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A Life-Span, Life-Space Approach to Career Development

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A career is defined as the combination and sequence of roles played by a person during the course of a lifetime. These roles include those of child, pupil or student, leisurite, citizen, worker, spouse, homemaker, parent, and pensioner, positions with associated expectations that are occupied at some time by most people, and other less common roles such as those of criminal, reformer, and lover. A Life-Career Rainbow is presented as a means of helping conceptualize multidimensional careers, the temporal involvement in, and the emotional commitment to, each role. Self-actualization in various roles, role conflicts, and the determinants of role selection and of role performance are discussed. The use of the Rainbow in career education and in counseling is briefly considered.

A paper with a title such as this might be expected to be one of two sorts of articles: seeking either to formulate a theory of career development from which hypotheses might be derived and tested, or merely attempting to describe what careers are and how they develop. Those who have proposed theories have, almost always, dealt with occupational choice rather than with career development: Bordin, Nachmann, and Segal (1963), Holland (1973), and Roe (1957) are outstanding examples. The first and last have not been supported by the research they stimulated, and Holland's hypotheses have been tested largely by the use of preferences to predict preferences and choices of courses rather than sequences of occupational positions. Writers who have focussed on career development, i.e., upon the emergence of sequences of choices throughout the whole or a part of the life span, have of necessity been limited by the scope of their task and by the variety of variables needing to be considered to simple descriptions: Blau, Gustad, Jessor, Parnes, and Wilcock (1956), Ginzberg, Ginsburg, Axelrad, and Herma (1951), and Super,

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Crites, Hummel, Moser, Overstreet, and Warnath (1957) are examples of writers who have sought to describe the multivariate process before attempting prematurely to perfect theory according to the canons of theory building. This article is an attempt to provide a brief description of career development in the hope that good descriptions will in due course lead to theories which are more comprehensive than the segmental theories which now dominate the field.

Careers have been viewed variously as a sequence of positions occupied by a person during the course of a lifetime (Super, 1957), as a decision tree portraying the decision points encountered by a person going through school and into the world of work (Flanagan & Cooley, 1966), and as a series of life stages in which differing constellations of developmental tasks are encountered and dealt with (Buehler, 1933; Super, 1957). A Life-Career Rainbow has been proposed (Super, 1976) in an attempt to describe more adequately the many aspects of a career throughout the life span.

The Life-Career Rainbow first proposed had two major defects: It lacked explicit recognition of the numerous determinants of decisions, and it seemed rigid in the uniformity of its arc even when varying bandwidth and color depth were specified in the text. This paper seeks to refine the concepts of life span and life space used in the Rainbow, to treat decision points more adequately, and to incorporate also the various personal and social determinants of the use of life space in the occupying of career positions and in the playing of roles during the course of the life career.

LIFE SPACE

People play a variety of roles as they mature, some of these roles beginning early in life, e.g., that of child, and others beginning late in life, e.g., that of pensioner. At some life stages a person plays only one role (e.g., that of child when still a neonate), and at others a number of roles, such as those of spouse, parent, homemaker, and worker when at the prime of life.

Nine Roles

Nine major roles and four principal theaters may be used to describe most of the life space of most people during the course of a lifetime. These are as follows, approximately in typical chronological order of taking on the role: (1) Child (including son and daughter), (2) Student, (3) "Leisurite" (no standard term is available to describe the position and role of one engaged in the pursuit of leisure-time activities, including idling), (4) Citizen, (5) Worker (including Unemployed Worker and Nonworker as ways of playing the role), (6) Spouse, (7) Homemaker, (8) Parent, and (9) Pensioner.

Other roles can be identified, e.g., sibling, worshipper, lover, reformer, criminal, etc. Not everyone plays all roles, for some never marry and some die without having reached retirement. The sequence of the initiation and abandoning of roles may differ, as when a student marries before leaving school or college and before becoming a worker. But the order in which these roles are listed corresponds to the order in which the positions are typically first occupied. The constellation of interacting, varying, roles constitutes the career.

None of the roles is necessarily sex-linked: Not only can a child be of either sex, but (in modern Western societies) also citizens, workers, and pensioners; men as well as women are usually homemakers, sharing all tasks equally in some contemporary households or dividing them in some more traditional homes as when the wife cooks and the husband dries the dishes, or when the wife takes care of the laundry while the husband mows the lawn and repairs electrical appliances. When positions are defined more precisely the roles may be sex-linked, as in the biologically determined parental role of mother and in the socially determined (and therefore socially alterable) worker roles of engineer, police officer, secretary, and nurse.

