

COGNITIVE AND PERSONAL FUTURITY IN LATER LIFE¹

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“Old people live in the past.” This hardy cliché, if correct, would have some rather serious psychosocial implications. Two of these will be noted here.

1. It would imply that the elderly person is estranged from the dominant value system of his culture. While the United States and other highly industrialized nations place a high premium upon futurity, progress, and novelty, the aged individual would dedicate himself to the past. This line of interpretation is consistent with cross-cultural analyses (e.g. 3, 7) and with psychological investigations into the meaning of time in our society (8, 12). From this viewpoint one might expect to find the elderly person regarded as an anachronism in his own community. Years ago, Alfred Adler observed that in our society young people literally “shrink away” from the aged (2, p. 443), an observation supported by recent research (9). Possibly the lack of community between young and old could, in part, be understood in terms of their divergent outlooks on time.

2. It would also follow that the elderly person is psychologically incapacitated. Futurity² is considered not simply a socially-valued category for interpreting experience, but an essential organizing principle for the individual as well. This view is central in the Adlerian approach to character development, and prominent in the developmental theories of Werner (14) and Piaget (11). Thus to abandon futurity as a major category for interpreting experience and organizing the self would be to damage one's integrity as a complete human being.

Does the elderly person, then, suffer a loss of psychological futurity and, consequently, find himself estranged from the community and hobbled in his self-organization?

¹This study was supported in part by USPHS grant MY-4818. An earlier version of this paper was presented at the annual scientific meeting of the Gerontological Society, Pittsburgh, Pennsylvania, November 8, 1961.

²Futurity is defined as (a) future time; (b) a future state of condition, a future event; (c) the quality of being future (1).

Before investigating this problem we must examine the concept of psychological futurity. Previous research (5, 10, 13) suggests that it involves several dimensions: *extension*, the range of futurity that is conceptualized, i.e., how far ahead a person thinks; *density*, the number of events and experiences with which the future is populated; *coherence*, the degree of organization within the conceptualized future; and *directionality*, the sense of moving from the present moment into the future. These dimensions do not necessarily show identical transformations as the individual ages. E.g., there is evidence that in adolescence directionality develops more rapidly than does coherence (4).

But a second approach must be added. The dimensions described above represent the investigator's, the external, framework which he applies to the thoughts of the subject. The subject himself, however, operates in accord with his own, the internal, frameworks, two of which are: personal and cognitive futurity, as we have called them.

Personal futurity is bound to the individual's own life-span. From the vantage of his present moment of existence the individual can look back toward a past which is his own personal history, and ahead toward a future that holds his own personal "destiny." Time has the quality of an intimate personal possession.

Cognitive futurity is the orientation toward utilizing time as an abstract cognitive category for organizing and interpreting experience in general. Time is a tool of the intellect.

It is now possible to formulate the inquiry more specifically: Do elderly people tend to suffer a loss in the use of both personal and cognitive futurity? To support the familiar notion that "old people live in the past," both futurities should be markedly impaired. Particular attention will be given here to the dimensions of extension, density, and coherence.

METHOD

Subjects. *Ss* were 24 elderly persons (median age 77, range 66-89), and 24 younger adults (median age 19, range 18-24). There were 16 women and 8 men in each sample, the younger *Ss* being juniors in a liberal arts university, and the older *Ss* residents of a geriatric institution. All the older *Ss* were well-oriented and clinically assessed as of average intelligence or better. The younger *Ss* were not a control group in the strictest sense, but provided a set of performances that would contribute to gaining a perspective on the performance of the older *Ss*.

Cognitive futurity. This was studied by a story construction technique. The construction of a complete story from an introductory fragment (story root) requires the ability to order experiences in time. Three story roots were presented

to each *S* (counterbalanced design) with instructions to develop each into a "good story." The roots were: "One day Jack (Betty) was thinking . . . (unspecified). "One day Bill (Jane) began to think about his (her) future . . ." (Future). "One day Bill (Jane) began to think about his (her) past . . ." (Past). These roots were selected to provide a sampling of *S*'s cognitive structuring of time under various stimulus conditions. Methods of analysis are reported below.

Personal futurity. This was studied by the Important Events technique. *S* is asked to report the most recent important event or experience in his life, and the temporal distance between that event and the present time is ascertained. He is then asked for the most recent event prior to that, and, again, for the most recent event prior to that. These three steps into the past are followed by three steps into the future. *S* is requested to give his expectations for the next most important event in his life, and so on. *S* is free to give his own interpretation of what constitutes an important event. Such events then range from major tragedies and successes to relatively minor experiences. Methods of analysis are reported below.

