One conception of ego development and recent research on its outcome are presented. The infant first asserts his selfhood through demand and negation. This is the Impulsive stage. The next stage is the Ritual-hedonistic stage, in which controls are supplied by ritual observances, and reward and punishment remain important sanctions. The next stages include the Conformist stage, at which the child accepts the rules of the group; the Conscientious stage, at which he evaluates for himself which rules he shall follow; and the Autonomous stage, at which he tolerates ambiguity. The work of Piaget and Erikson are reviewed to shed light on these stages. (CR)
Psychoanalysts at various times use at least three different conceptions of ego development, not altogether compatible with each other. The most common usage seems to cover the development of all ego functions, as if the ego is a bag of tricks, any one of which can develop by itself. This involves no conception of the ego as an organization nor of development as an organic process. It is not so much a conception as default of conception. It is a grab bag concept and does not serve theory or enlighten clinical discussion.

The second usage restricts the term largely to the period of early infancy, culminating in the first consolidation of the ego. Thus "ego development" is taken to mean the coming into existence of the ego. Occasionally the conception of ego development is then extended by contrasting this early ego with that of a mature, wise, and well-balanced adult, implying that between infancy and that consummation nothing very eventful with respect to ego development takes place, that the development occurs in a straight path. That is a dangerous mistake, since what most characterizes ego development is the enormous complexity of the periods between the earliest and latest discernible stages. Indeed, and herein lies the danger of an over-simplified view, the necessary way-stations in many respects appear entirely opposed to the state of wisdom and humanity that marks ego maturity.

Erikson's conception is widely acclaimed among psychoanalysts and psychologists, usually without explicit recognition that it constitutes a third usage, quite different from the preceding ones. Erikson recognizes and has names for the many complex stages that lie between infancy and maturity. His conception, rich as it is clinically, has a defect that makes it ineligible as a scientific construct. Erikson's version is defined in terms of the "average expectable" course. This leads to ambiguity in applying the conception to exceptional cases, a point to which I will return.
I shall sketch an alternative conception of ego development and show some recent research to which it has led. This is a self-consciously scientific construct. It is capable of standing on its own as a psychological conception, but I believe it is also fundamentally compatible with the essential corpus of psychoanalytic theory and with the usage of the term ego development by some psychoanalytic theorists, such as Loewald.

Anyone with sharp eyes can observe a child's psychological development, perhaps even make original observations. If there is more than one kind of development occurring at a time, as there surely is, mere observation will not serve to define or differentiate the strands. Ego development, intellectual development, and psychosexual development are radically different, yet observation by itself cannot establish that fact. When a child's behavior changes from one year to the next, shall we attribute the change to ego development, to psychosexual development, or to intellectual development, or perhaps to something entirely different, say, a change in the environmental demands on him? To carve out a part of that territory and call it ego development requires a construct. Neither observation nor theory alone but only observation guided by constructs can lead us to a science of child development.

While I stress the importance of a construct, paradoxically I avoid beginning my discussion of ego development with a formal definition (Loevinger, 1966). I prefer to begin by tracing the stages. The highest stages are problematic, since every author reserves the right to project his own ideals and aspirations into his theory. There is no question about where to find the earliest stages, though their exact nature is somewhat problematic for a different reason, that is, the subjects will not tell us. The task of the first stage can be loosely described as differentiating self from nonself or as the mutual structuring of self and reality. This is the stage sometimes referred to as the period of ego development in one psychoanalytic usage. I would prefer to consider it a kind of preparatory stage, and reserve the term ego development primarily for the later transformations of the ego.

The infant first asserts his selfhood through demand and negation. For short, this can be called the Impulsive stage. At first the infant is entirely dependent on the environment for control; later he becomes responsive to direct, immediate rewards and punishments. But the mark of this period remains that the impulse to do something predominates over the calculation of longterm gains. Some persons of this type, however, are very passive.
The next stage of childhood can be called the Ritual-hedonistic stage. Controls are supplied by ritual observances, and reward and punishment remain important sanctions. Normally, however, the capacity to anticipate the future has broadened; so impulsivity has declined. The child at this stage may be slyly opportunistic, something not possible for the impulsive child.

The next stage is the Conformist stage, at which point the child accepts the rules of the group, be it family, school, or country. Rules are given by the Authorities, and they are sacred and unchangeable. The Conformist stage is widely recognized and described, whether with approval or alarm.