Four Theaters

In the order in which they are typically entered, the principal theaters in which these roles are played are: (1) The Home, (2) The Community, (3) The School (including College and University), and (4) The Workplace. There are other theaters, e.g., The Church, The Union, The Club, The Retirement Community or Home, etc., but not everyone enters all theaters, for some people never enter paid employment (in such cases, the home may also be the theatre of indirectly remunerated work). Some never retire or, if they do, remain in the same community and in the same home as before retirement, as pensioners, playing the pensioner's role and meeting some of the attendant expectations.

Theaters, Positions, and Roles

Each role is typically played in one theater, but may also be played less often, sometimes less congruently, in one or more other theaters. The role of parent, for example, is played primarily in the home, which is also the theater in which children, spouses, and a worker (when the home employs a cook or a cleaning woman) may play their primary roles, but this same role of parent may also be played in the school, the church, and the courtroom as occasion arises. Similarly the role of worker may be played in the theater of the home, as well as in that of the workplace, when the worker takes work home at night or over the weekend. This impinging of one role on another by spilling over into a secondary theater, as when the worker role is played at home where the spouse and homemaker roles are

primary, may cause a certain amount of role conflict in the person playing them, and a certain amount of confusion in the minds or feelings of others in the same theater; it may also enrich the life of those in that theater, as when a parent shares some of the interesting events of the workplace with spouse and children while at meals, at the same time organizing his or her own thoughts about them. It is important that, as just noted, it is the occupying of positions in theaters that casts one in roles, for a role is a set of expectations that others have of a person occupying a position. A parent is expected to assume certain responsibilities for a child, even though he or she may not have chosen to become a parent, and similarly a worker is expected to perform certain duties by virtue of having been employed to fill a certain position at a place of work with a given job description and with a descriptive job title such as that of bricklayer or cashier.

The term "role" needs to be understood and defined in terms of both expectations and performance. *Expectations* can be categorized as (1) the expectations of observers and as (2) the conceptions of the player. *Performance* also has two definitions: (1) enactment of the role as shown by satisfaction and satisfactoriness, and (2) shaping of the role, as both it and the expectations of others are redefined by the actor better to suit the developing conception of the role. It is in *role shaping,* as well as in the *choice* of positions and roles, that the individual acts as the synthesizer of personal and situational role determinants.

Some roles change their more specific behavioral definitions with increasing age. That of child, for example, is defined quite differently at ages 1, 9, and 17, and even more differently when the son or daughter is the 50-year-old child of an 80-year-old parent. At this last stage some role expectations are reversed, for the child is expected to help take care of the parent, although the parent is still expected to provide for the child by leaving a fair bequest.

Similarly, the specific position which defines the role may change. Thus the worker role changes when the individual changes jobs, and especially when the individual changes occupations, as may be done more than once in the course of a lifetime (so-called "serial" careers, more accurately called *multioccupational careers).* Manual workers without special qualifications typically change positions and occupations a number of times during their working lives, for it is in the nature of such work that workers are easily released when work is slack and easily hired when needed. Seasonal work in resort areas, for example, may mean changing jobs and location to work in the same occupation (e.g., porter), or changing job and occupation but not location in order to avoid moving (e.g., porter to factory worker). A worker may even occupy two worker positions, working during the day as a schoolteacher and during the evening as a bartender; in career terms, these positions are held simultaneously (on the same

day and during the same week), even though at different times during the day (with important differences in role expectations at any given hour but not from week to week).

It is because of these sequences and simultaneities that it is incorrect to use the terms *occupation* and *career* as synonyms. A career is a sequence of positions held during the course of a lifetime, some of them simultaneously (Super et al., 1957); an occupational career is the sequence or combination of occupational positions held during the course of a lifetime. The root word *carrus* means a cart or chariot, whence came the word *via cararia* or road, whence in turn *carriére* and *career*.

