

SUBJECTIVITY, OBJECTIVITY,
& INTERSUBJECTIVITY

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& INTERSUBJECTIVITY

A NEW PARADIGM FOR RELIGION AND SCIENCE

JOSEPH A. BRACKEN, SJ

With a Foreword by William R. Stoeger, SJ



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*To the many students, colleagues, and friends who
have shared with me the fun of thinking out of the box
this book is affectionately dedicated.*

CONTENTS

Foreword by William R. Stoeger, SJ ix

Acknowledgments xiii

Introduction 3

- 1 The Individual in a World of Universals 9
 - 2 The Turn to the Subject 24
 - 3 What Is Matter and What Is Spirit? 38
 - 4 Kant's Copernican Revolution 54
 - 5 Transcendental Idealism and the
Empirical Other 71
 - 6 The Revolt against Systems Thinking 89
 - 7 Starting with Events Rather Than Things 107
 - 8 The One, the Three, and the Many 124
 - 9 Open-Ended Systems 138
 - 10 Parts and Wholes in Contemporary
Natural Science 154
 - 11 Time and Eternity in Religion and Science 168
 - 12 Conclusions 179
- Notes 197
- Index 227

FOREWORD

The knowledge and understanding of reality deriving from the natural sciences dominates our contemporary culture and strongly influences all its other components, including ethics and religion. That is simply because it has been and promises to continue being so incredibly perceptive and successful—in revealing the amazing dimensions and intricacies of nature and the universe and in applying them technologically. It even tends to displace all other forms of inquiry and belief—frequently inducing us to consider it to be without limits. Fortunately, in recent decades there have been a contingent of scholars representing the sciences themselves, philosophy, theology, and related disciplines who have begun to contextualize and relate this rapidly expanding scientific understanding of our universe and of ourselves to these other realms of knowledge and understanding in more profound and enlightened ways. The most challenging and important areas where this common quest seeks consonance and compatibility is with philosophy and theology. Though significant progress has been achieved, a great deal remains to be done—particularly in crafting a more adequate philosophical infrastructure for relating scientific and theological understandings.

In this book, Joseph Bracken has provided an outstanding contribution to this crucial long-range project. With extraordinary care and critical acumen, he opens an avenue toward fashioning a more adequate metaphysics for a dynamic richly emergent reality uniting

the subject and object in an overarching intersubjectivity, inspired by and consistent with an expansive, radically incarnational Trinitarian theology—and potentially with theologies of several other non-Christian religions. This is a metaphysics partially based also on Whitehead's process thought, but with a number of crucial modifications which attune it to contemporary scientific understandings, as well as to the very best in Christian systematic theology and spirituality.

Focusing on the perennial central philosophical enigma of the One and Many and its diverse implications—including the universal and the particular, subject and object, reality and our perception of it—Bracken critically engages and sifts through the principal insights and approaches of Western philosophy to its present resolution. In the course of his search, he draws strongly on the most compelling landmark paradigms of recent scientific advances—including those of quantum theory, relativity, evolutionary biology, systems theory, and the physics of complex systems—as well as on the insights of Trinitarian theology.

From these insights he gradually distills the beginnings of a process metaphysics which is based on relatively autonomous agency at every level within an enveloping field of enabling creativity—within which the emergence of completely novel “societies” or systems, each with its own unique collective agency, is encouraged. Such a universe is radically intersubjective and accommodates the prolific interplay of both bottom-up and top-down causality. As Bracken himself mentions, in a sense it might be called “an emergent non-duality” approach to metaphysics. There is the enveloping dynamic field of creativity—the nature or dynamic principle of the Creator-God if you wish—which is both transcendent towards and profoundly immanent in all that it enables. What emerges, nevertheless, possesses its own individuality and freedom of action.

In envisioning and sketching this approach, Bracken provides a very attractive and carefully constructed set of philosophical hypotheses or models—which is by no means final or complete. Much

remains to be done. Refinement and modification through further critical philosophical reflection and discussion, and through further detailed confrontation with, and interpretative application to, both scientific and theological understandings must continue. However, in this book he has provided us with secure beginnings and a profound and clear vision for constructing a metaphysics adequate to our burgeoning scientific, theological, and spiritual understanding.

