — is not epistemically superior to basic belief in God. Consider someone who believes that 2 + 3 = 5, not, as the rest of us do, because he finds that proposition self-evident, but on the basis of the following sort of evidence. He notes that a certain computer has nearly always yielded truth in the cases where he has been able personally to test its deliverances; he observes that the proposition in question is among its deliverances, and accepts it on that basis. This is perverse, as is the person who, while in full view of the pigeons flying around the Tower and knowing that his perceptual powers are entirely in order, believes that pigeons frequent the Tower, all right, but believes this only on the basis of the Guide Book's testimony. The same thing may be said for the person who believes in the existence of her husband on the basis of the sort of evidence cited by an analogical argument for other minds. Belief in God on the basis of the sort of evidence furnished by the traditional theistic arguments (even supposing the arguments successful) is, according to the Reformed epistemologist, rather like these cases. It is not epistemically superior to taking belief in God as basic. The shoe, indeed, is on the other foot: the better of these two ways of accepting theistic belief is the latter.

We may briefly — very briefly — put this claim in broader perspective as follows. Thomas Reid, the important but unduly neglected 18th century Scottish philosopher, observed that there are several *sources of belief* or *belief producing mechanisms*: There are, for example, perception, memory, testimony, reason and others. When I am appeared to in a certain characteristic way, I form the belief that I am seeing a tree; when I seem to remember that I had breakfast this morning, I form the belief that indeed I did have breakfast; if upon being introduced to you, I am told that your name is 'Archibald von Poufnikof', I form the belief that this is your name; upon contemplating the proposition *if Socrates is a man and all men are mortal, then Socrates is mortal* I form the belief that this proposition is indeed true. There are others: there is *induction*, the tendency to expect what has happened before to happen again; there is *introspection*, whereby we come to believe such propositions as *I have a mild pain in my left knee* or *I'm being appeared to redly*; there is also *extrospection*: upon seeing someone engage in typical pain behavior, I form the belief that he or she is in pain. Of course questions can arise as to which of these soruces of belief are by nature and which by nurture: does my tendency to believe what people tell me result from my having learned in other ways that what people say is for the most

part true? Presumably not; what I learn by way of testimony — my learning of my language, what I learn from books and maps, etc. — is much too large and significant a part of my entire noetic structure for me to make a reliable independent judgment (on the basis of non-testimonial evidence) that most of it is accurate.

Furthermore, these belief-forming tendencies react upon and modify each other; what Reid calls credulity — the tendency to believe what we're told — obviously gets modified in the light of further experience, so that we learn to trust certain people on certain subjects and to distrust others on others. More questions can arise. I have a tendency to take it that someone is in pain when I witness a certain sort of behavior: is that a second level tendency, built upon such first-level tendencies as induction, introspection and sense perception, or is it a *sui generis* first level tendency? How do we tell, in fact, when we have one source of belief or several? There are difficult problems of individuation here: the same problems that beset a reliabilist theory of knowledge. If we think of these sources of beliefs abstractly — as functions from inputs to outputs, for example — then there will obviously be many different ways of individuating them. But I think the general picture is right. What it needs is detailed development and articulation.

As Reid pointed out, philosophers since Descartes had expended an enormous amount of energy in "justifying" some of these belief forming mechanisms or sources of belief in terms of others; the history of philosophy since Hume is littered with the wreckage of attempts to justify the deliverances of sense perception on the basis of self-evidence and introspection. Reid argues — correctly, I believe — that the deliverances of sense perception don't *need* justification or certification in terms of such other sources of belief as introspection and self-evidence. Suppose sense perception cannot be certified in terms of those sources: there is nothing epistemically defective or improper in accepting its deliverances as basic.

What Reid said about sense perception, Reformed thinkers have said about belief in God.[27] What these Reformed thinkers meant to hold, I think, is that belief in God doesn't need the evidential support of other sources of belief for rationality. They held something more. According to Aquinas it isn't possible for human beings (in this earthly life here below) to *know* that there is such a person as God, except on the basis of deductive argument from propositions that are either self-evident or evident to the senses. Reformed theologians such as Calvin, however, have held that God has implanted in us a tendency or nisus to accept belief in God under certain conditions. Calvin speaks, in this connection, of a "sense of deity inscribed in the hearts

of all".[28] Just as we have a natural tendency to form perceptual beliefs under certain conditions, so says Calvin, we have a natural tendency to form such beliefs as *God is speaking to me* or *God has created all this* or *God disapproves of what I've done* under certain widely realized conditions.[29] And a person who in these conditions forms one of these beliefs is within his epistemic rights, displaying no epistemic defect; indeed, Calvin thinks, such a person *knows* the proposition in question. The source of theistic belief God has implanted in us requires no certification from other sources of belief, either for rationality or for knowledge. In sum, on the Reformed or Calvinist way of looking at the matter, a person who accepts belief in God as basic may be entirely within his epistemic rights, he may thereby display no defect or blemish in his noetic structure; indeed, under those conditions he may *know* that God exists. This seems to me correct. I have stated and developed these views in 'Reason and Belief in God', and in future work I hope to develop and defend them more fully.

C. *The Ontological Argument*

I began thinking about the ontological argument when (as a junior at Calvin) I took Professor Henry Stob's course in medieval philosophy. I found the argument intriguing indeed, utterly fascinating — although I was certain there was a fatal defect in it somewhere. But *where*? I read Kant's famous words on the subject, but found them opaque; they seemed important and somehow relevant, but it was exceedingly difficult to see just how they bore on Anselm's argument.

When I began teaching philosophy of religion at Wayne in the late 50's, I again turned to the ontological argument and to Kant's criticism of it. What struck me then was the substantial distance between Kant's promise and his performance. Kant adopts a baronial tone: he writes as if he has shown, finally and definitively, just what is wrong with the ontological argument in any recognizable formulation. In the fifties, furthermore, nearly everyone who wrote on this argument apparently agreed. They claimed that Kant had administered the *coup de grace* by showing that existence is not a predicate: they quoted Kant's claim that a hundred real thalers do not contain the least coin more than a hundred merely possible thalers and that the real has no more content than the merely possible. But a careful look at what Kant actually says reveals little that need trouble Anselm. How, after all, does the fact, if it is a fact, that the content of a concept is as great as that of the corresponding object(s) show that Anselm's argument is faulty? And what

is the content of a concept, or of an object? What does it mean to say that either a concept or an object *has* content? Kant says that existence is not a (real) predicate. But what does *that* mean, and how does Anselm's argument presuppose or involve the idea that existence *is* a predicate? I found it vaguely scandalous that so many philosophers should think Kant had disposed of the ontological argument on the basis of pronouncements such as these, when it wasn't in the least clear what these pronouncements meant or how they were supposed to bear on Anselm's argument.

Then in 1960 Norman Malcolm dropped his bombshell. At the time nearly all Anglo-American philosophers — the eminent exception was Charles Hartshorne — agreed with Schopenhauer that the ontological argument is a joke. Schopenhauer, indeed, at least thought it was a charming joke; but at the time of Malcolm's piece most philosophers thought it was more like a *stupid* joke, an obvious howler. It was widely claimed, for example, that there is vast conceptual confusion in attempting to argue from concept to existence; and most writers thought it utterly obvious, somehow, that no existential propositions are necessary. And then with a perfectly straight face Malcolm *defended* the argument, urging that Anselm had given two versions of it: one presupposed that existence was a predicate and thus fell to Kant's criticism, but the other did not and was in fact sound. I found this striking — as apparently, did most of the rest of the American philosophical world: the next year more than a hundred philosophers submitted replies to *The Philosophical Review*. Like most of those who wrote replies to Malcolm's piece, I didn't then realize that Charles Hartshorne had for many years been proposing versions of the ontological argument very similar to the one Malcolm endorsed.

In *God and Other Minds* I argued that Kant's alleged wholesale refutation of the ontological argument in its various versions was unsuccessful, as were the contemporary developments of Kant's objections. I went on to point out that there are many forms of the argument, and that there is no substitute for looking at these forms one at a time and in detail. I then examined some plausible versions (including Malcolm's), concluding that while some are initially plausible, none has any prospect for real success. As I now see it, however, my discussion was vitiated by an importantly false assumption: I assumed throughout the discussion that there are or could be things that don't exist. That is, I assumed that in addition to all the things that exist in reality — which, of course, are all the things that exist *simpliciter* — there are some more that don't exist in reality but nonetheless are really there, really have properties, and can be compared in various respects with things that do

exist. I took it, for example, that Hamlet, who does not exist, nonetheless had such properties as *being indecisive*. Furthermore, Hamlet, I thought, could be compared, in various respects, with such existing beings as Lyndon Johnson: for example, more books have been written about the former than the latter. And from these things I thought it followed that there is at least one thing that does not exist, and which is both indecisive and such that more books have been written about it than about Lyndon Johnson.

I was misled, I blush to say, by arguments of the following sort:

(1)   Pegasus does not exist;

therefore

(2)   There is at least one thing that does not exist.

The premise of this argument will be widely conceded; and the conclusion, I uneasily thought, follows by the argument form logicians sometimes call "Particular Generalization", an argument form as impeccable as any one is likely to encounter. What I didn't realize, of course, is that it can't simply be taken for granted that this inference is of that form. Arguments that seem at first glance to display this form are not always to be trusted. For example:

(3)   The average American woman has 1.84 children

therefore

(4)   There is at least one woman that has 1.84 children;

and

(5)   There is no such thing as Pegasus

hence

(6)   There is a thing such that there is no such thing as it,

or perhaps

(6*)   There is at least one thing such that there isn't any such thing.