Earlier Performance and Later Positions and Roles

The nonoccupational positions occupied before the adult career begins influence both the adult positions which may be occupied and the way in which their role expectations are met. Thus the amount and type of schooling is one determinant of occupation entered, and the first occupational position, both its type and job performance, is one determinant of later occupational positions open to the individual. Later, the last full-time job held for any significant length of time, which may or may not be qualifiable as a "regular adult occupation," is one major determinant of life-style in retirement, for it influences retirement income, activities, and friendships. The quality of the occupational role performance has similar effects.

The more adequately, in self-perception and in that of others, the adolescent plays preoccupational roles, especially those of student and of part-time worker, the more likely are success and satisfaction in occupational roles. That this is true is shown in the Career Pattern Study (Super, Kowalksi, & Gotkin, 1967; Jordaan & Super, 1974) by substantial correlations between school grades, extracurricular activities, and participation in out-of-school activities such as scouts and church groups while in school, on the one hand, and both occupational and career success and satisfaction at ages 25 and 36 of the other. Correlations do not prove causation, but when antecedents correlate with consequents as hypothesized, e.g., in path analyses (Blau & Duncan, 1967; Card, Goodstadt, Gross, & Shanner, 1975) the combination of logic and data is compelling (Chapin, 1947). Havighurst (1953, 1964) had hypothesized that coping with the developmental tasks of one life stage is basic to (but, as the research cited above shows, not perfectly correlated with) coping with those of the next life stage. That the correlation between vocational development at age 18 and success and satisfaction at age 36 is lower than that for age 25 fits this hypothesis, for the closer the task coped with in the past is to the task being coped with in the present, the fewer intervening variables there are which have the opportunity to attenuate the effect of the former.

The same real although imperfect relationship appears to exist between vocational success and satisfaction in the preretirement years and satisfaction with one's life in retirement. Steer (1970) showed, in a retrospective study bolstered by cross-sectional data from a preretirement sample, that the retired teachers and principals who were best satisfied with their retirement activities tended to be those who were carrying on activities, vocational and avocational, in which they had engaged with satisfaction during their later working years.

Role Conflict, Balance, and Extension

It might be hypothesized that playing a number of roles simultaneously (i.e., during the same life stage) would result in role conflict, commitment to one role making it difficult to do justice to another. There are, indeed, a number of studies which support this hypothesis (Super, 1957). Similarly, it might be hypothesized that playing several differing roles might be associated with greater satisfaction than is playing several similar roles, the balancing of one kind of activity with another (e.g., sedentary with physical) being good mental health. But this has not been found to be the case in the few empirical tests of the hypothesis (Parker, 1971; Super, 1940), for the most satisfied men were those who pursued, in their leisure time, activities essentially similar to those in which they engaged in their work, thus finding diverse outlets for their abilities and interests. And finally it might be hypothesized that the greater the number of simultaneous roles played by the individual at any one life stage, the richer and more satisfying would be the life-style and the greater the likelihood of playing later roles successfully and with satisfaction.

The number of hours in a day, the number of days in a month and in a year, the nature and variety of the individual's abilities and interests, and the emotional stability of both principal and partners, obviously set limits to the degree to which the simultaneous and sequential proliferation of roles produces role conflict or results in self-actualization and satisfaction. Hypotheses such as the three just suggested are therefore no doubt simplistic, and they may not be mutually exclusive. They need to be refined in order to be likely to find empirical support. A more valid hypothesis might be that, the more a person's abilities and interests find ready and temporally compatible outlets in the full range of the activities engaged in, the more successful and satisfied that person will be.

The fact that, willy nilly, people play several roles simultaneously (during the same day, month, and life stage), in several theaters, means that occupation, family, community, and leisure roles have impact on each other. Success in one facilitates success in others, and difficulties in one role are likely to lead to difficulties in another, although success bought at too high a price may cause failure in another. The theraputic effects of success are well illustrated in the case of John Stasko (Super,

1957), whose marriage to a better-educated woman aggravated his feelings of inferiority, and whose successful coping with his occupational problems (facilitated by therapeutically oriented vocational counselling) led to better personal and familial adjustment and to better health.