The next big jump is to the Conscientious stage. While the Conformist child has internalized the necessity to obey the rules, his source of rules is still external. The person at the Conscientious stage, by contrast, evaluates and decides for himself what rules he will give his allegiance to. Thus, internalization is carried a decisive step further.

The next stage is called the Autonomous stage. The person at this stage, hardly ever a child, is at least partially liberated from excessive demands of conscience. He appreciates paradox and tolerates ambiguity. At their best these people become what Abe Maslow called Self-actualizing people.

Besides being a developmental sequence, this is also a dimension of individual differences, that is, a typology or characterology. A Conformist stage person of 40 years is not exactly like a Conformist of age 10, but there are common elements, and those common elements are the essentials of the stage. The assumption is that a person develops up to some point and then, for reasons we do not know, ceases to change with respect to this basic aspect of his character. He meets his problems for the rest of his life in whatever terms characterized his frame of reference at the point that his ego development stopped. For the majority of adults in American society, this is in the Conformist stage, the Conscientious stage, or, most often, a stage or point of transition squarely between those two; one might call the average American a Conscientious Conformist.

My colleagues and I began by numbering our stages. As we learned to make new distinctions and as we clarified the characteristics of what we thought of as transitions between stages, we risked terrible confusion if we renumbered; so we have moved towards using names. There are difficulties in using names, too. The names are an attempt to capture the central problem of each stage. It is not the case, obviously, that all conformist actions indicate that the
person is at the Conformist stage, nor that conscience does not appear prior to
the Conscientious stage. The literal-minded can easily misinterpret any system
of titles.

Obviously much more must be said to define the several stages, which have
characteristic manifestations in impulse control and character formation, in
mode of interpersonal relations, and in self-conception and cognitive style.
I have described these stages at length elsewhere (Loevinger, 1966; Loevinger &
Wessler, 1970); moreover, many people are familiar with another more or less
similar one, such as Kohlberg's stages of moral development. There are many
other versions.

Some of those who have captured a major part of this sequence have seen
it almost exclusively as a developmental sequence, overlooking the fact that
it generates a major dimension of individual differences. Piaget's Moral
Judgment of the Child is a prime example. Others have caught the characterology
without detecting its origin in development. The Authoritarian Personality is
a well-known example, noteworthy for being the first to have caught the complex
web of diverse manifestations. H. S. Sullivan was probably the first to see
that the developmental sequence generates a dimension of individual differences;
he is thus the grandfather of my conception of ego development.

Erikson, on the other hand, is a gifted observer whose version of ego
development or, as he often calls it, psychosocial development is debarred
from becoming a characterology by being closely tied to age-specific (or average
expectable) contingencies, such as entry into school, courtship, child-rearing,
and so on. I intentionally avoid age-specific contingencies, aiming instead to
describe just those aspects common to a stage in its normal developmental place
and in its status as a permanent point of fixation. This is not always easy.
The stage between Impulsive and Conformist I currently describe as Ritual-hedon-
istic in early childhood. In adolescence and adult life it becomes easier to
describe as Self-protective. We first described it as Opportunistic, but that
represents one particular isotope, a malignant but not invariable form for that
stage. My version of ego development, stripped of age-specific contingencies,
is an abstraction. That represents another step towards making it a scientific
construct.
There is another problem here. There are many versions of this sequence stressing one or another aspect. Robert Peck and Norman Bull, like Piaget, Kohlberg, and William McDougall, have more or less similar sequences of moral development. Kenneth Isaacs and Clyde Sullivan, Douglas Grant, and Marguerite Grant (now Marguerite Warren) have written of stages in the development of interpersonal relations that closely parallel Kohlberg's stages; Marguerite Warren now has a modified version. Clare Graves, Gordon Allport, and others have stressed the development of the self-concept. Others, such as David Ausubel and the authors of The Authoritarian Personality, have captured vividly some limited aspect of the sequence.

How shall we cope with integrating all these versions? Are they all just ideas in the heads of their inventors, arbitrary constructions to be used on whim? Shall each become a school of thought with its own coterie that one joins as one joins a political party? Is one version right and all the rest wrong? Or do some people fit into one set of categories and others fit into categories of another writer? None of these possibilities seems acceptable to me. I aspire to create an abstract conception of universal applicability. In principle, every person belongs somewhere on the dimension of ego development, just as everyone has some height, even though he may be deformed in some way and not be a typical example of any habitus.