Even Meinong, according to whom "Those who like paradoxical modes of expression could very well say: 'There are objects of which it is true to say that there are no such objects'" would presumably balk at holding that (6) or (6*), literally construed, follow from the true proposition (5). In a proper case of Particular Generalization, the premise predicates of some specific

object a property that the conclusion says at least one object has. The inferences of (4) from (3) and (6) from (5) do not meet this condition. ((3) for example, does not predicate the property of having 1.84 children of any object.) And the question is whether the inference of (2) from (1) meets this condition; it can't simply be assumed that it does. (Of course it follows from (1), or, more exactly, from the truth of the sentence (1), that there is at least one true substitution instance of '____ does not exist'; but it doesn't follow from *that* that in addition to all the things that exist, there are some more things that do not.)

By 1968–69, when I wrote the first draft of *The Nature of Necessity*, I had come to see through the alleged inference of (2) from (1), and I argued there that there aren't any things that do not exist. I am now inclined to think that 'there are' and 'there exist' are ordinarily and in most contexts no more than stylistic variants – in which case 'There are some things that do not exist' expresses the same proposition as 'There exist some things that do not exist'.[30] But then, clearly enough, it is logically false that there are some things that do not exist. *A fortiori*, there aren't any things that do not exist but have properties.

If we reflect on this truth, however, perhaps we can see how some of Kant's puzzling aphorisms are relevant to at least some versions of the ontological argument. Kant distinguishes 'real' properties or predicates from 'logical' properties or predicates[31] and declares that *being* or *existence* (in this section of the *Kritik* he clearly uses 'Sein' and 'Existenz' interchangeably) is not a real predicate or property. In explanation, he asserts that the content of object and concept "must be one and the same" and that "the real contains no more than the merely possible" (and here he adds that a hundred real thalers do not contain the least coin more than a hundred possible thalers). He then goes on to say

By whatever and by however many predicates we may think a thing – even if we completely determine it – we do not make the least addition to the thing when we further declare that this thing *is*. Otherwise it would not be exactly the same thing that exists, but something more than we had thought in the concept; and we could not, therefore, say that the exact object of my concept exists (Smith translation, A 600, B 628).

Perhaps this is to be understood as follows. Take any set *S* of properties and consider the result *S** of adding *existence* to *S*: it is necessary that anything that exemplifies all the members of *S* also exemplifies all the members of *S** (and conversely). We may thus say that *S* and *S** are *equivalent with respect to exemplification*. Existence is therefore such that for any set *S*

of properties, the result S^* of adding it to S is equivalent with respect to exemplification to S: we could go on to say that a property P is a *real* property if and only if there is a set S of properties such that the result of adding P to S is *not* equivalent with respect to exemplification to S. But if existence is not a real property in this sense, then it is not possible that there be an object that does not exist. For suppose there were an object O that did not exist; then it would be possible (because actual) that there be an object that exemplifies the set S of properties exemplified by O but does not exemplify the result S^* of adding existence to S.[32]

If Kant is right about existence, therefore, it follows that there neither are nor could have been any nonexistent objects. But many versions of the ontological argument seem to presume that at any rate there could have been such objects. In many formulations the argument begins with some such proposition as

(7)   The being than which it is not possible that there be a greater does not exist (in reality)

as the supposition of a *reductio ad absurdum* argument. These versions then go on to add a premise connecting greatness and existence (or existence in reality); perhaps:

(8)   For any objects x and y, if x exists and y does not, then x is greater than y

or

(9)   For any object x, if x does not exist, then it is possible that there be a being greater than x

or

(10)   For any object x, if x does not exist in the actual world, then there is a possible world W^* such that the greatness of x in W^* exceeds the greatness of x in the actual world.

Now if there neither are nor could have been any objects that do not exist, then each of these propositions will be true; since every object exists, every object has, for any property P, the property of being such that if it does not exist, then it has P. But none of these propositions will be of any use to the argument. At the next step, or some subsequent step, it will be necessary to instantiate the premise in question with respect to 'the being than which it is not possible that there be a greater'; that is, some step in the argument

will have to consist in the result of dropping the initial quantifier of, say, (9) and replacing subsequent occurrences of its variable by 'the being than which it is not possible that there be a greater':

(9*)   If the being than which it is not possible that there be a greater does not exist, then it is possible that there be a being greater than the being than which it is not possible that there be a greater.

If the argument is to succeed, therefore, (9*) will have to follow from (9) by Universal Instantiation. But of course the idea behind Universal Instantiation, as ordinarily conceived, is as follows: we have a universal premise predicating a property of every object (or every object in a given domain) and a conclusion predicating that property of some specific object. So the conclusion of an argument by Universal Instantiation is a proposition predicating of some specific object a property the premise says everything has — in this case, the property *being such that if it does not exist, then it is possible that there be something greater than it*. That is, (9*) must then be construed as

(9**)   The being than which it is not possible that there be a greater is such that if it does not exist, then it is possible that there be a being greater than it is.

The step from (9) to (9*), accordingly, is sound only if among the objects over which the quantifier in (9) ranges there is one that has the property of being the being than which it is not possible that there be a greater — only if, that is, *there is* such a thing as the being that which it is not possible that there be a greater. Given the Kantian contention that existence is not a real property (glossed as above), it follows that the step from (9) to (9*) is sound only if there *exists* such a thing as the being than which it is not possible that there be a greater; and that is just what the argument was supposed to demonstrate. Accordingly, the argument begs the question in the sense that one who seriously offers it assumes that the conclusion is true in making the inference of (9*) from (9).

Here someone might object as follows: "The above criticism assumes that the quantifier in (9) is to be construed in the standard 'objectual' fashion; the difficulty disappears if we take the quantifier substitutionally, so that (9) is to be seen, not as the contention that every object has a certain property, but as or as equivalent to the claim that every substitution instance of 'if ____ does not exist, then it is possible that there be a being greater than

_____' is true." But is there any reason for thinking (9), so construed, *is* true? Certainly not the reason I gave above (p. 68) for supposing it true; that reason is no longer relevant if we construe (9) substitutionally. Nor can we say that its substitution instances all have false antecedents; for among its substitution instances are such items as 'If Pegasus does not exist, then it is possible that there be a being greater than Pegasus' — whose antecedent seems wholly unimpeachable. Indeed, there is good reason for supposing that (9), so construed, is false; for among its substitution instances are such items as 'if the middle linebacker than which it is not possible that there be a greater does not exist, then it is possible that there be a being greater than the middle linebacker than which it is not possible that there be a greater. This sentence is multiply ambiguous. But if we give 'the middle linebacker than which it's not possible that there be a greater' widest scope, it implies that there is, i.e. exists, a middle linebacker than which it is not possible that there be a greater, and is thus false; and if we take it any other plausible way, it has a true antecedent and a consequent that is false by virtue of implying either that there is or that there *possibly* is such a middle linebacker. Read substitutionally, therefore, (9) is false.

So if we interpret Kant's claims as I have suggested, then what he says entails that there neither are nor could have been objects that do not exist. This claim is indeed relevant to many versions of the ontological argument: these versions that take as the assumption for *reductio* the proposition that the being than which it is not possible that there be a greater does not exist, add some premises connecting existence and greatness, and then use (or try to use) Universal Instantiation with respect to "the being than which it is not possible that there be a greater" to pursue the argument further. Perhaps we may see some of Kant's obscure pronouncements on the argument as inchoate and groping attempts to state this point.

Of course there are many versions of the ontological argument, and many versions that do not fall victim to this criticism. The versions I gave in *God, Freedom, and Evil* and *The Nature of Necessity*, for example, involve Universal Instantiation all right, but onto properties and possible worlds rather than onto the being than which it is not possible that there be a greater. What I claim for these versions of the argument is not that they constitute *proofs* of the existence of God; for a reasonable person who thought about their premise might nonetheless reject it. What I claim is that they contain no confusions or paralogisms or other errors in reasoning; if their premise is granted, their conclusion quite impeccably follows. Furthermore, I claim that it is rational or reasonable to accept their premise; one who does so

can be entirely within his intellectual rights.[33] Third, I believe that the arguments are just as satisfactory as most serious arguments philosophers give for important conclusions — as satisfactory as Wittgenstein's private language argument, or Quine's argument for the radical indeterminacy of translation, or Armstrong's argument that mental events are identical with brain events, or Kripke's argument that they are not thus identical. Of course none of these arguments may be successful in the strong sense that they compel rational assent; none, I think, *is* successful in that sense. Still, consider a philosopher who accepts, say, the conclusion that there cannot be a private language, and accepts it on the basis of Wittgenstein's argument; such a philosopher can be both entirely rational and entirely within his philosophical rights in so doing. The same, I think, may be said for one who accepts the existence of God on the basis of the ontological argument.

