

namely, no matter how fast and complicated technology grows, the informed public has the ability and the duty to understand and control it. This is to be expected from the publisher of *Scientific American*, a journal founded on the principle that the intelligent public can and must understand science. To Piel's credit his essays explain lucidly the public's obligation to retain its civilized and human values in the machine age.

The title essay sets the stage by describing the exponential growth in scientific achievement over the course of all human history. By now, Piel says, the doubling time for discoveries in basic science has been reduced to less than fifty years. Faced with this bewildering proliferation of knowledge and technology, Piel sees laymen slipping into a desperate fatalism, a luxury he says we cannot now afford.

Piel poses solutions to this sense of impotence in the remaining essays, most of which concern education and public science policy. In a section appropriately entitled "common sense," he skillfully attacks the myth of "two cultures" of science and humanism (here the contrast with the garbled efforts of Morgenthau on the same topic are striking). Science, says Piel, has always been a humanistic discipline, created by men for human ends. What are you afraid of? he seems to be asking the new opponents of science. He places his essays on the role of the university and the scientist in American society under the rubric "The Treason of the Clerks." Here Piel consciously puts himself in the tradition of Julien Benda and tacitly follows the arguments of such current critics of the university as Noam Chomsky. Piel chides intellectuals for their sheep-like subservience to the transitory political aims of the state and their perversion of the truth-seeking role.

Today there is nothing startling in criticizing scientists and universities for whoring after government money and forgetting their educational mission. In the early sixties, however, when Piel wrote these essays, science was unthinkable without the succor of the grant-contract system, and the

"multiversity" was regarded as the greatest boon to free inquiry since the endowment of the library at Alexandria. In those palmy days, Piel's voice sounded lonelier and more original.

Piel's tone is informed and urbane. Yet he can raise eyebrows with astonishing generalizations worthy of Hans Morgenthau, e.g., "Without doubt, the most revolutionary idea in the life of man was the concept of inertia advanced in 1638 by Galileo." Piel can also provoke unintended belly laughs, as in his description of the Harvard commencement as "the most resplendent annual rite of our democracy." Tell that to the organizers of Macy's Thanksgiving Day Parade! Nonetheless, the essays are useful as a record of what was on the mind of a good popularizer of science during a turbulent decade. If most of the essays now seem passé, as they do, that too constitutes something of a tribute to Piel's glimpse into the acceleration of history.

We will be getting many more books of the type reviewed here; such is the self-sustaining nature of exponential growth. But now everyone knows, or should know, that scientists are political animals and that what scientists do has political impact. What we need are precise descriptions of the politics of science. Such descriptions would compare the politics of science with those of diplomacy, of welfare and of civil rights. Such descriptions would compare the rhetoric of science to the rhetoric of other political issues and explain how the language of science has acquired a symbolic importance equal to that of such old saws as "the national interest" or "free enterprise."

We do not need more general essays on the subject of science and politics written by outsiders (Morgenthau on science, Clarke on politics). We rather need detailed analysis from trained historians and sociologists of science. One hopes that a better understanding of the politics of science will contribute to a better politics and, who knows, to a better science.

The Planetary Man by Wilfrid Dasan

(Macmillan; 380 pp.; \$9.95)

John C. Koritansky

Wilfrid Dasan has now published the second volume of the work he entitles *The Planetary Man*, including, under the same cover, a revision of the first volume published in 1961. Volume 2 is called *An Ethical Prelude to a United World*; the first, *A Noetic Prelude to a United World*. The foreword promises yet a third volume, *A United World*, although the author makes no promises as to the date of completion, nor does he indicate what he thinks remains to be written on the subject. Dasan's readers will find it useful to have the first volume published along with the second, since the latter not only depends upon the former, but the first volume actually anticipates nearly every theme sounded in the second.

In the introduction Dasan gives a cogent statement of the starting point of his argument—and of the difficulty with it. He mentions in order Descartes, Husserl and the existentialists by way of defining the modern philosophical tradition of individualism. The existentialists represent the most extreme anti-idealistic position by making intentionality the primary concept. "The individual subject, standing in the center, gives vision and meaning to a world of his choice." This radically anti-idealistic individualism is unacceptable to Dasan:

For it overlooks the fact that of the notion of existence or individual as existent nothing can be said. Existence is not an object of knowledge unless it can be somehow essentially incarnated. . . . When existentialists, therefore, in order to escape the accusation of idealism insist that their aim is existence, they must of necessity endow this existence with some feature, whether it be anguish or hope, boredom or nausea, some-

thing around which existence can be wrapped. . . . Whether the center be called *Dasein* or *Pour-soi*, it will always be a subject looking around itself for a conceptualizable order, and although they insist and claim that their revelation is the discovery of an existing world, it will nonetheless always be their world.