LIFE SPACE, LIFE-STYLES, LIFE CYCLES, AND CAREER PATTERNS

The simultaneous combination of life roles constitutes the *life-style;* their sequential combination structures the *life space* and constitutes the *life cycle.* The total structure is the *career pattern.* Roles wax and wane in importance and in the quality of performance, theaters are entered and deserted. How this is done is a result of the interaction of personal and of situational variables. Work roles structure life and give it meaning (Friedman & Havighurst, 1954; O'Toole et al., 1973; Roe, 1956; Super, 1957). They help to establish a regulating daily, weekly, and annual schedule, they provide associates and social life, they tend to supply social solidarity and support, and they often (and often fail to) contain content which is interesting in its own right. The same characteristics are found in certain other theaters such as the home and in the role expectations associated with occupying positions in them. Thus homemaking women are generally expected to organize a schedule of shopping, meals, house cleaning, and laundry activities. To a lesser extent this may be said of community roles and of role expectations in other theaters which people enter. Thus trade union leaders are often expected to play a part in community politics, and business leaders are expected to be leaders of community fund-raising drives.

The Life Cycle and Career Patterns: The Waxing and Waning of Roles

It has already been noted that roles increase and decrease in importance with the life stage in which a person finds himself, according to the developmental tasks which are encountered with increasing age. Importance can be operationally defined in terms of *time* and in terms of *emotion.*

Temporal importance is a function of the amount of time that playing a role requires or makes desirable, both formally and informally. In the case of a pupil and student the informal demands are slight in the early years of schooling, considerably greater during the final years. The role of worker does not normally become temporally demanding until after leaving school, although a youth who engages in part-time work may find that his daily and weekly schedules are full as a result of playing two roles, the primary role of pupil or student and the secondary, essentially instrumental, role of worker. The first full-time job may not make demands on free time until the young worker develops the occupational motivation that sometimes comes with increased age, family responsibilities, and recogni-

tion of the fact that taking work home or taking part-time courses can be rewarding materially and, in some fields, psychologically.

Figure 1 is a revision of the original Career Rainbow (Super, 1976). It portrays nine major life-career roles graphically, in the case of a person who finished college at the age of 22 and went at once to work.

The fluctuating temporal importance of each role is shown by schematic changes in the width of the shading of the corresponding arc or band. Thus the band representing the child role continues when the band representing the student role appears in the life-career diagram, but is narrower than in the preschool years. During the school years the three roles of child, student, and leisurite take up the whole of the then-utilized life space. As the individual matures, all of this life space is filled. When the individual starts to work, this new role reduces the amount of the life space available to one or more of the other roles, generally that of student.

If, after working full time for a few years, the young adult began to work overtime (whether at the workplace or at home) the band representing the worker role would expand again, normally at the expense of the leisure role. The work role suffers in the case in Fig. 1, when the individual takes on domestic responsibilities with the roles of spouse, homemaker, and parent. It is only as one or more of these becomes less time consuming, as when children leave home, that the remaining roles can again take up more time. This is why, for example, hobbies tend to be the pursuits of

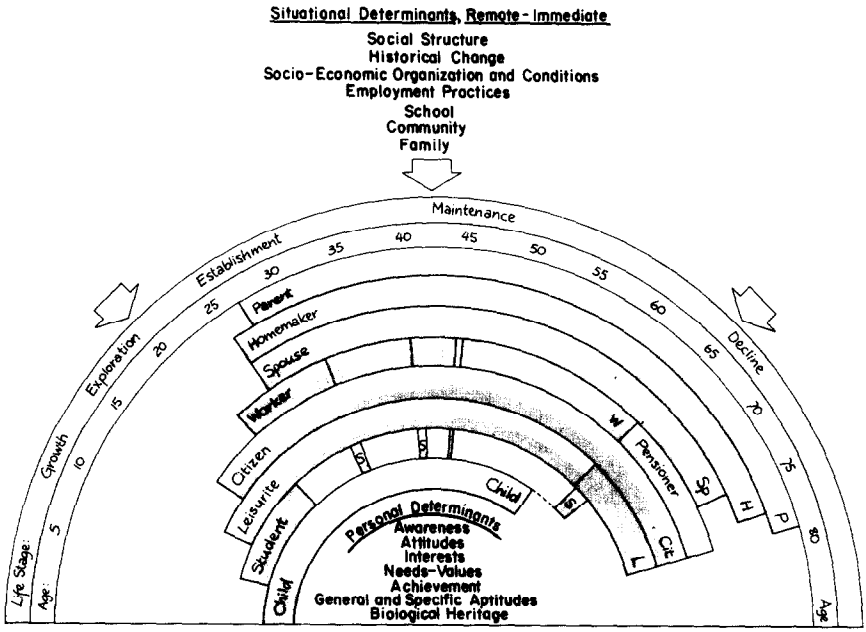

FIG. 1. The Life-Career Rainbow: Nine life roles in schematic life space.

very young, middle-aged, and older people, or if they are pursued by younger men and women it is at the expense of time as parents and homemakers. (Ideally, the arcs or role bands occupied would occupy all of the space in the life-career diagram, but it is difficult to draw them to achieve that effect, hence the blank areas left in the life space in Fig. 1).