D. *Necessity* De Dicto

In the fall of 1954 I took a course from William Frankena in which one topic for discussion was the so-called "linguistic theory of the *a priori*" in its various formulations; it was then that I became interested in necessity. I found this theory extremely uncongenial. In the first place, it was typically stated in an extraordinarily opaque fashion. It was said, for example, that a necessary truth — *either there are carnivorous cows or there aren't any*, let's say — "records our determination" to use words in a certain fashion. But if that is what it records, then wouldn't it be contingent rather than necessary? It was said that necessary truths somehow "arise out of" or "reflect" linguistic conventions, that a given necessary truth is necessary because we have adopted certain linguistic conventions, and would not have been necessary, or perhaps not even true, had we adopted other conventions. "Thus," said A. J. Ayer,

it is a contingent, empirical fact that the word "earlier" is used in English to mean earlier, and it is an arbitrary, though convenient rule of language that words that stand for temporal relations are to be used transitively; but given this rule, the proposition that, if A is earlier than B and B is earlier than C, A is earlier than C becomes a necessary truth.[34]

But I was unable to see what the claim was here. "Given this rule, the proposition that ... becomes a necessary truth": does this mean that before the rule was in force the proposition in question wasn't true or wasn't necessary? That seemed at best peculiar. Is the idea that before the rule was in force there simply wasn't any such truth? That seemed wholly incredible. Is the

idea that there are rules of language we have adopted, such that our adopting them somehow brings it about or somehow explains or accounts for the fact that this proposition is necessary, so that if we had adopted *other* "linguistic rules," then the proposition would not have been necessarily true? Again, I found this quite incredible. It seemed wholly obvious that there is nothing we could have done such that if we had done it, then it would not have been necessary that either there are carnivorous cows or there aren't. Indeed, even if there had been no people at all, so it seemed to me, that proposition would still have been necessary.

Argument for this linguistic or conventionalistic theory, furthermore, seemed distressingly scarce; and what little there was seemed at best confused. It was suggested, for example, that the necessity of the proposition *either there are some carnivourous cows or there aren't any* is due to our linguistic conventions because that proposition wouldn't have been necessary or even true if we had used the words involved in some other way — if, for example, we had used 'either ... or ... ' in the way we do use 'both ... and ... '. But this argument seemed (and seems) to me to confuse sentences and propositions. It is no doubt due to human conventions that the *sentence* 'Either there are carnivorous cows or there aren't any' expresses a truth in our language; if we had adopted different conventions, then perhaps that sentence would have expressed a different proposition in our language and would not have expressed a necessary truth. But of course it doesn't follow that the proposition the sentence *does* express would not have been necessary. It was pointed out to me that this objection to the argument in question appeals to a distinction — that between sentence and proposition — not accepted by those who offered the argument. Perhaps so; but any philosopher will be obliged to adopt *something* like this distinction. No one will hold, presumably, that if we had used 'rich and happy' the way we do use 'lives during the twentieth century' then we should all have been rich and happy.

But even if we reject any such distinction, the argument still seemed wholly unacceptable. The truth *either some cows are carnivorous or none are* is said to owe its necessity to convention, because there are conventions we could have adopted under which the sentence 'either some cows are carnivorous or none are' would have failed to be necessary. Of course there are other conventions we could have adopted under which the sentence in question would have failed to be *true*; by parity of reason, then it owes its truth as well as its necessity to convention. This consequence, of course, was not unwelcome to conventionalists; they held that necessary truths were "true by convention", apparently for something like the reason given. But

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contingent truths are true by convention in the same sense; for any true contingent sentence there are conventions we could have adopted under which it would have been false. So, for example, the sentence 'there are no carnivorous cows' would have been false if we had adopted a convention whereby "no" served to only express emphasis, like the Greek γαρ or perhaps the English 'indeed'.

It therefore seemed to me that the linguistic theory of necessity was resoundingly false and that the starting point for sound thought on the subject was its rejection. Neither the truth nor the necessity of necessary propositions, so it seemed to me, depends in any way upon contingent facts about human beings — facts about the conventions they have adopted or facts about their psychology, transcendental or otherwise.

E. *Necessity* De Re

As I now see it, I was right on that point; but on another crucial point involving necessity I was dead wrong. Writing in 1960 about Norman Malcolm's claim that the pains I feel have the property of being mine *necessarily*,[35] I said

... objects do not have necessary properties *merely as objects*, so to speak; they have them only under or relative to certain descriptions. A cow necessarily has the property of being female; — i.e., it is a necessary truth that if Bessie is a cow, then Bessie is a female kine. But it is not a necessary truth that Bessie is a female ....[36]

Here I was doing no more than echoing the prevailing orthodoxy; I was taken in by the then fashionable claim that if it makes any sense at all to suppose that an object x has a property P necessarily or essentially, then x's having P essentially must he construed, somehow, as something like a three termed relation among x, P, and a description of some sort — perhaps a description that entails P in some relevant sense. Relative to the description 'the meanest man in North Dakota', Dirk Miedema has essentially the property of being in North Dakota; relative to the description 'the husband of Agnes Miedema', however, he has essentially not *that* property but instead such a property as *being married*. The idea that some of his properties might be essential to him *simpliciter* was widely and often contemptuously dismissed as a medieval confusion.

This rejection of *de re* necessity was the reigning dogma of the day. According to William Kneale, for example, the idea that objects have both essential and accidental properties is based on the assumption that

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properties may be said to belong to individuals necessarily or contingently as the case may be, without regard to the ways in which the individuals are selected for attention. It is no doubt true to say that the the number 12 is necessarily composite, but it is certainly not correct to say that the number of the apostles is necessarily composite, unless the remark is to be understood as an elliptical statement of relative necessity. And again, it is no doubt correct to say that this at which I am pointing is contingently white, but it is certainly not correct to say that the white paper at which I am pointing is contingently white.[37]

A similar sentiment is expressed in Quine's famous mathematical cyclist passage. Quine claims that talk of a difference between necessary and contingent attributes of an object is "baffling", and then proceeds:

Perhaps I can evoke the appropriate sense of bewilderment as follows. Mathematicians may conceivably be said to be necessarily rational and not necessarily two-legged; and cyclists necessarily two legged and not necessarily rational. But what of an individual who counts among his eccentricities both mathematics and cycling? Is this concrete individual necessarily rational and contingently two-legged or vice versa? Just insofar as we are talking referentially of the object, with no special bias towards a background grouping of mathematicians as against cyclists or vice versa, there is no semblance of sense in rating some of his attributes as necessary and others as contingent. Some of his attributes count as important and others as unimportant, yes, some as enduring and others as fleeting; but none as necessary or contingent.[38]

By about 1961 essentialism and necessity *de re* was a central topic of discussion at Wayne; we were coming to question the dogma that essentialism is incoherent, and to suspect that arguments like Quine's and Kneale's weren't at all conclusive. By 1965, when I was writing the second draft of *God and Other Minds*, I had rejected the dogma in question and offered the following peculiarly partial account of what it is for an object to have a property essentially:

x has *P* necessarily if and only if *x* has *P* and the proposition *x lacks P* is necessarily false (where the domain of the variable 'x' is unlimited but the set of its substituends contains only proper names) (p. 177).

After I finished *God and Other Minds* in 1966, I turned to explicit study of the issues surrounding essentialism; and for me serious reflection on these topics began with serious scrutiny of those arguments by Quine, Kneale and others. In 1968–69 I had the splendid fortune to spend the year at the Center for Advanced Study in the Behavioral Sciences, a scholarly haven than which it is not possible that there be a greater. That year I wrote '*De Re et De Dicto*', 'World and Essence' and most of the first draft of *The Nature of Necessity*. In the first and third I explicitly and carefully examined

the arguments for the conclusion that essentialism is confused, inconsistent, incoherent, senseless, or in some other way intellectually bankrupt; I concluded the essentialist has nothing whatever to fear from these arguments. Quine, for example, seemed to take it for granted that the essentialist will hold both (1) that mathematicians are essentially rational if and only if it is a necessary truth that all mathematicians are rational, and (2) that cyclists are accidentally or contingently rational if and only if it is a contingent truth that cyclists are rational. This, of course, leads to trouble; but why suppose the essentialist would believe any such thing?

Although it was common, twenty-five years ago, to dismiss essentialism as medieval confusion, the fact is that discussions of essentialism then current had a long way to go to catch up with the medievals. It was widely assumed without argument that a sentence of the form "A's are necessarily B's" must be seen as a stylistic variant of the corresponding sentence of the form "Necessarily, A's are B's". But the difference between these sentences was perfectly clear to Thomas Aquinas. Considering the question whether divine foreknowledge of human action — a foreknowledge that, he says, consists in God's simply seeing the relevant actions taking place — is compatible with human freedom, Aquinas inquires into the truth of

(a)   What is seen to be sitting is necessarily sitting.

For suppose God sees at t_1 that Paul is sitting at t_2. If (a) is correct, then presumably Paul is necessarily sitting at t_2, in which case it is not then within his power not to sit. But then he isn't free, at t_2, with respect to the action of sitting. Aquinas' reply to this argument is by way of a *distinguo*. (a) can be taken either *de dicto*, as

(a')   It is necessarily true that whatever is seen to be sitting at a time *t* is sitting at that time

or *de re* as

(a*)   Whatever is seen to be sitting at a time *t* has essentially the property of sitting at that time.

(a'), says Aquinas, is true but does not yield the deterministic conclusion; together with the premise that Paul is seen to be sitting at t_2 it yields the conclusion that he sits at that time, but not the conclusion that he has *essentially* the property of sitting then. (a*), on the other hand, does indeed yield the second conclusion; but, says Aquinas, there isn't the slightest reason to think that (a*) is true. So the argument fails.

The fact is, I think, that those who rejected essentialism didn't do so on the basis of the arguments publicly purveyed; those arguments dissolve upon close inspection. The real moving force wasn't these arguments, but simply the conviction that the distinction between accidental and essential properties makes no sense. The fundamental idea here, I think, was that a statement of the form "A's are necessarily B's" or "A's are essentially B's", *must*, if it is to mean anything at all, mean something like "Necessarily, A's are B's." Modality *de re* must be construed, somehow, as modality *de dicto*; for "necessity resides in the way in which we talk about things, not in the things we talk about" (*Ways of Paradox*, p. 174). But even if modality resides where Quine says it does, how does it follow that modality *de re* is more obscure than modality *de dicto*? An object has a property *P* essentially if and only if it has *P* and couldn't possibly have had the complement of *P*: a proposition is necessarily true if and only if it is true and couldn't possibly have been false. How is the latter more limpid than the former? Why is it harder to understand the claim that Socrates could have been a planet than the claim that *Socrates is a planet* is possibly true? It isn't easy to see why modality *de re* should be thought in principle more obscure than modality *de dicto*. Indeed, necessary truth is best seen as a special case of *x's having P essentially*: the case where *x* is a proposition and *P* is truth.