Existentialism collapses into subjectivism.

This is a levelheaded, if somewhat familiar or even catechetical, criticism. However, Desan does not follow it with a return to the tradition from which the catechism is derived. If the modern individualists, and especially the existentialists, deny the primacy of *nature* in the sense of natural types or kinds—"ideas"—Desan does not, on the other hand, assert it. Perhaps he is prevented from such a stand by the perception of the anti-egalitarian consequences that follow from the thought that there are "forms" for all natural things including man and that these forms are the standards of excellence, health and happiness.

In any case, Desan attempts to transcend the limits of subjectivism by taking "the viewpoint of the *totum*," or elsewhere "*the totum humanum*," or "*totum genus humanum*," which means conferring one's own finitude and accepting the plurality of finite human beings. The *totum* "is not a collective consciousness or some form of world mind . . . the *totum* is nothing but the plural." In short, Desan rejects as subjective the position that individual man can live in no other world but that of his own making, but he fears that the alternative, the primacy of a natural or true world, will deprive individuals of their significance and claim to freedom. His middle position, that the viewpoint from which we may grasp the truth is nothing but "the plural," i.e., that there are many ideas of what is the truth, is only a restatement of the problem.

The major part of Desan's "noetic" volume is a discussion of the nature of the truth. It amounts to an elaboration, or insistence, on the funda-

mental tension in his work. Thus we find a discussion of "angular truth," statements or opinions of individuals that are not false but are derivative from a personal point of view or are fragmentary. We discover that the variety of angular truths exist in a dynamic state of mutual self-correction tending toward the survival of the species by preserving it from the dangers of systematic angularity. The variety of angular truth, however, not only contributes to survival but also, through the process of "additive complementarity," to a second kind of truth, "generic truth," which is the property of no individual mentality but rather that of the "*totum*." An example here, not meant to be exhaustive, is the variety of observations that are offered to explain any single event—e.g., the Battle of Verdun. "The true (generic truth) Verdun is not that of Jules Romain, nor of Marshal Pétain, nor of the German historian, but each of these approaches has seized upon a totality, only the fringes of which were given to one person."

As was indicated, however, Desan recognizes that he must distinguish "angular truth" from personal error and "generic truth" from collective deception. He discusses finally "Absolute Truth." The account here is remarkably traditional. "By [Absolute Truth] we do not merely mean that some assertions are absolutely true . . . but we signify that some Being exists which embodies Omniscience and Absolute Truth in its total fulfillment. This Being would be God or Truth itself." But again, lest this traditional thought be permitted its traditional consequences, specifically of providing man a transpersonal standard of behavior or principle of excellence, we are reminded that "The existence of this Absolute Truth, however, cancels neither the genesis nor the individual approach. . . ." Desan reminds us that we are fragments, and what is less compelling, that the result of understanding our fragmentariness ultimately casts us back into our own idiosyncratic "preference"—our personal creativity, our angularity.

The ambiguity at the root of Desan's argument does not prevent him from drawing from it ethical consequences. Men have an obligation to act *as fragments* so as to contribute their unique angle to the welfare of the "*totum*" and its specific kind of truth. On the other hand, if one's own will to be different, or "to be such," is in a state of destructive competition with that of others, the need for the *totum* itself simply "to be" precedes any will to "be such," and so the knowledge of the *totum* mitigates destructive contests.

Desan means by this not only that political necessity makes strange bedfellows but, further, that there is in principle no definitive standard in the name of which men might need to risk universal destruction. Of that thought one is entitled to ask the old question whether it does not reduce everything about which men differ (besides techniques of survival) to the level of whimsy, impossible to be taken seriously. Perhaps this problem is eliminated if we accept Desan's account of sainthood as the new and true model of man—the planetary man. The saint is "committed" to the "other-in-peril," to the relief of suffering. While few would object to this with a defense of suffering, we wonder whether a world of planetary men devoted solely to its relief would retain anything of the richness of that variety of angular truths Desan seemed so concerned to legitimize and preserve.

All in all I suspect that most of Desan's readers would wish a clearer statement of what his noetic and ethical preludes are preludes to before they lend their assent. What sort of community or politics could preserve the meaningful uniqueness of the individual while causing individuals to contribute to and not hinder the welfare of the community (*sub-totum*)? The question of the nature of political union is, of course, ancient and is central to the whole tradition of political philosophy.

In Desan's second volume, in a sub-chapter called "The Future of Authority," he asserts that what claims to be authority must be exercised in the name of the *totum*,

though it is not identical with the *totum*. On this basis individual members remain parts of the *totum* through their participation in the exercise of authority. Desan concedes that there are obstacles to such participation, however; he mentions the division of labor and the lack of communication.

