use of others because they loved them, and those they had to harm because they loved them and had no other way to express it. Or who did both because they hated. But hate and love too are only deceptive forms of appearance, accidental symptoms of a driving force that occurs in many people and that one can only characterize as moral aggressiveness, as the utterly fantastic compulsion to react to one's fellow human beings in some vehement way, flowing into them, annihilating them, or creating constellations with them that are rich in inner inventiveness. Altruism and egoism both are possibilities for expressing this moral imagination, but taken together they are nothing more than two of its many forms, which have never been counted.

Similarly, evil is not the opposite of good, or its absence; evil and good are parallel phenomena. They are not fundamental or ultimate moral antitheses, as has always been assumed, probably not even particularly important concepts for moral theory, but rather practical and impure summations. Diametrical opposition between good and evil corresponds to an earlier stage of thought that expected everything from the dichotomy; in any case this opposition is not very scientific. What gives all these moral bifurcations the illusion of importance is the confusion with the dichotomy: worth opposing/worth supporting. In fact this genuine antithesis, which plays a role in all problems, contains an important element of morality, and any theory that wanted to smooth over or obscure this opposition in some way would be a bad theory. But "to understand all is to forgive all" is no greater a misunderstanding than deciding that the excusability or inexcusability of a moral phenomenon exhausts its meaning. Two things are confused here that must be kept entirely separate. What we should oppose or support is determined by practical considerations and factual circumstances, and, if one allows enough room for historical contingencies, can be explained completely. To punish a thief I do not require an ultimate justification but only an immediate one, but this involves no trace of moral reflection and imagination. If, on the other hand, a person feels paralyzed the moment he is about to punish someone, if he sees his right to lay hands on another person suddenly disintegrate, or if he begins to do penance or carouse to death in bars, then what has moved him no longer has anything to do with good or evil; and yet he still finds himself in a state of the most vehement moral reaction.

The extent to which morality is basically experienced as something adventurous and experimental demonstrates that even its theoreticians have left the solid ground of utilitarianism, and have often attempted to elevate "Thou shalt!" to a unique experience in order to allow feeling—elaborately disguised as duty in the looming form of a stranger—to knock from the outside. The categorical imperative, and what has counted since as specifically moral experience, is at bottom nothing but a grumpily dignified scheme to return once again to feeling. But this forces into the foreground something entirely secondary and dependent, which assumes moral laws instead of creating them; an auxiliary experience of morality, and by no means its central experience.

Of all the moral propositions ever enunciated, the strongest altruistic atmosphere belongs not to "Love thy neighbor as thyself," or "Do good," but rather to the proposition that virtue can be taught. Every rational activity needs other people, and can develop only through an exchange of shared experiences. But morality actually begins only in the solitude that separates each person from every other. That which is incommunicable, the encapsulation in the self, is what makes people need good and evil. Good and evil, duty and violation of duty, are forms in which the individual establishes an emotional balance between himself and the world. What is most important is not only to establish a typology of these forms, but even more to comprehend the pressure that creates them or the distress on which they rest, and these are infinitely various. The act is only a stammering language for expressing whether we are dealing with a hero, a saint, or a criminal. Even a sex-murderer is, in some cranny of his soul, full of inner hurt and hidden appeals; somehow the world is wronging him like a child, and he does not have the capacity to express this in any other way than the way he has found works for him. In the criminal there is both a vulnerability and a resistance against the world, and both are present in every person who has a powerful moral destiny. Before we destroy such a person—however despicable he may be—we ought to accept and preserve what was resistance in him and was degraded by his vulnerability. And no one does morality more harm than those saints and scamps who, in tepid horror over the form of a phenomenon, refuse to touch it.

The Mathematical Man

1913

Musil here announces a theme that continues throughout his essays: his respect for reason and the Enlightenment and his conviction that writers must do in their field what mathematicians do in theirs. Musil was at home with mathematics and physics, and he was able to see what could be valu-

able in the imagination of the mathematician for understanding human experience.