By now, of course, all of this seems a long time ago; essentialism and modality *de re* have become philosophically respectable. One decade's patent confusion is another's profound new insight. It is one of the many ironies of intellectual history that essentialism has become an influential and important part of contemporary philosophy at least partly through the efforts of the logical positivists — who were about as hospitable to it as, say, Hugh Hefner to the basic ideas of the Moral Majority. The positivists brought a salutary emphasis upon the use and application of logic in philosophy; and the explosion of modal logic in the fifties and sixties helped both to expose the superficiality of the objections to essentialism and to provide new ways to understand and think about it.

F. *Names*

I began thinking about the connection between proper names and essential properties in the early 1960's while writing *God and Other Minds*; there I offered an account of essential property possession that crucially involved proper names (see above, p. 74). In the summer of 1968 I took part in a Council for Philosophical Studies Summer Institute in Metaphysics on Long

Island. I argued that the objections to essentialism were wholly unimpressive and offered an account of the *de re via* the *de dicto* — a way of finding for any proposition expressing modality *de re, a de dicto* proposition strongly equivalent to it[39] — that relied upon certain features of proper names. The other lecturers, during my three-week stint, were Chisholm, Quine and Sellars; Quine wanted to know what my view of proper names was; clearly enough my account would give the wrong result if, for example, Frege and Russell were right and proper names were really disguised definite descriptions. Although I had no very good answer to Quine's question, it seemed to me then (as now) utterly obvious that proper names do not function as Frege and Russell said they did. Russell and Frege held that such an ordinary[40] proper name as 'Thales' is semantically equivalent to such a description as 'the ancient Greek philosopher who thought everything was made of water'. (The same name they thought, will be semantically equivalent to different descriptions for different speakers; even if the above equivalence holds for us or some of us, it very likely did not hold for Thales' wife.) If this is correct, then descriptions of this sort can be substituted *salva propositione* for proper names; the result of replacing a name in a sentence *S* by the right description of this sort will express the same proposition as does *S*. This seemed (and seems) to me quite false. The sentence

(1)   Thales did not believe that everything was made of water

for example, does not express the same proposition as

(2)   The ancient Greek philosopher who believed everything was made of water did not believe that everything was made of water.

The proposition expressed by (1) is clearly possible; had Thales' parents emigrated to North Africa and brought him up, say, in the Sahara desert, in all probability he would not have come to hold his peculiarly aquatic views. The proposition expressed by (2), on the other hand, seems to be impossible, entailing as it does that there was an ancient Greek philosopher who believed that everything was made of water and who furthermore did not believe that everything was made of water. But then 'Thales' clearly enough, will not be semantically equivalent to the description in question; nor will it be semantically equivalent to any of the other sorts of definite descriptions to which Russell and Frege direct our attention.[41]

Some philosophers have objected to this line of argument. They point out that such a sentence as (2) can plausibly be seen as ambiguous; the

description can be taken with wide scope, so that the sentence expresses something like

(2*)   There was just one ancient Greek philosopher who believed that everything is made of water and he did not believe that everything is made of water

which does indeed seem to be impossible, or it can be taken narrow scope, in which case (2) expresses what is expressed by

(2**)   It is not the case that there was just one ancient Greek philosopher who believed that everything is made of water and who believed that everything is made of water

which, even if somewhat unstylishly redundant, is at any rate not impossible. If so, however, then (so the claim goes) the argument of the preceeding page does not suffice to establish that names and descriptions of the sort under consideration are not semantically equivalent; for perhaps names should be seen as semantically equivalent to descriptions that always take widest scope. But whatever the merits of this response, it is easily side-stepped by a change in example: what we must do is assimilate the sign for negation, in (2), to the predicate, so that the sentence is no longer plausibly construed as ambiguous. Suppose we therefore define the term 'anhydronomous' as 'does not believe that everything is made of water'. Then the sentence

(2*)   the ancient Greek philosopher who believed that everything is water was anhydronomous

is not ambiguous in the way suggested. (We could achieve the same result with less rigamarole by switching from (1) to

(1**)   There was such a person as Thales and he did not believe that everything was made of water;

the result of replacing 'Thales' in (1**) by the suggested description is not relevantly ambiguous and (unlike (1**)) expresses an impossible proposition.)

I was therefore quite certain that proper names do not function as disguised descriptions of the Russell-Frege sort, but I had only a partial answer to the question Quine pressed: how *do* they function? It seemed to me that Frege and Russell were right on one point: proper names do express properties, even if they don't express the sorts of properties Frege and Russell thought they did. Let's suppose we know what it is for a predicate — 'is wise', for example — to express a property, in this case, wisdom. Then

we may say that a singular term t expresses a property P if (but not only if) the result of replacing 'x' and 'P' in 'x is P' by t and a predicate that expresses the complement of P respectively, expresses a necessarily false proposition. Then 'the first American to climb Everest' expresses the properties *being an American, having climbed Everest*, and *having climbed Everest before any other American*. What I believed and still believe is that a proper name of an object x, in its use as a name of x, expresses all and only the properties x has essentially. Thus the name 'Socrates' expresses the properties *being a person, being a non-number* and *being self-identical*; for the sentences 'Socrates is a non-person', 'Socrates is a number' and 'Socrates is self-diverse' all express necessarily false propositions.

Then in 1968–69, the year I spent at the Center for Advanced Study in the Behavioral Sciences, I hit on the notion of an individual essence. An essence E of an object x is a property that is essential to x and essentially unique to x; that is, x has E essentially and it is not possible that there be an object distinct from x that has E. Alternatively expressed, an essence of an object x is a property x has in every possible world in which x exists and which is such that in no world does there exist an object distinct from x that has it. This idea has a long history, going back at least as far as Boethius,[42] and getting explicit treatment by Duns Scotus. The idea was new to me then, however, and what I saw (as I think of it) was that proper names express essences. The winter quarter of that year I commuted weekly from Palo Alto to Los Angeles to attend a seminar David Kaplan was giving; David Lewis, then at UCLA, also attended it. I learned much from discussion with Lewis and Kaplan, and my ideas about proper names and essences were subjected to a good deal of genial and penetrating if somewhat skeptical criticism. The basic idea still seems to me entirely correct: *pace* Mill, proper names do indeed express properties; but *pace* Frege and Russell the properties they express are essences.

In 1971–72 I was a visiting professor at UCLA; during this time I wrote the final draft of *The Nature of Necessity*. During this year I also first encountered Saul Kripke's work on necessity and proper names; I attended a seminar he gave at UCLA and I saw a version of "Naming and Necessity". I found his work extremely interesting — indeed, fascinating — and was both surprised and gratified by the confluence of his views on both topics — necessity and proper names — and mine. I did find find some points of disagreement, however: Kripke's genealogical essentialism (the view that a person has essentially the ancestors she has in fact) seemed to me dubious; and while I thought he was right in rejecting an easy equivalence between

what is necessary and what is known or knowable *a priori*, I thought he was mistaken in the specific suggestions he made as to the *a priori* knowability of such contingent propositions as *Stick S is one meter long at t* (See *The Nature of Necessity*, p. 8).

I also found it difficult to see precisely what Kripke meant by the term 'rigid designator' and what properties, if any, he thought proper names and other rigid designators expressed. He introduces this term as follows:

> What's the difference between asking whether it's necessary that 9 is greater than 7 or whether it's necessary that the number of planets be greater than 7? Why does one show anything more about essence than the other? The answer to this might be intuitively "Well, look the number of planets might have been different from what it in fact is. It doesn't make any sense, though, to say that nine might have been different from what it in fact is." Let's use some terms quasi-technically. Let's call something a *rigid designator* if in any possible world it designates the same object, a *non-rigid* or *accidental designator* if that is not the case. Of course we don't require that the objects exist in all possible worlds. Certainly Nixon might not have existed if his parents had not gotten married, in the normal course of things. When we think of a property as essential to an object, we usually mean that it is true of that object in any case where it would have existed. A rigid designator of a necessary existent can be called *strongly rigid*.[43]

This passage suggests that a term *t* is a rigid designator of an object *x* if and only if *t* designates *x* in every possible world in which *x* exists. Thus 'Socrates' would be a rigid designator of Socrates, because 'Socrates' designates Socrates in every world in which the latter exists. But how are we to understand "designates in every world" here? Under what conditions does a term designate an object in a world? This looked like a special case of an object's having a property in a world; and perhaps the most natural way to understand *that*, in turn, is, or is equivalent to.

(3)   *x* has *P* in *W* if and only if it is not possible that *W* be actual and *x* fail to have *P*

or

(4)   *x* has *P* in *W* if and only if necessarily, if *W* were actual, then *x* would have *P*.

The suggestion with respect to Socrates and 'Socrates', then, would be that the latter is a rigid designator of the former if and only if every world in which Socrates exists is one in which 'Socrates' designates him — if and only if, that is, every world in which Socrates exists is such that if it had been

actual, then, 'Socrates' would have designated Socrates. But this seemed wrong; surely there are worlds in which Socrates exists but is named, say, 'Thresymachus' rather than 'Socrates'; and these worlds are not such that if they had been actual, then 'Socrates' would have designated Socrates.