As a way to transcend these limitations Desan refers, through a footnote, back to Volume 1 where, faced with a similar problem, he suggested that

The future should explore the

means of manufacturing some form of electronic computer with the hope not only of a simplified calculation and statistical investigation, but also of revealing, insofar as possible, those personal nuances which have always been neglected in any condensation of the general will of the many.

The utility and beauty of this suggestion can only be appreciated by recognizing that even if such an elaborate machine as here envisioned were to malfunction, it would make no difference—no one could tell.

The Unknown Orwell by Peter Stansky and William Abrahams

(Knopf; 316 pp.; \$8.95)

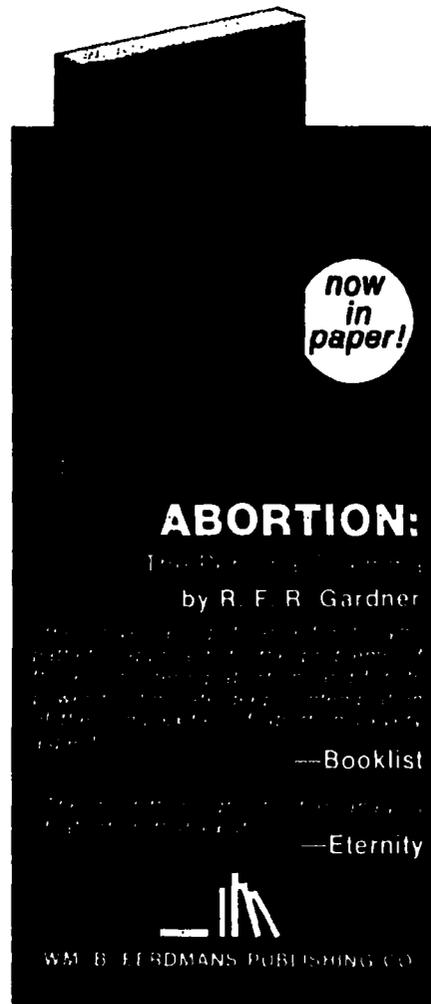
Norman Jacobson

We wish to know all we can about writers we admire. No detail is too trivial, no event in the author's life too insignificant. The way he knots his tie is of interest to the enthralled reader. In attention to just such detail *The Unknown Orwell* makes its chief contribution. As for the larger picture, the more profound relationship between the man and his works, between Eric Blair and George Orwell, the reader must bide his time until Bernard Crick is ready to publish the "official" biography.

Stansky and Abrahams concentrate on the period before Blair became Orwell. They want to pin the mysterious Blair in order to grasp the person he tried so desperately to slough off in favor of the persona he was later to assume. Along the way the authors attempt to maintain a dialectic between what it was actually like being Blair and what Orwell, in his published works, told us it was like. The focus is on *Down and Out in Paris and London*, the lengthy introduction to *The Road to Wigan Pier* and his essays "Such, Such Were the Joys," "Shooting an Elephant" and "Why I Write." They

find a pattern of "interesting" discrepancies. Orwell, it seems, chose to emphasize certain aspects of his experience as young Blair at the expense of others, invariably the cheerful or more personally rewarding. Now what else might they have expected? Their fixation with the fact that Blair had taken a pseudonym, had publicly flaunted a bill of divorce from his former self, serves mostly to confuse their earnest efforts to understand him (them?).

Is it true that pseudonymous authors present a special case? Are Samuel Clemens, Sidney Porter, Soren Kierkegaard, H. H. Munro subject to different canons of interpretation than those writers who publish under their own names? Moreover, to what extent does any writer, pseudonymous or otherwise, stick to "the facts" when recreating his past? Proust wrote a novel, Rousseau wrote his *Confessions*. Which is more strictly autobiographical, which the more impressive achievement as a work of fiction? It is precisely the degree to which he is successful in maintaining the tension within himself, in re-creating the past while ad-



dressing the present, that a writer becomes interesting. That the struggle should be waged under the skin of a *political* writer is what is so fascinating about George Orwell.

This "perversity" in Orwell marks all of his works, with the notable exception of his last books, *Animal Farm* and *1984*. It is not surprising that these should have been his most popular. In *Down and Out* a literate young man speaks from the underworld of poverty and neglect in behalf of the outcasts of a civilized society. In *Wigan Pier* the socialist reporter is determined to bite the hand that feeds him, the Left Book Club and other lovers of the proletariat—at a distance. "Shooting an Elephant" is remarkable for its portrayal of the inexorable tragedy of imperialism, in which *all* the actors are impoverished as human beings in the slaughter of the innocent. And we are told in "Why I Write": "... looking back through my work, I see that