Emotional involvement in a role also varies with life stage. A pupil may, for example, be lukewarm about his or her studies until something, perhaps the experience of examination success or the stimulus of a skilled teacher, arouses interest in a subject and perhaps in general school achievement. The familiar role may then take on new meaning and new importance, with or without more time being devoted to it. Similar changes in the degree of psychological involvement take place in the marital, parental, worker, and other roles. The role of worker may be very important emotionally to the young person beginning management training in a major company, and become still more important when he or she is given a regular assignment. It may lose its challenge and emotional importance if, after a number of years, the middle-aged middle-management person finds that aspirations to advance to top management are not likely to be realized (not illustrated in Fig. 1).

If Fig. 1 were in color, emotional involvement could be shown graphically by the depth of color of a role band. Thus, for example, if green represented the child role, a dark green might depict the dependency of early childhood and the role conflict of adolescence, and a paler green the years of emotional independence of the parents. When, later in life, the adult becomes emotionally involved in helping his parents with problems of ageing, the pale green would temporarily become darker again. The role of worker, depicted perhaps in blue, might in the case of an alienated assembly-line worker remain a constant light blue, while the role of committed barrister might be a fairly dark blue to begin with, become still darker for a significant period at the peak of the career, and become slowly lighter until retirement. In Fig. 1 no such refined portrayal is attempted, for reasons of economy.

It is the number and types of roles, and the stability of the width and depth of these roles, that constitute and portray a *life-style*. The subject depicted in Fig. 1 had a fairly common life-style in which the student and worker roles dominated the late teens and twenties with domestic roles added in the mid-twenties, and in which the worker role was somewhat diminished when marriage brought expectations in the roles of spouse, homemaker, and parent. The figure gives a clear picture of where and how this person has invested time, energy, and self.

DECISION POINTS

In addition to the maxicycle of the life stages, shown by the uppermost row in Fig. 2, and the career roles shown by the horizontal bands, this

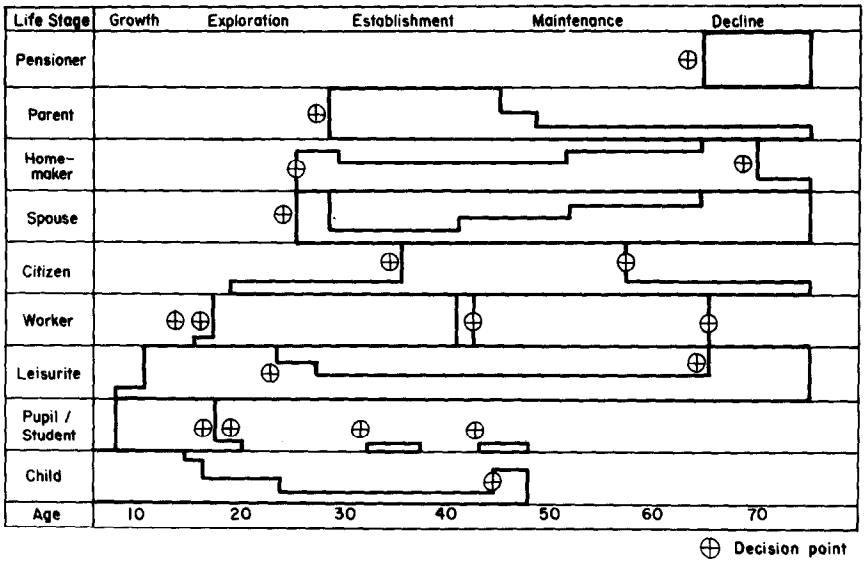

FIG. 2. Major roles in a life career.

figure shows decision points, in the career of a youth who dropped out of school at age 16, as circles on the bands. Changes in bandwidth signal encounters with situational and personal determinants are discussed later in this paper.