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& INTERSUBJECTIVITY

INTRODUCTION

In recent decades a great many books and articles have been published dealing with the relationship between religion and science, some by Christian theologians and proponents of the other world religions, others by scientists newly interested in the religious implications of their discipline. Yet, reviewing the history of Western civilization, one realizes that dialogue between representatives of religion and science has always been present and in some sense a focus of interest among educated people. The difference between the present and the past within this ongoing discussion, however, is quite important. Whereas in the ancient world and above all in medieval times, before the natural sciences as we now know them took shape, religiously and scientifically oriented people shared a common worldview or philosophy: the metaphysics of Plato and Aristotle as adapted to one's antecedent understanding of the Bible and the teaching of the church. At the present time, however, for a variety of reasons there is no such philosophical common ground. In the early modern era, for example, natural scientists like Galileo and Newton set forth a new, empirically based methodology for their research and writing that seemed to dispense with metaphysical speculation. Theologians, on the contrary, for the most part still held fast to the basic principles of Plato and Aristotle in their defense of the Christian faith. So the gap between proponents of religion and science grew larger over the centuries, with each side

insisting on its necessary autonomy and independence of the truth claims of the other side.

What holds promise for the future is that both sides now seem to recognize the need for a new worldview or underlying philosophical conceptuality. Recent advances in physics, chemistry, and biology (see below, chaps. 9 and 10) have led many natural scientists to question whether the mechanistic approach to physical reality espoused by Galileo and Newton is still adequate to explain all the empirical data within their disciplines. Likewise, philosophers and theologians in increasing numbers have begun to reevaluate the classical metaphysical attributes of God (e.g., immutability, omniscience, omnipotence) in the light of an evolutionary understanding of reality (see chap. 11). As yet, of course, there is no agreement on the basic principles or theoretical presuppositions of such a new worldview other than the commonly shared conviction that it must somehow be based on dialogue or the willingness to listen to one another from a variety of different perspectives. Truth is thus more and more commonly seen as an ideal or long-term goal for all to work at together rather than as the secure possession of one group over all the others.

The aim of this book is to set forth for this sustained dialogue between experts in the humanities and the sciences a new paradigm that is based on a new understanding of subjectivity, objectivity, and intersubjectivity. These terms, however, are to be understood within a cosmic rather than a strictly interpersonal context. In other words, subjectivity, objectivity, and intersubjectivity must likewise be at work in the operation of Nature as well as in human discourse. Thus understood, what I am proposing is a new understanding of the relationship between the One and the Many on all the different levels of existence and activity within this world. The Many are the virtually infinite number of individual subjects of experience that exist at any given moment. The One is invariably some objective form of coherence and order produced from moment to moment through the ongoing dynamic interrelation of these multi-

ple subjects of experience. Intersubjectivity, accordingly, is the common denominator in our human understanding of the world around us, both the starting point and the goal for resolving the tension between subjectivity and objectivity, the Many and the One, at all the different levels of existence and activity within Nature as well as within the world of human discourse and action.

To make this clear, however, it will be necessary first to review the differing solutions to the problem of the One and the Many, objectivity and subjectivity, proposed by some of the great philosophical minds of the Western world over the centuries and then by degrees to introduce my own process-oriented approach to reality, which is based on the philosophy of Alfred North Whitehead but at key points notably departs from it. In brief, I argue that Whitehead had a revolutionary insight into what is meant by the Many, the reality of concrete particulars, when he proposed in his masterwork *Process and Reality* that “the final real things of which the world is made up” are actual entities or actual occasions, that is, momentary self-constituting subjects of experience.¹ True individuals are then always self-constituting subjects of experience; they make themselves to be what they are by their own conscious (or more often unconscious) decision.

Yet, given this new understanding of the Many, Whitehead in my judgment failed to come up with a corresponding new metaphysical analysis of the nature of the One. As a result, his metaphysical scheme remained committed to philosophical atomism. As he himself says, “The ultimate metaphysical truth is atomism. The creatures are atomic.”² Yet if physical reality is ultimately atomic in character, then the One can logically never be anything but an aggregate or collection of discrete individuals. Some aggregates, to be sure, are more tightly organized than others. But an aggregate by definition is an implicit denial of the distinctive reality of the One as something different from and other than the Many, its component parts or members.

Whitehead’s insight into the reality of the Many as momentary

self-constituting subjects of experience, to be sure, still allows one to evaluate and critique the work of many of his predecessors in the history of Western philosophy, each of whom sought in his own way to solve the problem of the One and the Many, universality and particularity. But, even with this new insight, the job is only half done. Atomism, whether it be material atomism or in Whitehead's case spiritual atomism, is an implicit admission of failure in dealing with this distinctive reality of the One. Moreover, the consequences of simply acquiescing in a doctrine of philosophical atomism are far-reaching. In one form or another it has been a dominant factor in the alleged conflict between religion and science since the beginning of the modern era.