Presumably, then, we are not to understand '*t* designates *x* in *W*' along the lines of (3) or (4). But then how are we to understand it? Kripke responds to a similar query as follows:

> To clear up one thing which some people have asked me: When I say that a designator is rigid, and designates the same thing in all possible worlds, I mean that, as used in *our* language, it stands for that thing, when we talk about counterfactual situations. I don't mean, of course, that there might not be counterfactual situations in which in the other possible worlds people actually spoke a different language. One doesn't say that 'two plus two equals four' is contingent because people might have spoken a language in which 'two plus two equals four' means that seven is even. Similarly, when we speak of a counterfactual situation, we speak of it in English, even if it is part of the description of that counterfactual situation that we were all speaking German in that counterfactual situation. We say, 'suppose we had all been speaking German', or 'suppose we had been using English in a non-standard way', Then we are describing a possible world or counterfactual situation in which people, including ourselves, did speak in a certain way different from the way we speak. But still, in describing that world, we use *English* with *our* meanings and *our* references. It is in this sense that I speak of it as having the same reference in all possible worlds. (p. 290).

I didn't find this response entirely clear. The suggestion seems to be that a term *t* is a rigid designator of an object *x* in our language if we do or can use *t* (in our language) to refer to *x* when talking about counterfactual situations — even situations in which *x* is not in fact denoted by *t*. If *t* is a rigid designator of *x*, we can use it to talk about *x* and how things stand with *x* in other possible worlds — even those in which *t* does not denote *x*. Thus we may say: suppose Socrates had not been named 'Socrates' but 'Pico della Mirandola'; then Socrates would have had a very long name. But the problem here is that the contrast between names and definite descriptions is not appropriately preserved; it is indeed true that proper names are rigid designators in this sense, but the same goes for descriptions, including descriptions that are presumably to be thought of as flaccid rather than rigid. We can certainly use 'the meanest man in North Dakota', for example, to talk about its denotation in counterfactual situations, including situations in which its denotation isn't denoted by that term. Thus we can quite properly say "Suppose the meanest man in North Dakota had not been beaten so often by his father: then he wouldn't have been so mean and probably wouldn't have been any meaner than you or I"; or "Consider the meanest man in North Dakota: in some

worlds he isn't nearly as mean as some other North Dakotans." So this too is presumably not what Kripke meant.

The context in which Kripke first introduces rigid designation (above, p. 80) suggested another way of understanding what he had in mind. "What's the difference", he inquires, "between asking whether it's necessary that 9 is greater than 7 or whether it's necessary that the number of planets is greater than 7? Why does one show anything more about essence than the other?" He goes on to give his account of rigid designation as designation of the same object in every possible world; and then he continues: "Of course Nixon might not have existed if his parents had not gotten married, in the normal course of things. When we think of a property as essential to an object we usually mean that it is true of that object in any case in which it would have existed." Two things stand out here: first, Kripke is clearly connecting rigid designation, designation of the same object in every possible world or in every world in which it exists, with essential properties of the term's denotation. And second, there is the qualification that a rigid designation of an object x need not denote x in every possible world but only in those in which x exists: this qualification is closely linked, in the passage, with the idea that an object x has a property P essentially if x has P in every world in which x exists; it needn't have P in every world, unless of course it is a necessary being. These two considerations suggested that what Kripke had in mind was this. First, a rigid designator of an object expresses a property essential to that object — one that it has in every world in which it exists. 'The inventor of bifocals' (to use one of Kripke's examples) is not rigid because there are possible worlds in which what it in fact denotes — Benjamin Franklin, let's say — exists but does not have the property of being the inventor of bifocals. But a rigid designator expresses a property essential to its denotation. And secondly, one of Kripke's "intuitive tests" for rigid designation suggested something further:

One of the intuitive theses I will maintain in these talks is that *names* are rigid designators. Certainly they seem to satisfy the intuitive test mentioned above: although someone other than the US president in 1970, might have been the US President in 1970 (e.g., Humphrey might have) no one other than Nixon might have been Nixon. (p. 270)

What *this* suggests is that a rigid designator expresses a property essentially unique to x — one such that it is impossible that there be something distinct from x that has it. Putting the two suggestions together, I concluded that a rigid designator of x expresses a property essential to x and essentially unique to x — but that would just be an individual essence of x. So I was

inclined to think that what Kripke had in mind could best be put by saying that rigid designators are singular terms that express essences.[44]

I'm no longer at all sure that this is what Kripke had in mind but I do think it is a plausible interpretation of what he says. Other interpretations encounter difficulty. One thesis often ascribed to Kripke of late, for example, is the thesis that rigid designators refer *directly*, make a direct reference to their denotations. I'm not sure just what this thesis comes to. A variable under an interpretation, it is said, is a paradigm of direct reference; but is it really even the least bit clear that an interpreted variable *refers to* or *denotes* the object assigned to it? Nor am I sure whether this thesis is incompatible with the view that rigid designators express essences and other essential properties. If it *is*, however, how shall we understand Kripke's connecting rigid designation with essential property possession?

A second interpretation can be put as follows. According to the interpretation I suggested in *The Nature of Necessity*, a term t denotes an object x in a world W if and only if (roughly) the strongest property t expresses (expresses in fact, in the actual world) characterizes x in W. On the interpretation I shall consider now, a term t denotes an object x in (better: 'at' or 'with respect to') a world W if, roughly, the proposition expressed by a simple sentence of the form 't has P' is true in a world W if and only if x has, in W, the property denoted by P. On this suggestion, t denotes x with respect to W if x is the object whose properties, in W, determine the truth value, in W, of propositions expressed by simple sentences containing t in subject place. On this account, an ordinary description will not, indeed, denote the same object with respect to every possible world, or with respect to every world in which what it denotes in the actual world exists. The proposition expressed by

(5)   The meanest man in North Dakota is wise

for example, is true in a world W if and only if in W there is just one meanest man in North Dakota, who is indeed wise; the vicissitudes in W of the person denoted with respect to the *actual* world by that description — Dirk Meidema, say — are irrelevant. The proposition expressed by

(6)   Dirk Meidema is wise,

on the other hand, is true in a world W if and only if the person denoted with respect to the actual world by 'Dirk Meidema' — Dirk Meidema, as it happens — has the property of being wise in W.

Sadly enough, however, on this interpretation we are left with a residual perplexity. According to Kripke, a rigid designator denotes its denotatum *in*

every world where the latter exists; it is only *strongly* rigid designators, designators of necessary beings, that denote their denotata in *every* possible world. But under the present construal, this wouldn't be so; 'Socrates is wise' expresses a proposition true in a world *W* if and only if in *W Socrates* has the property of being wise in *W*; and this is so whether or not Socrates exists there. But then under the present construal 'Socrates' denotes Socrates with respect to every possible world (not just the ones in which he exists) and is therefore a strongly rigid designator despite the fact that Socrates is a contingent being. This construal, therefore, renders nugatory Kripke's distinction between rigid and strongly rigid designators.

I therefore believe that there is much to be said for the interpretation I suggested in *The Nature of Necessity*. Nevertheless there is a good deal in 'Naming and Necessity' to suggest that Kripke meant to follow Mill in holding that proper names express neither essences nor any other kind of property; they have denotation but no connotation, as Mill put it. This is suggested by such passages as the following: "Mill, as I have recalled held that although some 'singular names', the definite descriptions, have both denotation and connotation, others, the genuine proper names, had denotation but no connotation. . . . . The present view, directly reversing Frege and Russell, *endorses* Mill's view of *singular* terms . . ." (p. 327). It is thus not implausible to interpret Kripke as holding that proper names do not express properties. It is even more plausible to ascribe this doctrine to Kaplan, Donnellan and others who hold views of proper names quite similar to Kripke's. As I argued in 'The Boethian Compromise', however, the doctrine in question — the anti-Fregean doctrine, as I called it there — faces profound and serious difficulties: difficulties about empty proper names, proper names in negative existentials, and proper names in belief contexts.[45]

Whatever the vicissitudes of the anti-Fregean doctrine, I thought it was clear that proper names do indeed express properties, at least in the sense of 'express' outlined above (p. 79). First of all, they express trivially essential properties, such as *being either a horse or a non-horse*. Furthermore an ordinary proper name such as 'William F. Buckley' will express properties that are not trivially essential:

William F. Buckley is a prime number,

for example, is necessarily false, so that the name in question, in that use, expresses the complement of the property of being a prime number. (This is compatible, of course, with the fact that someone may have bestowed the name 'William F. Buckley' on the number 7.) Still further, it is easy to

see, I think, that any property essential to an object will be expressed by a proper name of that object. But then it follows, as I argued in *The Nature of Necessity*, that a proper name of an object *x* will express an individual *essence* of *x*. 'William F. Buckley,' for example, expresses the property *being William F. Buckley* or *being identical with William F. Buckley*. This property is essential to him; clearly it isn't possible that he should not have been identical with William F. Buckley (although of course he could have lacked that *name*). It is also essentially unique to him; it is not possible that something distinct from Buckley should have been identical with William F. Buckley. I went on to suggest (p. 83) that different proper names of the same object — 'Hesperus' and 'Phosphorus', for example — express the *same* essence of that object.