Decision points occur before and at the time of taking on a new role, of giving up an old role, and of making significant changes in the nature of an existing role. These are illustrated by the decision to enter a school, college, or university when there is some freedom of choice of age of entry and type of school; by decisions concerning the use of leisure while a pupil or student; by decisions to enter or not to enter the labor market, to apply for and accept or decline a particular job, to work part time and return to full-time job training for updating or for another occupation; and by decisions as to whether, when, how, and where to retire.

The decision points concerning some roles are sometimes closely tied to those of certain other roles, sometimes only somewhat related, and at other times independent of these other roles. Decisions about getting married and about working are often related, but sometimes unrelated; decisions about homemaking are often related to decisions about work. For example, the decision to accept a transfer, promotion, or new job offer may involve moving the household and with this moving may come additional responsibilities connected with settling into the new home and helping a spouse and children with transition problems.

The graphic representation of decision points for a pupil and student is easily handled, for school systems are like decision trees in their branch-

ing points, at which course and institutional decisions must be made (Super, 1976). These are age related and are fairly standard within a culture or society.

The graphic representation of decision points outside of the educational system or theater is much more difficult except on an individual basis, since these points vary with socioeconomic status, educational attainments, occupational level, and even occupation, job, and employing organization. They depend upon the occupational achievement of the individual, for in the case of manual workers without special training the decisions are largely those of what kind of manual job to seek among a situationally restricted list and where to seek it, while for executives the decision points depend largely upon how well they have done their latest assignments and what kinds of vacancies open up (or fail to open up) as a result.

The decision points encountered by a hypothetical subject during the course of this person's educational (student), occupational (worker), and other careers are shown in Fig. 2. The circle at the end of the pupil role and at the point of entry into the worker role, that at the age of 42 when retraining for a related occupation was considered and chosen, and that at the time of retirement, all show the periods of anticipation, planning, action, and adaptation at each major student and worker career decision point in the life career of this individual.

Although Fig. 2 shows where the subject's occupational career decision points occurred, the cyclical decision steps or phases are not shown. Figure 3 does this. The major types of career behaviors are observable in miniature in the decision-making process. Growth at age 42 may consist, for example, of recognizing a decision question: the need for more training. Exploration may consist of seeking new data to understand an approaching or actual new status such as that of raw recruit in the new field. Establishment during the recycling process means pursuing an action plan to make a place for oneself in a new job. Maintenance then is holding one's own in the transfer or new job, and decline may consist of being unable to meet job requirements and therefore of facing new decisions concerning tapering off prior to retirement and actually retiring.

The graphic representation of decision points and of decision making has been handled in a number of different ways by those working on models of occupational choice and of career development. Thus Blau et al. (1956) considered personal and situational determinants, from basic biological and historical to immediate educational and labor-market variables, and suggested a formula for individual and employer decisions, but did not consider the actual decision-making processes of either the individual or the employer at the time of the personal–situational encounter. Miller and Form (1951), Ginzberg et al. (1951), and Roberts (1977) have argued that situations make decisions for people; Paterson

and Darley (1936) and Williamson (1950) have assumed that individuals weigh evidence in some rational but undefined manner; and Bordin et al. (1963) take the position that emotions sway people in ways unknown to the deciders. Kitson (1925) was an exception among his contemporaries in putting an emphasis on the importance of occupational exploration in the learning of career decision-making methods as well as the acquisition of a fund of information. More recently, research and development people such as Hilton (1962), Gelatt (1962), and Jepsen and Dilley (1974) have drawn on problem-solving theory and developed models of career decision making, paving the way for the revival of interest in these processes which has characterized the career education movement.

Fitting a career decision-making model into a life-stage model is difficult. Blau and others led up to decision making in their model but skirted the problem. Super (1953) called attention to the need to understand the process, but incorporated decision-making processes into his life-stage model only through the recognition of exploration and of mini- and maxidecisions. Gelatt and Hilton both focussed on specific decisions, but did not show how their models fit into sequential, career, decisions. The cycling and recycling model shown in Fig. 3 is a prescriptive, developmental model of rational, emergent career decision making such as might be the result of effective career education in a well-adjusted, well-situated, individual.