Many religiously oriented people, for example, are deeply suspicious of the notion of evolution because it seems to call into question their traditional understanding of the God-world relationship. If Nature on its own can over time produce higher forms of organization and complexity, what is the role of a Creator God, if any at all, in this cosmic process?³ Isn't God needed to bring the many things of this world into an overarching unity or providential plan of action? For their part, many natural scientists find themselves puzzling over how an empirical effect can be greater than its antecedent natural cause (or causes). Thus they, too, are consciously or unconsciously wrestling with the problem of the One and the Many. Can the One emerge out of the ongoing interplay of the Many and represent something genuinely new and different from its component parts? If not, then nothing really new ever happens. Nature is then equivalently a cosmic machine with everything explainable in terms of predictable interactions between subatomic particles. No reference to God as Creator or Architect of the cosmic process is needed.

Accordingly, a rethinking of the metaphysical scheme of Alfred North Whitehead in terms of a new worldview based on subjectivity, objectivity, and intersubjectivity might be what is needed if experts in the humanities and the sciences are to ever find com-

mon ground. Yet one cannot simply say to the reader, "This is the way it is; take it or leave it." So in the early chapters of this book I offer a cursory review of the history of Western philosophy in the light of the problem of the One and the Many insofar as it comes to focus in terms of what is meant by objectivity and subjectivity, universality and particularity. Admittedly, in undertaking such an overview of Western philosophy, one has to pick and choose among the philosophers to be considered. My choice was dictated in large part by my own intellectual history. I chose to concentrate on those thinkers who notably influenced me in my own intellectual journey toward the position that I hold today.

Yet for that same reason I do not attend in this overview to the work of many North American philosophers who flourished at the beginning of the twentieth century (e.g., William James, Charles Sanders Peirce, John Dewey et al.). My own training years ago for the master's degree in philosophy focused on Plato and Aristotle in the ancient world, Thomas Aquinas and other scholastic thinkers in the medieval period, and early modern European thinkers up to the time of David Hume and Immanuel Kant. Then for my doctoral work in philosophy I did further work in Kant and the German Idealists as the basis for a dissertation on freedom and determinism in the writings of F. W. J. Schelling. As a side interest, I became quite interested in the writings of Martin Heidegger, whose influence at the University of Freiburg in Breisgau during my student years there in the 1960s was still very strong. To be sure, one major American philosopher, Josiah Royce with his late work *The Problem of Christianity*, prompted me in my postgraduate years to undertake a deeper study of the nature of community and the possibility of a new social ontology based on Royce's argument that communities are higher-order, specifically socially organized realities distinct from the human beings that compose them.⁴ But even then contemporary European thinkers on the subject of community (e.g., Martin Buber, Emmanuel Levinas, and others) remained the focus of my research until I was introduced in the 1970s to

the philosophy of the Anglo-American philosopher Alfred North Whitehead and the tradition of process philosophy and theology in the United States.

I was eventually disappointed by Whitehead's failure (in my judgment) to think through more carefully what he meant by the notion of "society" in distinction from "actual occasion." But by this time I had begun to realize that working out my own metaphysics of universal intersubjectivity with its emphasis on Whiteheadian "societies" as other than and different from their constituent actual occasions would be my own contribution both to the process tradition and to the broader history of Western philosophy. I leave to the reader the judgment of whether this was in the end a worthwhile project.

THE INDIVIDUAL IN A WORLD OF UNIVERSALS

The Swiss philosopher Karl Jaspers suggested many years ago in *The Origin and Goal of History* that humankind went through an “axial period” from 800 BCE to 200 BCE during which time human beings began to free themselves from a tribal mentality, in which the interests of the individual were routinely subordinated to the survival needs of the group, to a new sense of individual self-awareness and personal liberty.¹ Among those “axial” thinkers were Socrates and his disciple/scribe Plato. Certainly the analogy of the cave in Book VII of Plato’s *Republic* has had an enduring influence (for better or for worse) on the subsequent history of Western philosophy.² The dualism between appearance and reality—that is, shadows on the wall of the cave representing ever-changing sense experience versus the universal forms of things seen in the light of the sun (human reason)—has been both enthusiastically embraced and strongly resisted over the intervening centuries. Idealists and materialists have argued ever since about what’s really real and the ultimate source of human knowledge. Scientists, for example, have tended to be implicit materialists because of their insistence on empirical verification of abstract theories. Humanists, on the contrary, in their ongoing search for meaning and value in human life, have tended to be outspoken idealists.