Every one of the typologies began with drawing typical or salient examples, but as difficult cases have come to our attention, we, at least, and I suppose most of the others too, have broadened our description of the several categories to become inclusive. A case currently at issue is where the typical hippie fits in. He has seemed higher than our Self-protective type but usually distinctly lower than our Conscientious type. Shall we then say that these conspicuous nonconformists are of the Co-iformist type? Although that sounds paradoxical at first, it does not sound so strange if one says that a hippie is one for whom the issue of conformity versus nonconformity is the central issue around which his life style is formed. Thus we may broaden our definition of that stage to include all those for whom conformity is life's most salient issue, not just those who choose the Establishment solution to the problem.

I suspect that all the authors in this field aspire to create a universal sequence that classifies everyone without exception. The more concrete and vivid you make a description, however, the more you get caught up in describing typical instances rather than universal possibilities. This invariably limits the generality of the typology. Faced with this dilemma, I have striven consciously
towards a scientific aim of universal applicability, probably more than other authors have done.

Authors differ for other reasons. All of us see only the shadows on the wall of our cave; I maintain, however, that while the shadows differ, we are all describing shadows of the same thing. There are many difficult methodological problems in trying to resolve the differences between the accounts. The different strands of development are inextricably interwoven in nature, and they are inextricably interwoven with other non-developmental variables. Nature does not promise everyone an equal chance to achieve high ego level regardless of his intelligence or regardless of his station in life. We are far from understanding how to separate completely variables that are so confounded in actual occurrence.

Probably the greatest difference in accounts, however, comes from the different instruments used to measure the probandum. The population used initially by the investigator does not seem to matter. Different investigators have used all major population groups, men and women, girls and boys, normals, delinquents, neurotics, and psychotics. Passages describing similar developmental sequences or types can be found in literature of other eras and other countries, at least as far back as the Bhagava Gita. Currently, explicit cross-cultural work is going on by research workers at other universities, but I shall not describe it.

One of the major conceptions closely related to or intertwined with ego development is Kohlberg's conception of moral development. Currently he and his colleagues (Selman & Kohlberg, 1973) are working on the hypothesis that what I call ego development is composed of separate strands, not independent of each other but related as necessary but not sufficient conditions. For example, an appropriate stage of the ability to take the role of the other person is prerequisite to the corresponding moral stage. That there are intellectual and cognitive prerequisites for higher ego stages cannot be doubted. However, our own results show that much of ego development takes place in the period after age 12, when presumably most children have reached the cognitive stage of reversible operations. Thus it seems to me that in most cases the discrepancy between the possession of prerequisite cognitive abilities and the level of ego development attained is so great that this mode of analysis is not very powerful. Whether the Selman-Kohlberg model, in which separate strands of interpersonal and moral development are shown to have separate fates, can be rigorously verified remains to be seen.

My colleagues and I have used as our chief instrument a sentence completion (SC) test with 36 stems. While we do not always use the same stems, having
somewhat different forms for men and women (there is, in fact, no way to have identical stems for men and women) and slightly different versions of each for children, we essentially assume the interchangeability of one stem for another. One enormous advantage of the SC test is that it is clear what the scored unit is. It is the response to one stem, regardless of whether it is less than a sentence or several sentences, indeed, regardless of whether it is grammatically germane. Each response is considered as one of 36 clues to that person’s character. From the 36 clues (that is, the responses to the 36 stems) we construct a picture of the person’s character, placing him in one of the stages or in a transition between two of the named stages.

A major and neglected problem is how to reduce the scores on the 36 item responses to a single total protocol rating. This is the problem of the scoring algorithm. Few psychologists have directed attention to this psychometric problem. Yet given the obvious facts that every person is variable in his behavior and that every behavior sample exhibits diversity, scientific results hinge on the scoring algorithm. Different psychologists working with variables similar to what I call ego development have evolved different algorithms, almost invariably without giving serious consideration to possible alternatives. For example, the highest rated item or unit in a protocol may be taken as its most characteristic value, and that value assigned to the total protocol. One might look for a median rating for the item ratings. Kohlberg leans towards assigning to the total protocol the stage that is the modal rating for the scored units, provided it contains over 50% of the ratings. (The peaking of ratings at such a high mode is, however, somewhat spurious, an artifact of an elaborate system of subjective ratings and rescoring of the same idea more than once.) Experimentation with all of these algorithms has shown that none would preserve the diversity we find in our data. We have required, instead, a system where extreme ratings for the total protocol are indicated by a few extreme item ratings. This is a complex topic for discussion on another occasion. Suffice it to say that careful attention to measurement is the hallmark of science, and it is unscientific to talk of psychological measurement and ignore the rationale underlying the scoring algorithm.