One of the many absurdities about mathematics that has gained currency from ignorance of its nature is that people refer to important generals as mathematicians of the battlefield. Actually, the logical calculations of these generals ought not go beyond the dependable simplicity of the four arithmetic maneuvers if they are to avoid responsibility for a catastrophe. The urgent necessity of pursuing the process of deduction involved in even such a moderately complex and obscure matter as solving a differential equation would in the meantime abandon helpless thousands to their death.

This says nothing against the genius of generals, but something for the peculiar nature of mathematics. People say mathematics is an extreme economy of thought, and this is also true. But thinking itself is a vast and undependable affair. Thinking, even if it began as simple biological economy, has long since become a complicated passion for thrift, which is no more concerned with the dilatory process of utilitarian application than is the miser with his paradoxical, voluptuously drawn-out poverty.

Mathematics makes it possible under favorable circumstances to perform in a few moments an operation that one could in principle never complete, like the enumeration of an infinite series. Complicated logarithmic calculations and even integrations can already be performed by machines; mathematical calculation today is as simple as entering the numbers of a problem and turning a crank or the like. A professor's administrative assistant can in this way dispose of problems whose solution two hundred years ago would have required his professor to travel to Herr Newton in London or Herr Leibniz in Hanover. And even in those problems (whose number is of course a thousand times greater) that still cannot be solved by machines, one may call mathematics an ideal intellectual apparatus whose task and accomplishment are to anticipate in principle every possible case.

This is a triumph of intellectual organization. It is the old intellectual highway, with its perils of weather and highwaymen replaced by Pullman cars. This is what economy looks like from an epistemological point of view.

People have asked themselves how many of these possible cases can actually also be applied. They have considered how many human lives and creative hours, how much money and ambition have been consumed in the history of this enormous system of savings, are still invested in it today, and are necessary just so we don't forget again what has already been gained; and people have tried to measure this in terms of the practical use to which it is put. But there too this difficult and decidedly complicated apparatus shows itself to be economical, indeed strictly speaking incomparable. For

our entire civilization has arisen with its assistance; we know no other way; the needs it serves are completely satisfied by it, and its aimless abundance is of the uncriticizable kind of irreducible facts.

It is only when one looks not toward the outside at their utility, but within mathematics itself at the relationships among the unused parts, that one sees the other, real face of this science. It is not goal-oriented, but uneconomical and passionate.—The average person doesn't need much more mathematics than he learns in elementary school; the engineer only enough to find his way around in the collection of tabulations in his technical handbook, which isn't a lot; even the physicist ordinarily works with quite simple mathematical tools. If they should need something different, they are mostly left to figure it out for themselves, since the mathematician has very little interest in such applied tasks. And this is why specialists in many practically important branches of mathematics are not mathematicians. But not far away are immeasurable realms that exist only for the mathematician: an enormous nerve center has coalesced around the point of origin of a few lesser muscles. Somewhere inside, the individual mathematician is working, and his windows do not open to the outside, but into adjoining rooms. He is a specialist because no genius is any longer in a position to master the whole of mathematics. He believes that what he is doing will probably eventually lead to some practical cash value, but this is not what spurs him on; he serves the truth, which is to say *his* destiny, and not *its* purpose. The result may be economical a thousand times over; what is immanent is a total surrender and a passionate devotion.

Mathematics is the bold luxury of pure reason, one of the few that remain today. Even many philologists pursue interests whose practical value they themselves probably don't see, and this is even more true of the collector of stamps or ties. But these are harmless whims, which play themselves out far from the serious business of our lives, whereas it is precisely here that mathematics encompasses some of the most entertaining and intense adventures of human existence. Let me offer a small example: We may say that we live almost entirely from the results of mathematics, although these themselves have become a matter of indifference to mathematics. Thanks to mathematics we bake our bread, build our houses, and drive our vehicles. With the exception of a few handmade pieces of furniture, of clothing, shoes, and children, everything comes to us through the intervention of mathematical calculations. All the life that whirls about us, runs, and stops is not only dependent on mathematics for its comprehensibility, but has effectively come into being through it and depends on it for its existence, defined in such and such a way. For the pioneers of mathematics formulated usable notions of certain principles that yielded conclusions, methods of cal-