At the bottom of Fig. 3 appears a career decision point, a branching point or adjustment need at any place on the educational or the occupational career path or career decision tree. The individual pursuing a career begins the cycle by becoming aware of an impending career decision (growth); he or she formulates the question, reviews premises, identifies facts needed to round out an understanding of the situation, seeks these data, evaluates and weighs the old and new data, identifies alternative lines of action, and considers their various possible outcomes and their respective probabilities (exploration); he or she then weighs the alternatives in terms of values and objectives, selects the preferred plan of action, stores the alternatives for possible future reference, and pursues the plan on either an exploratory basis or with a more definite but still tentative commitment (establishment). In either case there ensues more data collection through the evaluation of outcomes, with modifications of plans, maintenance, or decline, with recycling as shown by the lines which return toward the bottom of the figure.

What such a model does not bring out is the fact that the time intervals at any one step may vary greatly. For example, an individual may pursue an exploratory plan for 4 years as a student in secondary school, for 3 years at a university, and then for 3 more years in industry. Another may explore for 1 year and in 1 month evaluate exploratory outcomes, recycle to consider old and new data, weigh alternatives, and select a preferred

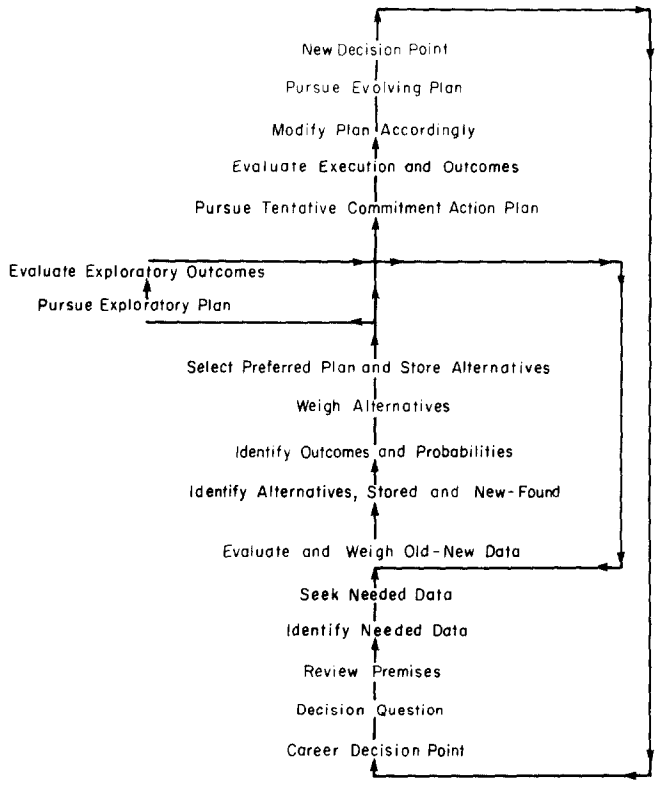

FIG. 3. A developmental model of emergent career decision making.

plan, pursuing it then with tentative and increasing commitment which soon becomes definitive. The vertical lines in this diagram are flexible and their lengths vary greatly from one decision cycle to another.

This model of career decision making is like a small part, like a switch or circuit breaker with connecting cables, which can be used in many places in a larger, complex machine. In this case, most of the part (growth to establishment) is to be inserted at each branching point as shown by the circles in the bands in Fig. 2, with the connecting cables of maintenance and decline leading to the next decision point. Including the detailed decision models in Fig. 2 is impractical, but it is possible to visualize these details inserted into each of the circles indicating decision points.

Determinants

The decision points of a life career reflect encounters with a variety of *personal* and *situational* determinants. The former consist of the genetic constitution of the individual modified by his or her experiences (the environment and its situational determinants) in the womb, the home, and

the community. The latter are the geographic, historic, social, and economic conditions in which the individual functions from infancy through adulthood and old age.

The major personal and situational determinants of occupational careers are shown in Figs. 1 and 4 to illustrate the bearing of these determinants on any and all decision points. In Fig. 1 the lines under the legend "Determinants," and the three arrows, indicate that these determinants affect *preferences, choices, entry* into the labor force and assumption of the worker role, and role *changes*. In Fig. 4 the continuing effects of both personal and situational determinants are also shown by continuous lines and repeated arrows. Similar conceptualizations of *role performance*, both enactment and shaping, are clearly possible.