In order to rate each of the 36 items, we have a scoring manual (Loevinger, Wessler, & Redmore, 1970) that lists repeatedly observed responses by category, showing how they were rated on the ego scale. This manual was constructed by a
bootstrap operation. Raters took a series of answers to a single item and rated each response without reference to any other response or to any additional information about the subject (except sex). Then we rated the total protocols from which the responses came, all 36 items at once as a unit, and used the Total Protocol Rating as a means of correcting our insights into various categories of response. This process was repeated many times with a variety of samples, each time of course beginning with the scoring manual constructed the previous time. This yielded a progressively more accurate scoring manual and, more importantly, new and deeper insights into the several stages. No other investigator in this area has evolved a similar self-correcting scoring procedure. This detailed, elaborate procedure for using evidence for the microanalysis and correction of our construct is, I believe, our chief contribution and the chief merit of our measuring instrument and our construct. Again, the simultaneous refinement of the measuring instrument and of the conception of ego development is in the mainstream of scientific method.

A major difficulty to the SC method, however, is that we ask people just to complete the sentences. How do we know they will show us what they really are like or how they really feel or think? Some may toss off just anything to be rid of the test, others believe they can create any kind of favorable impression they like. A series of recent studies have addressed those and related prob.

The first study in this series was conducted by Robert Tate and Dr. Carolyn Redmore (Tate, 1970). An introductory psychology class was administered the SC test under standard instructions to complete the sentences. Two weeks later they were given the test again, but half the men and half the women were told to answer in a way that would make a good impression, the other half to answer in a way that would make a poor impression. Test and retest were carefully coded and randomly intermixed. A research secretary typed all answers to a single stem together, with no identification except code number. Any remarks revealing S's identity or whether the protocol is a pre-test or post-test are routinely removed in this operation; so it cannot be considered an ordinary typing job. The item responses were thus rated out-of-context, as we call it. This study showed that when asked to make a poor impression, both men and women produced low ego level protocols, often of the Self-protective type. When asked to make a good impression, men stayed the same or raised their scores about one half a level. The women, who were a little higher in initial test (though not significantly so in this small
group), dropped their scores significantly in trying to make a good impression. That is, they scored closer to the Conformist stage, on the average, when trying to make a good impression than when responding spontaneously.

Redmore repeated this study with some variations. The Ss the next time were in a freshman psychology class at a College of Pharmacy. Prior to the retest, she gave a short lecture on the conception of ego development, omitting any reference to manifestations of ego level in SCs. Again the women scored slightly higher than the men on their spontaneous protocols, the men having a median and a modal level squarely at the Conscientious Conformist level, the women edging up into the Conscientious range. On retest, both men and women were able to fake significantly lower ego level, mostly lowering their scores to the Self-protective level. Almost half of the men were able to raise their ego levels, when so instructed, though usually not more than half a step, that is, from one stage to the transition into the next or from a transition into the next higher stage. The women were as likely to lower their scores as to raise them when instructed to fake higher levels.

One of the curious things that emerged from these studies is that no matter how clear you make the instructions, there will be some joker who does the opposite of what you tell him to do. Examination of these protocols indicated to us that this just had to be deliberate. We felt that perhaps some people were just itching to show how they could fake high or fake low and were in the group that got the opposite instructions. To test this idea we changed the experiment so that each person got both sets of instructions to part of his retest. In one small study I gave a short series of lectures, really a mini-course in ego development, to a group of mental health professionals at a medical center where there was some interest in the topic. They knew that I was also using them for research subjects, but they did not know in advance what the nature of the retest would be. As there were only 10 Ss, we could not analyze separately by sex. Half the Ss significantly increased their scores in response to instructions to answer as a person of high ego level would. Seven of 10 significantly decreased their scores in response to instructions to answer as a person of low ego level would. As usual, there was one joker who answered at a significantly higher level when told to fake low than when answering spontaneously or faking high. (We arbitrarily call a change "significant" in this context when on average more than half the stems are scored one half stage higher.)
In another study, conducted by John Colburn, the sentence stems were
broken into banks of 9 with a separate set of instructions for each. The test
was administered only once. The first set of 9 items was taken with instructions
to complete the sentences, as usual. Subsequent sets were given with instructions
to make a favorable impression, to make an unfavorable impression, or to answer
as if writing an essay. The latter instructions were counterbalanced. Sixteen
men students were administered this test, each one having a different order of
instructions and of item sets, so that every set of items was given under every
set of instructions equally often. The same design was repeated with 16 women
students. Only the instructions to produce an unfavorable impression resulted
in a significant change, and that of course was a decrement. Under these con-
ditions the differences between men and women were not as striking as in previous
experiments.