RESULTS

Cognitive Futurity. This was measured according to the dimensions of extension or range, density or number, and coherence or integration.

Regarding *extension*, young and old *Ss* did not differ significantly, either in frequency of long-future stories, or in median extension. By long-future story is meant one which extends beyond the situation given in the story root on the order of years, as distinct from minutes, hours, days, etc. The older *Ss* gave 29 long-future stories, the younger *Ss* 34, which is not statistically significant. Median extension was obtained by converting the degree of extension into minutes and the minutes into logarithmic values. The difference between the samples again did not approach significance.

Regarding *density*, stories with one event only were distinguished from those with several events, each with a distinct functional significance. Again, there was no statistically significant difference between young and old (39 and 42 stories, respectively).

To meet the criterion of *coherence* a story had to include a complex past, a complex future, and a relationship between past and future which gives a meaning to the total production. A story which does not contain several temporal parts could not reasonably be described as coherent, as there would be little in it that could be integrated. (Possible forms of integration other than temporal are not considered here.) Among the stories with a complex temporal sequence were a few with clearly fragmented events, while most stories possessed an inner relationship or development. Only the latter were cate-

gorized as integrated. The older *Ss* devised 29 integrated productions, while the younger *Ss* devised 15. This difference is significant at the .05 level of confidence. The older *Ss*' inclination to construct more stories possessing complex pasts, although by itself not significant, would appear to be one of the factors involved in their higher frequency of integrated productions.

To summarize, we found no significant differences between young and old adults with respect to cognitive futurity—except in a variable that is actually not specific to futurity, but involves the general integration of past and future within a total production. Here it was the older *Ss* who showed the relative superiority.

A qualitative observation might be added. In preliminary content analysis, drawing upon the productions of five different samples, the author has analyzed more than one thousand story completions of young adults. From the findings he believes it would be difficult to differentiate between these and the stories constructed by the present sample of aged people. Differences attributable to age are less readily apparent than differences attributable to personality organization.

Personal futurity. Here one can find evidence for a loss for the aged, both in the density of future events and degree of extension into the future.

Regarding *extension*, the older *Ss* did not go as far into the future as the younger ones, a finding one would have expected from the obvious consideration that the aged person has a much shorter life expectancy. The difference between median extensions is significant beyond the .01 level.

Regarding *density*, only five of the 24 older *Ss* gave all three of the requested steps into the future, while none of the younger *Ss* failed to give three. This difference yields a chi square value of 12.44, significant beyond the .01 level of confidence.

The shorter future extension of the aged person does not in itself dictate that the density of anticipated events need be markedly reduced. An elderly person might anticipate three events all of which would occur within the next year, or even within the next few days. But when density of expected events was compared within a proximal area of the total temporal range (events that were expected to occur within three months of the date of testing), the younger *Ss* retained their higher frequency. This difference was found to be significant at the .05 level. Thus it appears that the older *Ss*' tendency to anticipate

fewer important events in his personal future cannot be accounted for entirely on the basis of his shorter life expectancy.

Qualitatively, both personal past and future appear to differ in numerous respects which are now under further investigation.

DISCUSSION

The present findings suggest that elderly people in our society do not necessarily suffer a general loss in psychological futurity. While there is an obvious restriction of personal futurity, this is not the case with regard to cognitive futurity.

Considering that our younger *Ss* were in more favorable life situations, i.e., the bias from imperfect matching of the samples should be in their favor, one is more impressed by the fact that cognitive futurity is so similar for both groups than by the fact that the aged *Ss* dealt less extensively with personal futurity. The retention (and possible augmentation) of cognitive futurity in later life has been more convincingly established than the differential in personal futurity.

The discrepancy between cognitive and personal futurity in the older group appears most interesting. If the elderly person can "work with the future," as evidenced in his story constructions, why then does he not show a propensity to "live in the future?"

One possible explanation is that personal futurity in the aged tends to be constricted by "accidental" reasons. These would be that a particular elderly person happens to be depressed, institutionalized or fearful of death. This quasi-Aristotelian application of the term "accident" is intended to suggest that elderly people do not *necessarily* have to be limited in their future outlook. The implication is that specific conditions have occurred in the particular individual's total life situation which have brought about the observed restriction. That such a restriction might be rather common would be no argument for its necessity. By analogy, even when all oak trees in a given area are blighted with the same disease, no one suggests that this affliction is a necessary and intrinsic characteristic of being an oak tree. This view has practical implications: There would be the prospect that "something could be done" to prevent or remedy this "unfortunate accident" of restriction of future outlook.