This suggestion, of course, is subject to a well known difficulty. As Frege noted, the ancient Babylonians knew that Hesperus is the first heavenly body to appear in the evening; they also claimed they didn't know and didn't even believe that *Phosphorus* is the first heavenly body to appear in the evening. But how is that possible, if as they later discovered, Hesperus *just is* Phosphorus? For then, on the suggestion I made, 'Hesperus' and 'Phosphorus' would express the same essence of Venus, so that

(7)   Hesperus is the first heavenly body to appear in the evening

is the same proposition as

(8)   Phosphorus is the first heavenly body to appear in the evening.

These being the same proposition, no one, not even an ancient Babylonian, could know or believe one of them without knowing or believing the other. But then what shall we make of their sincere protestations to the contrary?

Shortly after *The Nature of Necessity* was published, it occurred to me that this assumption — that different proper names of the same object express the same essence of that object — was wholly gratuitous and raised wholly gratuitous difficulties. It is clear, first of all, that an object will have *several* individual essences. For where *P* is a property unique to *x*, *Pα*, the α-transform of *P* (the property of having *P* in *α*) is also an essence of *x*.[46] But then both *(being born at P, t)α* (where *P* names the place and *t* the time at which Socrates was born) and *(dying at P, t)α* are essences of Socrates. Furthermore, these are *distinct* properties; clearly someone could know of the first that it was exemplified by Socrates, without knowing or believing of the second that it was exemplified by him, or, indeed, exemplified at all. But then why not suppose that different names of the same object express different and epistemically inequivalent essences of that object? Then (7) and

(8) would express different properties, and the ancient Babylonians could be seen as telling no more than the sober truth in claiming to believe one but not the other. This is what I argued in 'The Boethian Compromise'.

What was needed first, of course, was a narrower, more discriminating sense of 'express'. In the broad sense of 'express' — the sense explained above, (p. 79) — every proper name of an object expresses every property essential to that object and hence each of its essences. But that broad sense of 'express' is irrelevant to the question which propositions are expressed by such sentences as (7) and (8). We can see this as follows. In the present (broad) sense, the terms '9' and '$\int_0^3 x^2 \, dx$' express the very same properties; each expresses all the properties essential to the number 3. But surely the sentences

(9)   9 is odd

and

(10) $\int_0^3 x^2 \, dx$ is odd

do not express the same proposition; for it is entirely possible that someone should grasp or apprehend the proposition expressed by the first without grasping that expressed by the second. A person might, for example, fail to grasp the notion of the definite integral; then he would be unable to grasp the second proposition, although this need not prevent him from grasping the first. If we think of what a term expresses, therefore, as among the elements determining which proposition is expressed by a sentence containing the term, then it is clear that the broad sense of 'express' isn't the relevant sense here. There must be a narrower sense; and in that narrower sense, however exactly we characterize it, '9' and '$\int_0^3 x^2 \, dx$' do not express the same property.

In order to get at the appropriate narrow sense, suppose, first, that we have a reasonably firm grasp of what it is for a predicate term to express a property and what it is for a sentence to express a proposition. The predicate 'is the square of 3' expresses the property *being the square of 3*: it does not express the properties *being the square root of 81* or *being the sum of 4 and 5*, despite the fact that whatever has one of these properties will also be obliged to display the others. The sentence '9 is the square of 3' does not express the same proposition as '9 is the square root of 81', again despite the fact that the proposition expressed by the first is equivalent, in the broadly logical sense, to that expressed by the second. Let us agree further

that a definite description ⌈the $\mathscr{P}$⌉ expresses (in English, or in an English idiolect) the same property as ⌈is the sole $\mathscr{P}$⌉. Then we can give the following partial account of the narrow sense of 'express': a proper name N expresses (in English, or in an English idiolect) a property P if (but not only if) there is a definite description D (in English or some extension of English) such that D expresses P and D and N are intersubstitutable *salva propositione* in sentences of the form 't is $\mathscr{P}$'. (Clearly certain restrictions are needed here. N must be used, not just mentioned, in the sentences in question; and certain further restrictions having to do with contexts expressing propositional attitudes are also necessary (see my reply to Ackerman, below, p. 355ff). A precise and accurate statement of these restrictions would be extremely difficult; here I must be content with a first approximation.)

Now all I explicitly *asserted* in 'The Boethian Compromise' is that an object typically has several epistemically inequivalent essences and that different proper names of the same object could express, in the narrow sense, epistemically inequivalent essences. Then we could see how someone might believe, e.g., that Mark Twain is identical with Mark Twain but fail to believe that Mark Twain is identical with Samuel Clemens; for these might be distinct and epistemically inequivalent propositions. I clearly meant to go further, however: I suggested that proper names sometimes express a specific kind of essence: α-transforms of singular properties. Thus if you and I are discussing the CIA we might say "Let's name the shortest spy 'Shorty'" and go on to talk about the spy thus named (let's suppose that in fact there is a uniquely shortest spy). When we thus use the name 'Shorty', I suggested, it expresses the property (*being the shortest spy*) α, an essence, as it turns out, of Ralph J. Ortcutt, who is the shortest spy. Then it could easily be true that we know the proposition *Shorty is a spy* but don't know the proposition *Ralph J. Ortcutt is a spy* even if Ortcutt is a close friend; they are simply epistemically inequivalent. I went on to suggest that in other sorts of contexts proper names might express other α-transforms.

In 1978 I read 'The Boethian Compromise' at the meeting of the Pacific Division of the American Philosophical Association; and Diana Ackerman responded with some powerful and searching objections. (Here she was only being even handed; she had already raised devastating objections to most of the other extant theories of proper names). Some of these objections turn up in her contribution to the present volume; in my reply I shall try to answer them.

G. *Possible Worlds, Actualism, Existentialism and Serious Actualism*

1. *Possible Worlds*

I began thinking about possible worlds in a desultory sort of way in 1963–64, when I was a visiting lecturer at Harvard. I began thinking about them more seriously after I finished *God and Other Minds* in 1967 or so. Then in 1968–69 I was a Fellow at the Center for Advanced Study in Behavioral Sciences; although I wasn't sure I was a behavioral scientist, I found it a sheer delight to be there. That year I worked out the conception of possible worlds found in *The Nature of Necessity*. With a qualification to be mentioned below, this conception still seems to me to be correct. In the first place, under this conception, there really *are*, i.e., *exist*, such things as possible worlds; talk about possible worlds is not merely a *façon de parler*, replaceable in official theory by talk that makes no commitment to their existence. My view may therefore be described as a sort of modal realism. Secondly, I took a possible world to be a way things could have been or a *state of affairs* — something like, for example, *Socrates' being shorter than Plato* or *Quine's being a distinguished philosopher*. A possible world, therefore, like a property, proposition or set, is an *abstract* object: an object that, (like God) is immaterial, but (unlike God) is essentially incapable of life, activity or causal relationships.[47]

Among states of affairs, furthermore, some obtain or are *actual*; others are not. Actuality, for states of affairs, is like truth for propositions; just as some propositions are true and others false, so some states of affairs are actual and others unactual. Those that are unactual, however, like false propositions, nevertheless *exist*; actuality must not be confused with existence. Among those states of affairs that are actual, furthermore, there are some that *could have* failed to be actual; and among those that are not actual, there are some that *could have* been actual. A state of affairs is *possible* if and only if it could have been actual; and of course if it *is* actual, then it *could have been* actual. I said above that a possible world is a state of affairs; we must now add that a possible world is a *possible* state of affairs. But not just any possible state of affairs is a possible world. To be a possible world, a state of affairs must be *maximal*. Say that a state of affairs S *precludes* a state of affairs S^* if it is not possible that both S and S^* be actual; say that S *includes* S^* if it is not possible that S be actual and S^* fail to be actual; and add that if S precludes S^*, then S includes the complement of S^*. Then

a state of affairs S is maximal if and only if for every state of affairs S^*, either S includes S^* or S includes the complement of S^* — if and only if, that is, for every S^*, S includes or precludes S^*. A possible world is then a maximal possible state of affairs.

So a possible world is a certain kind of possible state of affairs. Such modal notions as possibility and necessity, then, are not to be defined or explained in terms of possible worlds; the definition or explanation must go the other way around. (Of course it does not follow that the idea of possible worlds cannot help us deepen our grasp of these modal notions; it has obviously been a splendidly fertile source of modal insights; it has enabled us to explore these notions in a much more penetrating way.) Model discourse, therefore, cannot be reduced to non-modal discourse; it is none the worse for that.

Further, an object x *exists in* a state of affairs S if and only if necessarily, if S had been actual, x would have existed. Socrates, therefore, exists both in *Socrates' being wise* and in *Socrates' being foolish*. Since a possible world is a possible state of affairs, an object x exists in a possible world W if and only if necessarily, if W had been actual, x would have existed. Still further, an object x has a property P in a state of affairs S if and only if necessarily, if S had been actual, then x would have had P. Thus Socrates has wisdom in the state of affairs *Socrates' being wise* and foolishness in *Socrates' being foolish*. The proposition *Socrates is wise* is true in (has the property of truth in) *Socrates' being wise*; it is false in *Socrates' being foolish*. A special case: an object x has a property P in a possible world W if and only if necessarily, if W had been actual, then x would have had P. Another special case: a proposition P is true in a world W if and only if necessarily, if W had been actual, then P would have been true; and a proposition is necessarily true if and only if it is true in every possible world. Of course this isn't a *definition* or (non-circular) *explanation* of necessity but it is an important truth nonetheless. We can see *existence in S* as still another special case of *having P in S;* x *exists in $\underline{S}$* if and only if x has existence in S. Finally, we can also see inclusion and preclusion as special cases of *having P in S:* S includes S^* if and only if S has actuality in S^*; and S precludes S^* if and only if S^* has the complement of actuality in S.