We have now lost interest in asking people to make an unfavorable impres-
sion or to fake a low ego level, since it is clear that almost anyone can do so.
We have also found, however, in further analyses of the foregoing studies, that
a skilled rater can usually spot a protocol that is faked low. Correct identif-
ication of protocols that are faked high is less easy; our raters were highly
variable in their ability to make the latter identification.

Our studies and Kohlberg's agree that in junior high and high school
years girls lead boys in their progress to the Conformist levels. We find that
girls and women lead slightly also in progress towards post-Conformist stages,
while Kohlberg finds that men lead in that respect. The null hypothesis, one I
feel compelled to hold to until strong evidence to the contrary is adduced, is that
there are no overall sex differences in ego development.

To account for the differences being found, the obvious and chic hypothe-
sis is some kind of experimenter effect. Although my group now handles male and
female protocols with equal ease, we began our studies with women and girls, and
the senior researchers in the early years were all women. Kohlberg, by contrast,
began studying men and boys originally, and presumably the senior researchers in
his work were originally men. I suspect, however, the impress of the initial
investigators and of the initial subjects was not so much in bias in the usual
sense as in the substance or intellectual content of the probandum. This leads
us back to substantive issues. Male superiority in post-Conformist stages of
Kohlberg's test results, I suspect, from the dependence of those scores on an
aptitude and propensity for ratiocination of a type that men find more congenial
than women do.
The apparent, slight female superiority in our quite different explanation. It appears as if women who project a slightly higher ego level than men do, but whose impression lapse into a more conventional and conventional impression. On the other hand, when responding spontaneously feel no selves, but they are quite aware of how to do so when a result is some insight into the difference in male and constitutes a favorable impression. Our results confirm Women's Lib movement, that the ideals held up to women

Another study should be mentioned, since it for the foregoing studies and for future work. What happens on the SC test without changing the instructions? Ken Wall of that. He found, as we anticipated, highly satisfactory ability, ranging from about .75 to .91, depending on the There was, however, a significant decrease in score on responses to a single stem given by the same S on test. Often he would give a response the second time similar to elaborations and qualifications, the very things that he was as if the task lost interest on retest and elicited capacities. These results constitute a warning for the use the SC test of ego development as a measure of personal or experimental conditions. Such uses, at least over a doomed to disappointment. The ego, of course, is remains changes in ego level over a short period of time, regardless of retested conditions, is not to be expected. But Waldman's study warns of another, namely that the retest effect itself, at least over six months is likely to be significantly negative and might easily movement. Probably over a longer time period, six months effect would be negligible.

In a recent continuation of the faking studies, Redmore had half of a class in social psychology retake original instructions, the other half under instructions to impression. After they had finished, she asked the late to turn over and describe what they had in mind as exemplifying der. One S explained that he was infuriated by the request an. That gives us one explanation of how a person might lose instructions were the opposite.
Incidentally, answers to this question, what guided them in creating a favorable impression, were unexpectedly fascinating and diverse. This question by itself will probably prove to be a good measure of ego development, as indeed any free response question is.

From time to time people try to substitute a multiple choice test for the free-response SC test. This never works. High level responses are rare in free response format but are chosen frequently or even predominantly in multiple choice format. The ego is, among other things, the person's frame of reference. A free response item requires him to project his frame of reference, whereas multiple choice asks him to operate within the test constructor's frame of reference, an entirely different task. That particular direction for seemingly making our test more scientific we have rejected, at least until someone shows us how to make the task more objective without losing the discriminating power we know that we now have.

The many studies that we have done that demonstrate that our scoring method is relatively objective and can be taught are already published in our book, Measuring Ego Development, of which Ruth Wessler and Carolyn Redmore are my co-authors. I will therefore not repeat them here except to recall that persons who conscientiously train themselves on written materials now available in published form are shown to be as good at rating as the project's Old Hands.