In this chapter I indicate the historical roots of this contemporary clash of cultures within the philosophy of Plato and Aristotle in the

ancient world and in the heated debates among medieval thinkers about the status of universals. Plato was understandably fascinated by the newly discovered power of the human mind to penetrate beyond appearances to the form or essence of the thing in question and then to use that elusive definition to put order and coherence into one's personal and community life. Aristotle, being by temperament more empirically oriented, converted the Forms that for Plato existed apart from material reality into substantial forms, the inner principle of existence and activity for individual things. But the substantial form still invariably represented what the individual thing had in common with other similarly constituted things and not how it was genuinely different from those other things. For example, if one seeks to determine what makes human beings different from one another, the alleged substantial form (humanity) is of little value. All the distinguishing physical characteristics of a given individual (e.g., being tall or short, fat or thin, with black, brown, white, or yellow skin) are in Aristotelian terms "accidents," contingent properties that apply to many other human beings. The particular "thisness" of that individual, that which makes him or her as an individual different from other human beings, somehow remains beyond rational comprehension.³ Hence, even though he was much more aware of the importance of individual things than Plato, Aristotle too lived in a mental world dominated by the search for universals in the world around him.

Still another reason that Aristotle was preoccupied with the issue of universals, of course, was his interest in explaining the reality of change in the world of nature in terms of universal causal principles. W. T. Jones comments as follows:

Aristotle believed that in order to understand any individual thing we must know four aspects of it, each of which operates to determine its nature. We must know (1) the material out of which it is composed (the material cause); (2) the motion or action that began it (efficient cause); (3) the function or purpose for which it exists (the final cause); and (4) the form it actualizes and by which it fulfils its purpose (the formal cause).⁴

While Aristotle certainly wanted to explain the reality of individual things in terms of these causal principles, he found himself once again dealing with the individual existent in very general terms. Admittedly, to see something in terms of its relation to everything around it is a great help in understanding what it is in itself or in its particularity. But its individual “thisness” still remains elusive to full rational comprehension, given its explanation in terms of causal principles applicable to everything else that comes to be and ceases to be.

Why is this the case? Does it represent an inevitable limitation in human knowledge, or is something else at work here? Here I introduce a key component in my overall thesis for this book, namely, the distinction between objects of thought and subjects of experience. Objects of thought are invariably universal in scope since they abstract from the full reality of an individual existent and focus on some attribute or property that the individual shares in common with others of the same class. You and I as objects of thought for one another are both human beings; being human is what we have in common on the level of abstract thought. But as individual subjects of experience, you and I are quite different; we each have our individual approach to being human as manifest in our words and actions. Moreover, I cannot fully understand you in your particularity without becoming you and thereby losing my own personal identity. The same, of course, is true for you in your efforts to understand and deal with me.

By “subject of experience,” of course, I do not mean a grammatical subject of predication in a sentence but an existential subject that is both active and passive in its relations with the world around it. That is, it is first receptive to its environment and then has an impact upon that environment by reason of its response to that initial stimulus. Unlike an object of thought, therefore, which has a determinate reality in the mind of the observer, an existential subject or subject of experience is indeterminate since it never stays precisely the same from moment to moment. Its identity keeps changing as it receives new environmental influences and responds to them in ever

new ways. Each time that it responds, of course, it becomes for the moment determinate and can be an object of perception or reflection for other subjects and even for itself if it possesses self-awareness. But proper to the notion of subject of experience is potentiality, the power to be other than what it is right now. By way of contrast, proper to the notion of object of thought is de facto actuality, determinate reality lacking in potentiality or the power to change.

But is this not an unnecessary dichotomy? Is not everything in this world necessarily both subject and object? Agreed, but which of the two enjoys ontological priority over the other? Depending upon one's choice here, a radically different worldview emerges. As I elaborate in later chapters, the Anglo-American philosopher Alfred North Whitehead clearly gave priority to subjects over objects. That is, in his major work *Process and Reality*, he claimed that "the final real things of which the world is made up" are actual entities, momentary self-constituting subjects of experience.⁵ Each such subject of experience has an objective component, its reality as a "superject" once its process of self-constitution is completed.⁶ But, says Whitehead, once it is self-constituted and becomes a superject, it ceases to exist as a subject and a new subject of experience must take its place in order for the cosmic process as a whole to continue.

All this is explained in greater detail in subsequent chapters of this book. For now, it is only important to note that, while Plato and Aristotle were surely aware of their own individual subjectivity, their own reality as ongoing subjects of experience, unlike Whitehead they evidently gave ontological priority to objectivity and actuality in the world around them rather than subjectivity and potentiality. Both, to be sure, recognized the fact of change in the world of nature and tried to deal with it in different ways. Plato relegated change to the world of appearances, in sharp contrast to reality as represented by the mental world of the Forms. Aristotle, as noted above, was more empirically oriented and thus more accepting of the inevitability of change and becoming in this world. But in virtue of his causal scheme sketched above, Aristotle focused on the goal or final end for all changes, a

state of permanent being or rest in which the entity in question would finally achieve full actuality. Hence, Plato and Aristotle both gave ontological priority to objectivity over subjectivity in their respective worldviews and found themselves as a result unable philosophically to explain the reality of the individual existent in objective terms. They implicitly lived in a mental world of universals or intelligible forms, and the individual existent (e.g., themselves as individual human beings and other subjects of experience) could not be adequately defined and explained in terms of objective characteristics shared with other subjects of experience.