Among the possible worlds, there is one such that every state of affairs it includes is actual. In fact there are probably several such worlds. A pair of states of affairs can be distinct but equivalent in the broadly logical sense; and probably the same goes for possible worlds. For present purposes, however, pretend that there is just one actual possible world and call it 'α'. α alone is actual; but of course *all* the possible worlds *exist*, and exist *actually*,

in the actual world. Indeed, since possible worlds — like propositions, properties and other states of affairs — are necessary beings, every possible world exists in every possible world. Furthermore, it is not possible that there should have been *more* possible worlds than in fact there are, or *different* possible worlds from the ones there are in fact. In every possible world, therefore, the same possible worlds exist. I said above that actuality and existence must not be confused. This is worth repeating; actuality and existence must not be confused. Such a confusion is fostered by the ill-advised habit of speaking of "unactualized possibles", where the alleged reference is not to states of affairs that are not actual but might have been, but to objects that do not exist but might have. Actuality must be distinguished from existence; it must also be distinguished from *actuality in* α, a property had only by α, from *actuality in itself*, a property had by every state of affairs, and from *actuality in some possible world or other*, a property had by every possible state of affairs.

Each of us obviously exists in many different states of affairs; if each of us also exists in possible but *incompatible* states of affairs, then each of us exists in many different possible worlds. But this is equally obvious. My wearing a green shirt on Christmas day, 1984, is incompatible with my wearing no shirt at all then; but both are possible. So I exist in at least two distinct worlds; but if in two, then in indefinitely many. Of course I do not exist in *all* possible worlds; that distinction is reserved for such necessary beings as properties, propositions, states of affairs and God — who is the only concrete object that exists in every possible world.

This is the conception of possible worlds outlined in *The Nature of Necessity*; with one important modification, I think it is correct. There are many propositions, I believe, whose truth value varies over time. Thus the proposition *Paul is typing* is true at the present time, but fortunately not at every time. As I see it, a sentence like 'Paul is typing' uttered at a time t does not express the temporally invariant propositon *Paul types at t* but a temporally variant proposition true at just the times Paul types. Since states of affairs are isomorphic to propositions, there are also temporally variant states of affairs — *Paul's typing*, for example. But this makes trouble for the above account of possible worlds. A possible world, I said is maximal; since Paul is in fact typing, α, the actual world, includes Paul's typing. But then α itself will be temporally variant and will be actual only as long as Paul types. In fact, of course, its actuality will be briefer. Just now a bird is flying towards my window: name that bird 'Sylvester'. Let t be the present time; for each time t^* as close as you like to t, Sylvester is a different distance from me. α,

therefore, will be actual for no more than an instant. The remedy, obviously and simply, is to take a possible world to be a temporally invariant state of affairs that is maximal with respect to temporally invariant states of affairs; then everything else can go on as before.[48]

2. *Actualism*

The last quarter century has seen a series of increasingly impressive attempts to provide formal semantical accounts of modal logic and interesting modal fragments of natural language. These accounts typically present themselves as *pure* semantics. If they are to provide genuine illumination and understanding, however, they must be seen as involving an implicit *applied* semantics (see *The Nature of Necessity*, p. 126 ff). The intended applied semantics associated with a given pure semantics is usually left at an undeveloped and unrigorous level. This is unfortunate; it is to the applied semantics, not the pure semantics, that one must turn for philosophical enlightenment and understanding; and leaving the matter at this inarticulate level makes it more difficult to see just what sort of applied semantical account is intended in a given instance. Now of course these semantical accounts differ among themselves. The differences, however, are for the most part by way of theme and variations; one can discern, I think, a dominant conception of possible worlds, properties and propositions. In 'Actualism and Possible Worlds' I called this the "Canonical Conception"; after outlining its essentials, (pp. 139–144) I went on to argue that this conception presupposes that there are or could have been things that do not exist; it presupposes that in addition to all the things that exist, there are some more — "possible objects" — that do not exist but could have.

This presupposition seems to me resoundingly false. In *the Nature of Necessity* I argued at considerable length that there neither are nor could have been any objects that do not exist; there aren't any merely possible objects (things that could have existed but in fact do not) and, *pace* Meinong and Castañeda, there aren't any impossible objects either. You and I could have failed to exist; there are possible worlds in which I do not exist, and the same, I trust, goes for you. If one of those worlds had been actual, we would not have existed. That is not to say, however, that we would have been merely possible but non-existent beings; had we not existed, there would have been no such things as you and I at all.

The truth of the matter, then, is that there neither are nor could have been objects that do not exist. This view is sometimes called 'actualism';

I call it that myself. Nevertheless this is unfortunate terminology, for it tends to perpetuate a confusion between actuality and existence. One who claims that there are no non-actual possibles may mean to say either that there is nothing that does not actually exist – i.e., exist – or that there is nothing that is possible but not actual. On my account the former is true but the latter flatly false, in view of the existence of possible but unactual states of affairs. What the actualist holds is not that whatever there is, is actual – after all, there are merely possible states of affairs – but that whatever there is *exists*. Actualism should really be called 'existentialism'. By now, however, it is too late; 'actualism' is already entrenched.

So according to the actualist, there neither are nor could have been non-existent objects – although of course there could have been some objects distinct from each of the objects that in fact there are. According to the actualist, the class of objects – cardinality problems aside – that exist in some world or other is identical with the class of objects that exist in α, the actual world. This is not to say, of course, that there couldn't have been objects that do not exist in α; no doubt there could have been; God could have made more or different persons. So in some possible world W, there exist objects that do not exist in α; it doesn't follow that *there are* some things that do not exist in α but do exist in that world W.[49] If W had been actual then there would have been, and would have existed, an object that did not exist in α; it doesn't follow that there are some things that do not exist in fact but do exist in W. There aren't any such things, because there aren't any things that do not exist. What there are instead are unexemplified essences. To say that there could have been an object distinct from each of the objects that in fact exists – to say that there are possible worlds in which there exist objects that do not exist in the actual world – is to say no more than that there are some unexemplified essences. And to say that there could have been a pair of objects that do not exist in α and such that one but not the other exists in a given world W is to say that there are a pair of unexemplified essences E and E^* and a pair of possible worlds W and W^* such that E and E^* are both exemplified in W while E but not E^* is exemplified in W^*.

Thomas Jager has worked out a pure semantics for quantified modal logic that appropriately reflects this way of viewing the matter.[50]

3. *Existentialism and Serious Actualism*

Among an object's essences, there is its *haecceity*: the property of being that very object, or the property of being identical with that very object. An

actualist holds that if, say, Socrates had not existed, then there would have been no such thing as Socrates at all; it is not as if under those conditions he would have been an object that does not exist but could have. One who takes actualism seriously may go one step further: he may hold that if Socrates had not existed, then the same would have held for his haecceity, singular propositions about him, and states of affairs (including possible worlds) in which he exists.[51] He may hold that this haecceity, these propositions and these states of affairs are *ontologically dependent* upon Socrates; they can't exist unless he does. And he may offer as a reason for his view the claim that Socrates is a *constituent* of these objects, adding that the constituency relation is essential to the constituee, so that if a is a constituent of b, then b could not have existed if a had not.[52] In 'On Existentialism' I give an argument against existentialism, concluding that such singular propositions about Socrates as *Socrates exists* and *Socrates does not exist* would have existed even if he had not.

Existentialism, I believe, is in error; but one who is enthusiastic about actualism can take a further and well grounded step in a different direction: he may endorse the above actualist contention about Socrates and add that if Socrates had not existed then Socrates would have exemplified no properties – not even that of nonexistence. He may endorse *serious actualism*: the view that no object x has any property in any world in which x does not exist. In 'De Essentia' I gave a mistaken argument from actualism to serious actualism. John Pollock pointed out the error to me, and in 'On Existentialism' I acknowledged it, conceding that actualism and serious actualism are independent doctrines. As I now see it, however (after a good ideal of argument with Pollock and after reflection on his contribution to the present volume) that concession was premature; there is indeed a good argument from actualism to serious actualism (see below, pp. 321–325). The contributions by Pollock and Fine to this volume have enabled me to see the issues surrounding actualism and serious actualism with much greater clarity. They deserve (and have) my gratitude. Since I discuss these matters at considerable length in my replies to their essays, I shall say no more about them here.

H. *Plans for the Future*

The future, we hope, will resemble the past; and I expect my future work will involve many of the same basic concerns as has my work up to this point. First, I hope to continue thinking about 'Reformed' or 'Calvinist' epistemology, a set of views at the heart of which is the claim that belief in

God is properly basic. I hope to develop these views more fully, and to explore their connections with some topics of concern in contemporary epistemology. In exploring related questions of intellectual rights and duties I have become interested in the connections and analogies between epistemology and ethics; I hope sometime to do some work in ethics, beginning by exploring these analogies. I hope to do further work on the problem of evil, in particular probabilistic atheological arguments from evil. The issues involved here lead back to Reformed epistemology, and also to such central epistemological topics as the nature of probability, the role of probability in knowledge and justified belief, and the connections between epistemic and other varieties of probability; I hope to do some work on these topics.

Secondly, I hope to do some serious work on the nature of human action — in particular the constellations of problems and topics clustering around the notions of freedom and agent causation. With Chisholm, I believe that agent causation is the fundamental notion and event causation a relatively shaky derived notion.