culation, and results, and these were applied by the physicists to obtain new results; and finally came the technicians, who often took only the results and added new calculations to them, and thus the machines arose. And suddenly, after everything had been brought into the most beautiful kind of existence, the mathematicians—the ones who brood entirely within themselves—came upon something wrong in the fundamentals of the whole thing that absolutely could not be put right. They actually looked all the way to the bottom and found that the whole building was standing in midair. But the machines worked! We must assume from this that our existence is a pale ghost; we live it, but actually only on the basis of an error without which it would not have arisen. Today there is no other possibility of having such fantastic, visionary feelings as mathematicians do.

The mathematician endures this intellectual scandal in exemplary fashion, that is with confidence and pride in the devilish riskiness of his intellect. I could adduce still other examples, for instance when mathematical physicists were suddenly wildly bent on denying the existence of space and time. But they did not do this in a dreamy haze, the way philosophers sometimes do (which everyone then immediately excuses by saying: Look at their profession), but with reasons that rose up before us quite suddenly as palpably as an automobile, and became terribly credible. This is enough to show what sort of fellows these are.

After the Enlightenment the rest of us lost our courage. A minor failure was enough to turn us away from reason, and we allow every barren enthusiast to inveigh against the intentions of a d'Alembert or a Diderot as mere rationalism. We beat the drums for feeling against intellect and forget that without intellect—apart from exceptional cases—feeling is as dense as a blockhead. In this way we have ruined our imaginative literature to such an extent that, whenever one reads two German novels in a row, one must solve an integral equation to grow lean again.

Let no one object that outside their field mathematicians have banal or silly minds, or that they themselves are the ones who have left their logic in the lurch. Here it is none of their business, but in their field they do what we ought to be doing in ours. Therein lies the significant lesson and model of their existence; they are an analogy for the intellectual of the future.

If something of this seriousness shines through the playfulness I have been directing at the nature of mathematics, I hope these concluding remarks will not seem unexpected. People bewail our age's lack of culture. This means many things, but basically culture has always been unified, whether through religion, social convention, or art. For social convention we are too many. For religion there are also too many of us, although this can only be asserted here and not proven. And as far as art is concerned,

ours is the first age that cannot love its writers. And yet, not only are there spiritual and intellectual energies at work in our time as never before, but also a unity of mind and spirit as never before. It is foolish to maintain that this is all a matter of mere knowledge, for thinking has long been the goal. With its claims to profundity, boldness, and originality, thinking still limits itself provisionally to the exclusively rational and scientific. But this intellect gobbles up everything around it, and as soon as it lays hold of the feelings, it becomes spirit. Taking this step is the task of writers. To do this they don't need to learn some sort of method—God forbid, psychology or the like—but only aspirations. Yet they are helpless in the face of their situation and console themselves with calumny; but even if our contemporaries have no idea how to transfer their intellectual level to the level on which they live, they still have some idea of what is beneath their notice.

[On Criticism]

presumably before 1914

In this essay Musil returns, as he frequently does, to the problems of standards in criticism and reviewing, activities in which he was heavily engaged. As a practical critic with an intellectual program, he struggles with the question of how one can best do justice in newspaper reviews to the complexities of an experimental kind of literature, while genuinely informing the reading public without simply pandering to its ignorance.

Only in the most unusual cases is it useful to determine whether a book is good or bad; for it is just as rare for it to be one or the other. It is usually both. It makes sense to intercede for a great artist who is not yet recognized, and it makes sense to tear apart pretentiousness. It makes sense to write about a book if one can demonstrate something about it or if the critic feels an outburst of temper or enthusiasm rising up within him. It really makes no sense to take books one after the other, as publishers throw them on the market, and describe and evaluate them with the aid of at most fifty conventional standards. But that is just what the average critic does. In his sociological contingency he is a journalist, in his getup an eternist.

One of the most important tasks of a prize competition would be to motivate someone who was discriminating and precise to initiate an inventory of