Presumably Plato and Aristotle felt no frustration on this point since their respective philosophical agendas lay in another direction. Plato was eager to escape the world of appearances so as better to contemplate the unchanging world of intelligible forms. Aristotle was interested in the individual things of this world but only insofar as their coming and going (generation and corruption) could be explained in terms of his causal scheme. Yet causal explanations are always formulated in terms of laws or universal principles. The individual existent is only important as an instance of the empirical verification or falsification of some universal principle. That is, if the causal principle seems to explain the existence and activity of an individual existent a sufficient number of times, then the principle is considered empirically verified and treated as a law. If anomalies occur in which the causal principle seems not to be operative, then the causal principle is totally abandoned or at least significantly modified. In both cases, however, the individual existent in its particularity is ignored. In a thought-world dominated by the working of causal principles, its unique particularity is a distraction. In order to rise to the level of a causal explanation, one has to ignore individuating characteristics of the individual existent and focus on what the individual existent has in common with other individual existents under similar circumstances. Attention to the unique particularity of the individual existent is best left to artists of various kinds rather than to philosopher-scientists in search of universal principles.

Moving now to the thought-world of medieval thinkers, one can say that one of the major issues in that era was clearly the reality of universals, with realists and nominalists taking radically different positions on the matter. As W. T. Jones points out in his history of Western philosophy, however, early medieval thinkers were not well versed in the writings of Plato and Aristotle. In late antiquity Boethius had translated *Introduction to Aristotle's Categories*, written by a disciple of Plotinus, Porphyry, together with a modest number of Aristotle's own works on logic, and it was largely Porphyry's text that became the starting point for early medieval speculation on the nature of universals.⁷ Boethius himself distinguished between "composition" and "abstraction" in the formation of new ideas from sense experience: "Composition (as in the composition of horse and man to form the centaur) produces a false idea, whereas abstraction produces an idea which is true [e.g., the idea of a straight line], even though the thing conceived does not exist extra-mentally in a state of abstraction or separation."⁸ Boethius thus prepared the way for an Aristotelian approach to the doctrine of universals, namely, that universals are real but do not exist outside the mind in the same way that they exist in the mind. Ironically his initial successors in early medieval times were nearly all Platonists, holding to a doctrine of ultra-realism in this matter. Humanity, for example, in their view must exist outside the mind in the same way that it exists within the mind, namely, as the unchanging reality of which human beings are the changing and imperfect representations.

John Scotus Erigena, for example, and other Christian Platonists seem to have held this opinion even though logically this implies a form of monism. In the end, only one universal human being exists, with all individual men and women as its partial embodiments. For that matter, if God is identified with Being, then only God exists.⁹ Inevitably, there arose among other medieval thinkers a reaction in the form of conceptualism (universals exist only in the mind) or even pure nominalism (universals are words used to organize experience of individual entities).¹⁰ Frequently cited as a nominalist is

Roscelin (c. 1050–1120) although, as Frederick Copleston notes,¹¹ it is hard to know what Roscelin really held about the reality of universals, given that his views are only known through the writings of his opponents, for example, Anselm of Canterbury, John of Salisbury, and Peter Abelard.

Peter Abelard (1079–1142) in his student years listened to the lectures of both Roscelin and William of Champeaux, an ultra-realist, and sought to find a middle ground between them. Although accused by Bernard of Clairvaux of being a covert nominalist, Abelard clearly wanted to distinguish between words as physical sounds and words as symbols—that is, as logical referents to something real apart from the mind of the individual human being. Through a process of abstraction, “The nature [humanity] is set free, as it were, from all individuality and is considered in such a way that it bears no special relation to any particular individual but can be predicated of all individual men.”¹² Ultra-realism in the treatment of universal ideas is thereby refuted since the word has an objective reference to something real that exists one way within the human mind and quite another way in things outside the mind. Within the mind it is an intelligible form applicable to many individuals; in sensible things it serves as a principle of existence and activity for individual entities in their particularity.