An alternative explanation is that there is a certain "necessity" involved in the observed restriction of personal futurity. This might be an individual matter, i.e., not every elderly person would "necessarily" possess this "necessity"—but for those who did, its structuring

power would be great. What we mean to suggest here is that certain life-styles imply rather definite self-contained limits. Some elderly people consider that they have lived out their life plan, and thus exist on a sort of "surplus time" that is not part of their life-long system of values.

There are some empirical data and clinical observations to support both lines of explanation. One task of future research would be to specify the conditions under which the "accidental" and the "necessary" restrictions of personal futurity in later life occur. Another task would be to provide background information that would assist psychotherapists with the problem of reconciling personal futurity and life style in the later years of life (6). For both research and therapeutic purposes it seems essential to understand the elderly individual's life style before interpreting the meaning of his future outlook, or apparent lack of outlook.

Further investigation of the meaning of futurity in later life could be of great value in rounding out theoretical positions that originated largely from observations of children and younger adults. E.g., Adler pointed out that the fictional goal can itself serve as a compensation for inferiority and discomfort experienced in the present situation. "By means of this concrete [fictional] goal, the individual can think and feel himself superior to the difficulties of the present because he has in mind the success of the future" (2, pp. 99-100). But what can comfort the octogenarian? Does the restriction in personal futurity observed in this study signify hopelessness? Or has the individual adapted to his situation in some way that is meaningful and satisfactory to him, even though it is difficult to understand from an external viewpoint?

SUMMARY

The present findings suggest that the assumed loss of futurity in later life is not necessarily pervasive. A sample of intellectually intact, institutionalized elderly people equalled and, in some respects, exceeded a sample of younger adults in cognitive futurity, i.e., in their ability to use futurity as an abstract category for organizing experience. The older subjects, however, were more limited than the younger ones in personal futurity, i.e., in dealing with futurity within a personal framework.

Two lines of explanation were briefly sketched (*a*) that restriction of personal futurity is brought about by such "accidents" as insti-

tutionalization or depression, and (b) that certain life styles imply self-contained limits which of "necessity" terminate the forward projection of values and goals.

REFERENCES

1. *American College dictionary*. New York: Random House, 1957.
2. ANSBACHER, H. L., & ANSBACHER, ROWENA R. (Eds.) *The Individual Psychology of Alfred Adler*. New York: Basic Books, 1956.
3. FRANK, L. K. Time perspectives. *J. soc. Phil.*, 1939, 4, 293-312.
4. KASTENBAUM, R. Time and death in adolescence. In H. Feifel (Ed.), *The meaning of death*. New York: McGraw-Hill, 1959. Pp. 99-113.
5. KASTENBAUM, R. The dimensions of future time perspective: an experimental analysis. *J. gen. Psychol.*, 1961, 65, 203-218.
6. KASTENBAUM, R. The reluctant therapist. *Geriatrics*, in press.
7. KLUCKHOHN, F. R. Dominant and variant value orientations. In C. Kluckhohn, H. A. Murray, & D. M. Schneider (Eds.), *Personality in nature, society, and culture*. New York: Knopf, 1956. Pp. 343-357.
8. KNAPP, R. H., & GARBUTT, J. T. Time imagery and the achievement motive. *J. Pers.*, 1958, 26, 426-434.
9. KOGAN, N., & SHELTON, F. C. Differential cue value of age and occupation in impression formation. *Psychol. Rep.*, 1960, 7, 203-216.
10. LESHAN, L. L. Time orientation and social class. *J. abnorm. soc. Psychol.*, 1952, 47, 589-592.
11. PIAGET, J. *The psychology of intelligence*. New York: Basic Books, 1950.
12. TEAHAN, J. E. Future time perspective, optimism, and academic achievement. *J. abnorm. soc. Psychol.*, 1958, 57, 379-380.
13. WALLACE, M. Future time perspective in schizophrenia. *J. abnorm. soc. Psychol.*, 1956, 52, 240-245.
14. WERNER, H. *The comparative psychology of mental development*. Rev. ed. Chicago: Follet, 1948.