Two further kinds of studies can be mentioned. Since we are talking about a developmental sequence, and some persons do indeed question whether the stages constitute an invariant developmental sequence, there must be some age range in which we can demonstrate the age progression. Nothing in the theory clearly dictates when measurable change will cease, however. Several cross-sectional studies in St. Louis and one in Toronto show that significant changes in ego level occur throughout the years 12 to 17 or 18. We do not yet have much longitudinal data on these years, but we have many cross-sectional studies to back up this assertion. One cross-sectional study in a good technological college (not MIT or CalTech) shows no change in average ego level over the four college years. The graduate students were also indistinguishable from the undergraduates, but the faculty were distinctly higher on the average, though not of course in every case. We are continuing our studies in that college, as the faculty
Moving in another direction, our project has looked for ways to validate our test and our conception of ego development. There are difficulties in doing so, since obviously there are no well-established measures of ego development. Hence we are in the area of construct validity, bootstrapping ourselves up by a series of measures no one of which is better than or probably even as good as the one we are attempting to validate.

Ruth Lucas (1971) used an extensive interview, rated for ego level, as a validating instrument. First she taped interviews of a group of women at a state college. Then she and one other rater rated the taped interviews for ego level; naturally this had to be done without any scoring manual. These ratings correlated .6 with ego level as measured by the SC tests of the same students. Of course due precautions were taken to avoid contamination of either interview or SC ratings by knowledge of the results of other ratings or responses. Considering that the SC measure is not perfectly reliable, and surely the interview ratings are less so, this represents a high level of agreement.

Howard Lambert (1972), in his Ph. D. dissertation at the University of Chicago, correlated Kohlberg moral judgment levels with levels of ego development determined from our SC test. For a diverse group varying widely in ego and moral level and also varying widely in age, the correlation was about .8. For a group much more restricted in age, but hence also more restricted in ego and moral levels, the correlation was about .4. Using his data, I computed the correlation for the wider group partialling out age; the partial correlation was about .6, again a quite high value considering the limited reliability of the respective tests (not corrected for in this estimated coefficient).

The most impressive validational study was the work of Augusto Blasi (1971), though it was originally designed around another purpose. Blasi gave the SC test to sixth grade boys and girls in inner city schools. All were black. Their ages ranged from 11 to 13; with their limited writing skills this represents the outside limit of usage of a written test. Blasi sorted the youngsters into groups of between 5 and 8 children, sorting them according to a preliminary scoring of their SC tests, each group homogeneous as to ego level. He met with each group for one hour each school day for two weeks. The task he set for the children was to play out parts in stories presenting moral dilemmas, such as a conflict between helping a classmate who had been hurt and coming straight home, as Mother had ordered. The purpose was to encourage a rise in ego level particularly in the area of responsibility, or rather, the purpose was to show that
stories appropriate to the children's initial level were more effective in encouraging change than stories inappropriate in level. As no statistically significant change was recorded in this short training, the initial purpose was not achieved.

Two kinds of observations came out of Blasi's study that help to validate our test and our construct. These are, first, that behavior of the several groups as recorded by trained observers corresponds well with descriptions of the same levels on the basis of the written protocols. This is not an achievement to be belittled. Of course the original conception of ego development grew out of behavioral observations by many persons under many circumstances, but the details of our conception were derived from written SC protocols. Few or no children similar to those Blasi was studying had ever before been studied with this instrument. Our Ss had been older, mostly white, mostly female, mostly middle class, mostly more fluent in writing. Yet the behavioral descriptions inferred from the SC tests required no major modification to fit this sample. For example, the children classed at the Impulsive stage fought and jostled each other, brought food and ate during the sessions, acted their own parts more and spoke their assigned parts less than other children, and in short behaved impulsively. None of the children were at the stage we call Conscientious; correspondingly, none ever acknowledged any set of contingencies that would require them to break rules set down by authorities. Those close to the Conscientious stage, however, could understand contingencies that might permit a child to break a rule, say to help a hurt friend or to save a life.