Two other moderate realists of the twelfth century were Gilbert of Porrée and John of Salisbury, both of whom agreed with Abelard that universals exist one way in the human mind and another way in sensible things apart from the mind. But in terms of the basic issue of this chapter—namely, the reality of the individual existent in a world of universals—Gilbert is more interesting, for he distinguished between logical universals devoid of all individuating characteristics and concrete universals, universal forms that have become individuated within particular entities. There is the form of humanity in general and the form of humanity in the person of Socrates.¹³ Pushed to its logical extreme, of course, this distinction between logical and concrete universals results in conceptualism, the belief that

only particular individuals exist and that universals have no objective referent outside the mind of the observer. Yet, in my judgment, better than others Gilbert realized that the full intelligibility of the individual entity eludes explanation in terms of universal concepts applicable in principle to all the members of a given class. As Copleston comments, Gilbert's doctrine of universals was heavily criticized, but on theological, not strictly philosophical, grounds. In distinguishing between God (*Deus*) and divinity (*Divinitas*), he seemed to introduce a fourth reality, a semi-independent divine nature over and above the divine persons, into the traditional doctrine of the Trinity.¹⁴

With his customary precision and attention to detail, Thomas Aquinas mediated in his *Commentary on the Sentences* of Peter Lombard between the ultra-realist and the conceptualist position on the nature of universals.¹⁵ There is, in the first place, the universal prior to instantiation in individual creatures (*universale ante rem*). In this sense, the universal is an idea in the mind of God, one of the multiple ways in which the unitary reality of God is revealed in creation. Then there is, second, the universal as the essence or principle of operation of individual entities in this world (*universale in re*). Third, there is the universal as an abstract concept in the mind of the human observer (*universale post rem*). As Copleston comments, the foundation for Thomas' understanding of the doctrine of universals is the universal as existing in individual entities.¹⁶ Given this presupposition, one can derive by a process of abstraction the universal concept existing in the mind of the human observer and one can infer the prior existence of the universal as a possible created imitation of the divine essence in the mind of God.

What is still missing in Thomas' account of universals, of course, is Gilbert's distinction between logical and concrete universals in sensible things (*in re*). Thomas is content to claim that the essence (e.g., humanity) is the same in all entities of a given class (human beings) but numerically different. But is it only a numerical difference, or is something more involved? After all, human beings differ from one another not only numerically but also in terms of vari-

ous physical characteristics (size, weight, skin color, etc.). Likewise, there are still more subtle differences between human beings on a psychological level, which constitute their true individuality and difference from one another. Given that each human being has a personal history and grows to maturity in an environment peculiarly its own, Thomas' reference to simply numerical differences between individual entities belonging to the same class seems somewhat simplistic when applied to human beings and other higher-order animal species where psychological differences play such a prominent role in individuation. Thomas, in other words, is not mistaken in claiming that all entities sharing a common essence differ numerically, but it is only the starting point for an explanation of what it means to be an individual member of a given species.

Here one might object that this is simply a caricature of Thomas' full position on the reality of universals. Thomas, for example, likewise claims that universal ideas are not the goal of human cognition but only a means to human knowledge of the individual existent. As Copleston notes, "The mind has the power of reflecting on its own modifications and so can turn the concept into an object; but it is only secondarily an object of knowledge, primarily it is the instrument of knowledge."¹⁷ That is, through the senses the mind perceives an individual corporeal entity and forms a phantasm or mental image of that sensible reality. Then, in virtue of its agent intellect, it abstracts the intelligible species or universal concept from the phantasm and imprints it upon the passive intellect. Finally, in the act of knowing the mind returns to the phantasm and knows the individual corporeal entity in and through the intelligible species or universal concept.¹⁸

Human knowledge, therefore, is of individual entities, albeit through universal concepts. Abstraction of the universal concept from the phantasm or mental image of the corporeal entity is necessary not because it is singular but because it is corporeal,¹⁹ for the human mind is incapable of knowing material things in their materiality or full particularity. In principle, it could know a singular

immaterial reality (e.g., the mind or soul) directly through its immaterial intelligible form. But even here Thomas concedes that the human mind does not know itself except in and through its act of intellection, for only what is in act is knowable.²⁰ The human mind simply as a potency apart from the act of knowing is unknowable.

One can only admire the subtlety of Thomas' explanation of human cognition in terms of the Aristotelian doctrine of act and potency. But the basic problem of knowing individual entities in and through their universal forms still remains. If materiality is the obstacle here, why cannot the human mind directly know itself as an immaterial principle of existence and activity? Aquinas claims that only what is in act is knowable; the mind is only a potency, not an actuality, and thus cannot be known as an object of perception or thought. But don't we know ourselves, the inner workings of our minds and hearts, even though we cannot in this way reduce ourselves to an object of perception and thought? Do we not also intuitively know other people, their ways of thinking and acting, without being able to give an abstract definition of who they are in distinction from other people?