Third, I propose to do some work in philosophical theology on the attributes of God. I hope to take up such issues as God's transcendence and its relation to our ability to think about him; his omnipotence and whether it is in some way limited by the existence of counterfactuals of freedom whose truth value is not within his control; his sovereignty and aseity and whether they are compromised by the existence of such other necessary beings as propositions, properties, and states of affairs; his eternity and whether that involves being 'outside of time', in some sense; and his alleged simplicity. I also hope to consider in detail divine omniscience. I shall argue that God has knowledge of future free actions, and I expect to defend the Molinist contention that some counterfactuals of freedom are true and all counterfactuals of freedom are known by God. Some of the work for these projects is already underway.

Finally I hope to continue to think about the question of how Christianity bears on philosophy. Although I have devoted considerable thought to these issues, I have much less to show for it than I'd like. What difference does being a Christian make to being a philosopher? What is the bearing of Christian theism on the various constellations of question philosophers discuss? How, for example, is God related to such objects as properties, propositions, possible worlds, numbers, and sets? There are brief gestures in this direction in *Does God Have a Nature?* and 'How to be an Antirealist'; I want to work these matters out in much more detail. And how does Christian theism bear on our thinking about human beings? What does it imply or suggest with

respect to causal determinism, the topics coming under the rubric of artificial intelligence, and the nature of human knowledge? How does Christianity appropriately bear on our thinking about ethics? These are some of the topics I hope to take up.

Notes

[1] See my paper 'It's Actual, so it must be Possible'.

[2] *Proceedings of the Aristotelian Society*, 1919–1920.

[3] The papers were collected in H. N. Castañeda, ed., *Intentionality, Minds and Perception* (Wayne State University Press, Detroit, 1967).

[4] I took five year-long leaves of absence from Calvin, spending those years at Harvard (1964–65), The Center for Advanced Study in the Behavioral Sciences (1968–69), UCLA (1971–72), Oxford (1975–76), and the University of Arizona. I taught seminars at all of these places except for the Center. I have also taught seminars at Wayne, Indiana University, Boston University, Syracuse University, University of Chicago, and University of Michigan.

[5] 'New Testament and Mythology', in *Kerygma and Myth*, ed. Hans W. Bartsch (Harper, New York, 1961), p. 5.

[6] This view was held for example, by Epicurus, Voltaire, some of the French encyclopedists, F. H. Bradley, J. S. Mill, J. McTaggart and many others. Contemporary spokesmen who have endorsed this claim include J. L. Mackie, H. D. Aiken, H. J. McCloskey, and Walter Kaufmann.

[7] 'Evil and Omnipotence', *Mind* (1955), p. 200.

[8] Symbolize them as

$$(1^*) \qquad Eg \,\&\, Og \,\&\, O^*g \,\&\, Wg$$

and

$$(2^*) \qquad (Ex)\, E^*x;$$

and interpret 'E' as the set of natural numbers, 'g' as the number 7, 'O' as the set of prime numbers, 'O*' as the set of odd numbers, 'W' as the set of numbers greater than 6 and 'E*' as the set of numbers less than 6.

[9] 'Divine Omnipotence and Human Freedom', in *New Essays in Philosophical Theology*, ed. A. Flew and A. MacIntyre (SCM Press, London, 1955), 144–169.

[10] *Three Essays on Religion* (Longmans, 1874), 186–187.

[11] See Hume's *An Inquiry Concerning Human Understanding* (Open Court, La Salle, 1956), 105–108.

[12] The notion of omnipotence is notoriously problematic; but the argument I gave was designed to hold for any reasonably plausible conception of omnipotence that did not involve ascribing to God the ability to cause to be actual a state of affairs S such that *God's causing S to be actual* is impossible in the broadly logical sense. Since it is a necessary truth that if God causes S to be actual, then God causes *God's causing S to be actual*, this is just a special case of the obviously sensible claim that omnipotence does not require the ability to cause to be actual what is impossible in the broadly logical sense.

[13] See Robert M. Adams 'Middle Knowledge and the Problem of Evil', *American Philosophical Quarterly* (1977), 109.

[14] Here again I am indebted to David Lewis, who proposed this simplification of the argument. I do not mean to suggest, however, that Lewis accepts the free will defense.

[15] I use '→' to express the counterfactual connective, '⇒' to express inclusion among states of affairs, and 'G(A)' to denote God's strongly actualizing A.

[16] The principles of counterfactual logic employed in this argument are all widely accepted; in particular, they are endorsed in the systems of Lewis, Pollock, and Stalnaker.

[17] Objection: the above formulation of the free will defense asserts that it is possible that God be omniscient; but omniscience entails knowledge of the truth value of every proposition; if there are counterfactuals of freedom, it is necessary that there are; so if there are counterfactuals of freedom and it is possible that God is omniscient, it is possible that he have middle knowledge.

Reply: one who holds that there are counterfactuals of freedom but no middle knowledge on the part of God will hold, presumably, that middle knowledge is not possible; he will then reconstrue omniscience as knowledge, not of the truth values of all the propositions there are, but of all propositions such that knowledge of their truth values is possible.

[18] For example, Michael Scriven, *Primary Philosophy* (McGraw Hill, New York, 1966), and Brand Blanshard, *Reason and Belief* (Yale University Press, New Haven, 1975).

[19] *Reason and Belief*, 401.

[20] *Primary Philosophy*, 103.

[21] *Theory of Knowledge*, 2nd edition (Prentice-Hall, New York), 14.

[22] "All looks yellow to the jaundiced eye" — Alexander Pope.

[23] Of course there are several ways of construing classical foundationalism, and several related doctrines lurking in the neighborhood. It could be held, for example, not that if *S* believes *p* without evidence, then *S*'s belief is rational only if *p* is self-evident or incorrigible, but rather that if *S* knows *p* and doesn't know *p* on the basis of other propositions, then *p* is either self-evident for *S* or incorrigible for him. Alternatively, it could be held that if *S* has *certainty* with respect to *p* and does not believe *p* on the basis of other propositions, then *p* is either self-evident for *S* or incorrigible for him; perhaps this is how Descartes is most plausibly interpreted.

[24] See my reply to Alston, below.

[25] See my 'Reason and Belief in God', 47–59 and 72–73.

[26] See 'The Reformed Objection to Natural Theology', *Journal of the American Catholic Philosophical Association*.

[27] I say "Reformed Thinkers"; in fact, however, there is a tradition in Christian thought going all the way back to Bonaventura, Anselm and Augustine according to which belief in God doesn't need the evidential support of other sources of belief; it is in order just as it stands.

[28] *Institutes of the Christian Religion*, tr. Ford Lewis Battles (The Westminster Press, Philadelphia, 1965) Bk. I, Chap. iii, 43–44.

[29] See my 'Reason and Belief in God', 65–68 and 78–82.

[30] Of course these two sentences do not *always* express the same proposition; the first but not the second can properly be used, perhaps, to express the proposition *there are some true propositions of the sort expressed by "Pegasus does not exist"* or something similar. See my reply to Pollock, below.

[31] *Kritik der reinen Vernunft*, ed. Erich Adickes (Mayer & Muller, Berlin, 1889), 479.

[32] If *S* is empty, then *S** is just the unit set of existence.

[33] In his 'Ontological Arguments', *Noûs* (1977), Peter van Inwagen argues that the reasons I give for this claim in *The Nature of Necessity* are defective; I hope sometime soon to reply to van Inwagen.

[34] *Language, Truth, and Logic* (Dover, New York), Introduction to the 2nd edition, 17.

[35] 'Wittgenstein's *Philosophical Investigations*', *Philosophical Review* (1960).

[36] 'Things and Persons', *Review of Metaphysics* (1961), 518.

[37] 'Modality *De Dicto* and *De Re*', in *Logic, Methodology and Philosophy of Science*, eds. Nagel, Suppes, and Tarski, Stanford University Press, 1962, p. 629.

[38] *Word and Object*, MIT Press, 1960, p. 199.

[39] See '*De Re et De Dicto*'.

[40] Of course Russell thought that proper names ordinarily so-called are not genuine proper names; the latter are relatively rare (perhaps only 'this' and 'that' qualify) and function quite differently.

[41] Of course there are *some* descriptions that cannot thus be shown to be inequivalent to descriptions: 'the philosopher identical with 'Thales' ', for example.

[42] See my 'The Boethian Compromise', *American Philosophical Quarterly* (1978), 132.

[43] 'Naming and Necessity', in *The Semantics of Natural Language*, eds. Harman and Davidson, D. Reidel, Dordrecht, 1972, pp. 269–70.

[44] See *The Nature of Necessity*, p. 80.

[45] Some of these difficulties have been forcefully argued by Diana Ackerman; see her 'Proper Names, Propositional Attitudes, and Non-Descriptive Connotation', *Philosophical Studies* 35 (1979) 55–69.

[46] See *The Nature of Necessity*, p. 72.

[47] According to the most articulate alternative conception of possible worlds, that developed by David Lewis, a possible world (if I understand Lewis correctly) is a certain kind of *concrete* object — one spatio-temporally related only to its own parts.

[48] See John Pollock's essay in the present volume.

[49] *Contra* David F. Austin, 'Plantinga on Actualism and Essences', *Philosophical Studies* 39 (1981), 35–42.

[50] 'An Actualistic Semantics for Quantified Modal Logic', *Notre Dame Journal of Formal Logic* 23 (1982), 335–349, and 'Modality *De Dicto* and *De Re*', *Notre Dame Journal of Formal Logic*, forthcoming.

[51] See, for example, Robert M. Adams, 'Actualism and Thisness', *Synthese* 49 (1981), 3–41; Kit Fine, 'Postscript' in *Worlds, Times, and Selves*, Arthur Prior, University of Massachusetts Press, Amherst, 1977; and Arthur Prior, *Worlds, Times and Selves, loc. cit.*

[52] See my reply to Fine below, pp. 329–349.