A second finding of Blasi and his observers was that when a child was asked to enact a role whose premises were those of a higher ego stage than his own, he tended to rewrite or re-interpret the part in terms of his own ego stage. For example, a child playing the role of Mother would be told to make her "child" ashamed of himself. Instead, she would get angry and scream at him, though she understood she was making him angry rather than ashamed. The last finding is important because it illustrates one of the basic premises of our concept and of our method of measuring it. Ordinarily people do not understand the reasoning of those levels more than a shade above their own. This assumption Blasi's observations confirm, though not by way of producing change, as he had hoped. Rather, when asked to restate or re-enact a line of reasoning characteristic of a higher level, they will re-interpret it in the terms of their own level. This principle is the theoretical basis of the use of free response tests to measure ego level, namely, that the frame of reference you use to respond to any stimulus reveals (or constitutes) your own ego level.
It will be recognized that our faking studies also bear on this point. From a practical view they are concerned with the optimal conditions for administering the test. From a theoretical view they are concerned with how far one can reach above one's head, so to speak. As a general rule, not far, they show. Half even of our mental health professionals could not simulate responses of a higher ego level. Men seem to be able to do so better than women, but the most plausible explanation of that apparent finding is that our original instructions elicit a less whole-hearted cooperation from men in the first place.

A final study represents an entirely different approach to validation. Carl Hoppe (1972) reasoned that if our conception of ego development holds true, then measures of conformity ought to peak not at lowest or highest ego levels but in midrange, being lower at both extremes of ego development. He studied eighth, ninth, and eleventh grade students at a private boys' school. Three of his four measures of conformity showed exactly the curvilinear trend he had predicted. These were a self-report measure, a peer-rating or guess-who measure, and an unobtrusive measure, namely, the number of demerits recorded in the headmaster's office for the boy for the preceding 90 days. The one measure that did not work was an experimental test devised by Willis, an Asch-type measure. It did not correlate with anything else in this study. Apparently the Asch-type situation does not provide a good measure of characterological conformity, an interesting finding in view of the fact that it is often used as the prototypic or exemplary measure of conformity in elementary social psychology.

Catherine Harakal (1971), in a Ph. D. dissertation at Catholic University under the direction of Maurice Lorr, got a similar curvilinear relation with a different self-report measure and an all female population, again confirming that the major results relating to ego development are not sex-specific.

Hoppe's and Harakal's results illustrate a point of general importance. This is the difference between what I call milestone sequences and polar variables. Conformity is a polar variable, that is, a species of observable behavior graded from little to much. It is a variable defined at once behavioristically and quantitatively. Ego development is not so definable. Ego development can be quantified or rendered behavioristically but not both at once. If we define it in terms of observable behaviors, we have a milestone sequence, that is, qualitatively different observations for the several scale points. If we wish to measure it in some quantitative way, we must render it as an abstract variable,
to be inferred from many diverse types of observations, no one of which infallibly represents any given point on the scale. The curvilinear relation between the milestones and the underlying developmental continuum has a major practical consequence. A psychologist can study intensively types of behavior that are in fact manifestations of ego level and he can be rigorously quantitative for years on end without ever having a glimmer of the variable of ego development. Two polar variables, both intimately but curvilinearly related to ego development, that is, milestones separated in time and stage, can have any correlation whatsoever. There is no statistical technique or computer program that will reveal that they are in fact milestones of a single developmental continuum.

In summary, I have presented the concept of ego development that guides the current research of my colleagues and me. It contrasts with several usages of the term in psychoanalytic circles, usages which are not, however, intimately tied to the essentials of psychoanalytic theory. In fact, I would argue that my version usefully subsumes a variety of clinical and quasi-clinical observations.

At various points I have alluded to research on a closely related conception of moral development by Kohlberg and his colleagues. Kohlberg sees ego development as possibly preceding moral development or perhaps as less structured than moral development. I see moral development as an aspect of ego development, with the relationship in part obscured by the fallibility of our respective measuring instruments.

Ego development is a conception that cannot be arrived at by pure theory and certainly not by pure observation. It is an abstraction, both a developmental sequence and a dimension of individual differences. Rendering it as an abstraction is necessary to make it a universally applicable conception, as well as making it amenable to measurement and capable of integration into theory. The cost is to surrender the vividness of description in terms of typical cases.

The case for my conception of ego development rests on rigor with respect to measuring operations. Granted that various alternative conceptions differ as to detail, our procedure for using data to correct the details, a procedure that has no equivalent in other comparable lines of research, gives us some claim to arbitrate the differences. The use of a measuring instrument to refine a theoretical concept brings us within the mainstream of science.
References