What may well be at stake here is the distinction between subjects of experience and objects of thought which was presented earlier in this chapter. Subjects of experience and objects of thought obviously both possess some degree of actuality, but only subjects of experience likewise have the power to become other than what they are here and now. In this sense, subjectivity eludes full objectification as a fixed object of perception or thought. Yet we still have a reasonably reliable understanding of ourselves and other human beings as subjects of ongoing experience. There are, thus, evidently many different ways to grow in knowledge of the people and things in our lives, and Aquinas' focus on the knowledge of people and things through abstraction of their universal form or essence is only one of them.

Before bringing this chapter to a close, I review here the thought of two other medieval thinkers on the status of universals and the problem of individuation. The first is John Duns Scotus, born shortly

before Thomas Aquinas died, and likewise a monastic but a member of the Franciscan rather than the Dominican order. This difference in their intellectual training plus a more critical attitude in general toward the philosophy of Aristotle in the late thirteenth century may well have influenced Duns Scotus' critique of Aquinas on the nature of human knowing.²¹ While Scotus and Aquinas both agreed with Aristotle that metaphysics is based on the abstraction of universal forms or essences from material things, Scotus differed from Aquinas in maintaining that the human mind nevertheless has an intuitive intellectual knowledge of the individual existent as an existing reality.²² The individual existent is, accordingly, intelligible in itself, and the current human need for abstraction to obtain its essence or universal form is limited to life in this world.²³ For, once in heaven, human beings will know God and one another directly as individuals, just as even now God and the angels know each of us as individual existents. Unlike Aquinas, therefore, Scotus maintained that the proper object of human knowledge is not in the first place the universal form or essence but the individual existent in its particularity or individual way of being, albeit only in a confused manner.

Scotus, to be sure, then confused the issue by claiming that the particularity of the individual material existent is itself the effect of still another universal form, *haecceitas* or "thisness."²⁴ How can a universal, something applicable to many individuals, be at the same time the principle of individuation for any one individual, its difference from other individuals in the same class?²⁵ Scotus here reveals the preoccupation of medieval thinkers with the Platonic-Aristotelian belief that scientific knowledge must be grounded in essences or universal intelligible forms. But to Scotus' credit, better than Aquinas he realized that objective knowledge of the physical world has to take account of the *de facto* individuality of material existents and not simply of their *a priori* relationship to one another in terms of universal forms or essences.

Still another way in which Scotus differed from Aquinas and thereby unconsciously set the stage for subsequent developments in

the history of Western philosophy was his insistence on the primacy of the will over the intellect (love over knowledge) in the human psyche. Whereas for Aquinas the human will was considered to be the rational appetite that necessarily chooses what is good but only subsequent upon the judgment of the intellect on the relation of any particular good to the Ultimate Good (beatitude),²⁶ for Scotus the will is a free potentiality (*libera potentia*) to choose between alternatives rather than a rational appetite dependent upon the final judgment of the intellect as to the good.²⁷ Thus, even though it still depends upon the mind for knowledge of what to choose, ultimately its decision is not based on reason—that is, the final practical judgment of the mind on the good in question—but on its own spontaneity or power to make a free choice. This is a significant departure from Aquinas' vision of a rationally ordered world in which everything acts according to its pre-given nature or essence.

Even more dramatic in this regard was Scotus' contention that the divine will holds priority over the divine mind. For, if the divine will rather than the divine mind is primary in God's providence for the world of creation, then most human acts have to be judged morally good or evil not in terms of reason or natural law but only insofar as God declares them to be morally good or evil. As Copleston points out, this is not to say that human morality is a matter of arbitrary choice on God's part.²⁸ Rather, says Scotus, God knows which actions are in conformity with human nature and which are not. But the moral obligation to do good and avoid evil derives from the divine will and not from the divine mind as revealed in the natures or essences of created things. Hence, under special circumstances God can dispense human beings from full observance of the secondary precepts of the biblical Decalogue or Ten Commandments (4–10), those pertaining to relations of human beings with one another rather than with God. Copleston concludes:

While, then, if we look at Scotus' philosophy by itself, we must allow that his moral doctrine is not that of arbitrary divine authoritarianism,

we must also allow, if we look at the historical development of thought, that his moral doctrine helped to prepare the way for that of Ockham, in whose eyes, the moral law, including the whole decalogue, is the arbitrary creation of the divine will.²⁹