It would require another pair of papers or even a whole book to treat each of these sets of situational and personal determinants adequately. It is the objective of this paper neither to justify the list nor to describe the interactions of these variables, although it is important to note that each category of situational determinant has impact on and modifies each set of personal characteristics or determinants as shown in Fig. 4. (The use of the term "determinant" may cause some to raise the issue of determinism, but it is possible to consider influences as influences: Calling an influence or a characteristic a determinant does not make the argument deterministic.)

Combining these categories and lists of personal and situational vari-

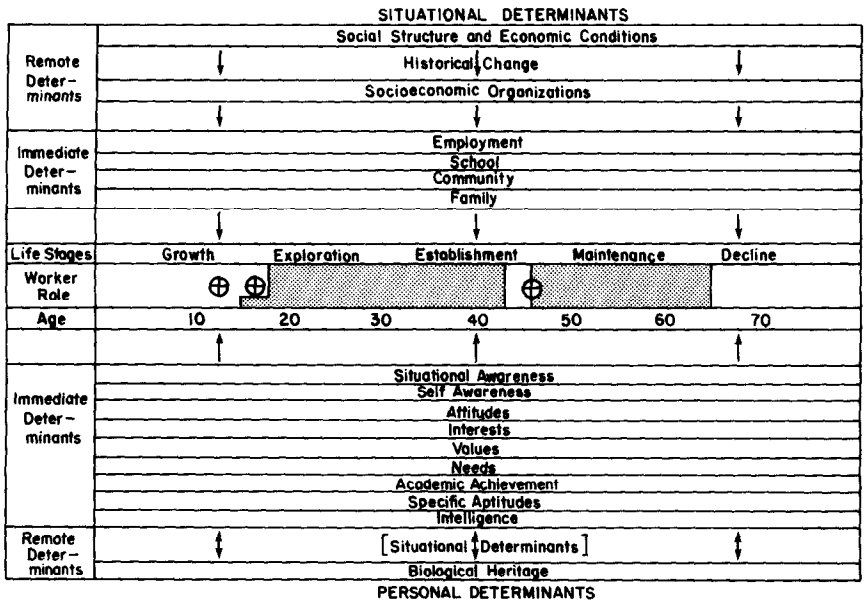

FIG. 4. Personal and situational determinants of the worker rule.

ables in one comprehensive model of career development, especially a graphic model, is not easy. But the individual pursuing the career (the person shown in Fig. 1 or 2) may be viewed as being at the center of the scene, as in Fig. 4, with the situation around lifting him up or pressing down upon him. Below the individual and sustaining his individuality, driving him up or holding him down, is his biological heritage, the basic core of his personality, which, interacting with situational determinants, produces his intelligence, specific aptitudes, self-knowledge (or awareness), educational and occupational information (or situational awareness), academic achievement, and other cognitive traits. These vectors of personality are shown graphically as bands in the life-career diagram of Fig. 4, together with the conative and affective determinants, needs, values, interests, and attitudes.

The final product of this exercise in conceptualization and representation would include decision points (Figs. 2 and 4) and many small decision models (Fig. 3) in Figs. 1, 2, and 4 to combine the life stages, the various roles, decision points and decision processes, personal determinants, and situational determinants, all in one diagram. No one of the diagrams used, like most models with many complex components, can portray all details as accurately as is to be desired. They need some verbal description to supplement them. But it is believed that this combination of graphic and verbal presentation is clearer than either would be by itself.

APPLICATIONS

The Life-Career Rainbow has two major uses:

1. Teaching the concept of Life-Career, including the notions of life stages, life space, and life-style, helping students and adults to see the interactive nature of the variety of roles constituting a career, and showing how self-actualization can be achieved in varying combinations of life roles;

2. A counseling aid with older adolescents and with adults, to help them to: (a) Analyze their own careers to date; and to (b) Project them into the future, both as they have been developing and as they might, with planning, develop.

The first type of application has been made in the Guided Career Exploration Program (Super and Bowlsbey, 1979), a field-tested career education course designed for secondary school use. The second type of application has been tried with adult groups in Leeds, Newcastle-upon-Tyne, and Vancouver with resulting insights into career development in general and into their own careers in particular. In these exercises "blank" Life-Career Rainbows have been provided so that each person may do his own plotting by showing when each role was begun and how the playing of those changed in its temporal demands. The same kind of filling in of blank arcs can be done in projecting the future.

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