It is easy to critique Scotus here for introducing a dangerous form of voluntarism or even irrationality into the medieval worldview. But this would be to overlook a possible link between Scotus' belief in intuitive knowledge of singular existents and his emphasis here on will rather than mind as the key factor in understanding the behavior of human beings and even of God. In both cases Scotus seems to be protesting against what he sees as the rationalism of the philosophy of Aristotle with its emphasis on the natural order and as a result the relative neglect of the divinely revealed supernatural order grounded in God's love for creatures and the creatures' love for God and one another. Love, in other words, is directed to the individual existent, not to its universal form of intelligibility or essence. Thus, Scotus' focus on the individual existent with its unique self-constitution, based at least in some cases on spontaneous free choice, may have been consciously or unconsciously a groping after a more adequate worldview grounded in the experience of individual subjectivity rather than in the strict logic of universal objectivity. Like all medieval thinkers, however, Scotus still lived in a thought-world dominated by universal forms of intelligibility; his employment of the concept of *haecceitas* as explanation for the problem of individuation bears witness to his continued trust in the power of universals to unlock the secrets of Nature.

Yet it is also obvious that he was more attentive than Aquinas to subtle differences between the requirements of pure logic and the details of concrete experience in human life. Distinguishing, for example, between real and rational distinctions, Scotus postulated what he called a formal distinction with respect to the thing (*distinctio formalis a parte rei*).³⁰ Any given empirical reality is inevitably multidimensional so that it cannot be fully grasped in terms of a single essence or rational form of intelligibility.³¹ Further dis-

inctions must be made that have a basis in concrete experience but which the mind intuits rather than objectively defines. Thus, to be intelligible it is sufficient for forms to be distinct from and yet related to one another rather than really different from one another as in Aquinas' notion of a real distinction. Essence and existence, for example, are interrelated dimensions of one and the same concrete reality in both God and creatures. But, whereas in God these two different dimensions of the divine being are necessarily related, in creatures they are contingently related, operative only in virtue of the antecedent divine choice to bring into existence a world of creatures.

Where Aquinas postulated a real distinction between essence and existence in creatures,³² Scotus thus simply proposed a formal distinction with respect to the thing (*in re*) between essence and existence in creatures.³³ Once the creature is brought into existence by the divine will, essence and existence are just as inseparable within the creature as they are within God. For the same reason, concludes Scotus, not form but being is the proper object of the mind, whether that mind be divine, angelic, or human, for "being" is a univocal rather than an analogical concept, as in Aquinas' scheme.³⁴ In every being there is the same existential identity of essence and existence, though in formally different ways within God, angels, and humans.³⁵

The second late medieval thinker (besides Scotus) whose views are important for the medieval understanding of the doctrine of universals and the problem of individuation is William of Ockham. As Jones notes in *The Medieval Mind*, Ockham "developed those tendencies in Scotism that were deviations from Thomism to a point at which the Thomistic compromise [between faith and reason] was destroyed."³⁶ With respect to the doctrine of universals, for example, Ockham held that all natural knowledge (knowledge derived from experience rather than divine revelation) is knowledge of individuals. But, since science aims at general knowledge, we invent universals or what he called terms of second intention (e.g., man) which stand

for similarities among the individuals designated by terms of first intention (names of individuals—e.g., Plato, Socrates, etc.). Thus, a universal “is an immense convenience, a great time-saver, but it is only a term—a tool used in reasoning scientifically. It is not a thing, and not an object of thought except in logic, in which, of course, it is simply a term of second intention.”³⁷ This, of course, is conceptualism, perhaps even nominalism. In any case, it is clearly opposed to the various forms of realism discussed earlier in this chapter (e.g., ultra-realism allegedly to be found in the thought of John Scotus Erigena, critical realism as represented in different ways by Aquinas and Scotus).

The medieval worldview was even further undermined by what has been called “Ockham’s razor”: what can be explained on fewer principles is explained needlessly by more; or, in simpler terms, do not multiply entities beyond necessity.³⁸ Ockham used this principle to deny any extra-mental status whatsoever to universals; these terms are simply the result of the act of thinking. Attention should be paid exclusively to the individual material entities to which the universal term refers. Yet, as Jones points out, Ockham was still very much a scholastic thinker in his method of argument. That is, even when he was questioning the empirical status of universals, he reasoned deductively from concepts, not inductively from observation of individual entities.³⁹ Much more important for the future of Western philosophy was his insistence that reason and revelation represent totally different spheres of mental activity, each with its own methodology or mode of operation. In his mind, revelation was superior to reason and, given belief in divine omnipotence, could even contradict the dictates of reason.⁴⁰ But, in thus setting human reason free from reliance on divine revelation in its own mode of operation, Ockham opened the door for a far more secular and results-oriented approach to the world of nature that became characteristic of the thinking of early modern natural philosophers like Descartes and Locke (as we shall see in the next chapter).