Self-with-Other Representations and a Taxonomy of Motives: Two Approaches to Studying Persons

Daniel M. Ogilvie and Kristin M. Rose
Rutgers University

ABSTRACT This article discusses two approaches to studying persons. Part 1 describes data gathering procedures that lead to an integrated visual display of particular self-representations of an individual in various spheres of life. "Self-with-other representation" is introduced as a central unit of analysis in this research. This concept is integrated into a method that is exemplified in this article by a description of how life can be injected into static trait characterizations of a person. In the context of a case study, it is shown that the method provides information about how traits are organized in terms of self-with-other working models and the conditions under which a particular working model is likely to prevail. Part 2 presents a new taxonomy of motives. This taxonomy is a product of having dipped into the area of operant conditioning and reformulating behavioral consequences into motivational causes. This intrusion into reinforcement theory has resulted in a two-dimensional classification system (referred to as PACK) that accounts for motives to keep or acquire positive experiences, and to cure or prevent negative experiences. After the taxonomy is described, it is used to organize motivational concepts in the area of goal-directed behaviors, and it is applied to purpose statements of individuals in different age groups.

The goals of this article are twofold: (a) to describe a system for gathering and recovering information about individuals' constructions of self...
in a variety of domains of life experience, and (b) to describe a taxonomy that we have found to be useful in studying motivations behind personal projects. Rather than describing our work in abstract terms, we discuss both developments in the context of a fabricated case study that is designed to highlight the major observations that we wish to make. A fully made-up case study is a vehicle of blatant convenience for this discourse. The story that we tell, however, comprises topics, issues, and themes that are commonly encountered and sufficiently "real" to provide a note of credibility to this venture. Our "as if" approach enables us to touch upon many true-to-life issues, several of which would not arise in a discussion that focused exclusively on any specific person who has been studied using the methods that are described.

Lynn

"Lynn" is the central figure in the opening portion of McAdams's (this issue) discussion of the value and limitations of trait descriptions in personality research. McAdams observes that traits play a particularly prominent role in the "psychology of the stranger" by providing information about the "dispositional signature" of an individual. He elaborates on this observation by reporting how he and his wife pieced together Lynn's signature as they were driving home after a dinner party at which Lynn had left her mark. Some of the information picked up about Lynn during the course of the evening included the following. She was a free-lance writer brimming with captivating stories about her worldly travels. She appeared to enjoy the limelight as she moved swiftly from one exotic tale to another. Many of her stories during the meal involved her recent experiences in Mexico where she had been conducting research for an article that was to appear in a national magazine. It was surmised that Lynn was about 40 years old and it was agreed that she was "strikingly attractive." The appealing mix of flamboyant clothes she wore contributed to the attention she received. Her careful selection of clothes, however, did not carry over to her choice of health behaviors, as she acknowledged a fondness for junk food and a distaste for exercise.

These items of information were compiled by consensus between McAdams (henceforth, Dan) and his wife (henceforth, Rebecca) in their car during their drive back home. However, each of them had interacted with Lynn at various times in the absence of the other or had different vantage points for observing her mannerisms and listening to her
comments. Thus, within the context of overall agreement, somewhat different impressions of the “stranger” were formed. For example, Dan was seated next to Lynn at supper and observed that she rarely made eye contact with her husband, who was seated at the opposite side of the table. Indeed, she evidenced some bitterness toward her mate as she made a few sarcastic remarks about a story he was relating. It was also discovered that Lynn was in her second marriage and that her two teenaged children from her first marriage were living with their father. Finally, Dan noticed that Lynn’s wine glass was replenished much more frequently than his.

Rebecca had an opportunity to witness a different “side” of Lynn when she interacted with her privately during a lengthy conversation on the patio. There, Lynn revealed aspects of herself that were less performance-oriented, more intimate, and demonstrated a degree of touching uncertainty about herself. Lynn described some memories of her life at home as a child. Her discussion of her parents led to conversation about how much she envied people who believe in something strongly, people who are passionate about at least one thing in their lives. She wished that she possessed this quality. This conversation resulted in Rebecca creating a more compassionate image of Lynn than she had formed at the supper table. Finally, near the end of the evening, Rebecca saw Lynn slip out of her refined demeanor and tell an off-color joke in a tough, “street-smart” dialect.

The above information comprised the raw data from which Lynn’s traits were discerned. In this instance, McAdams reports that two observers (he and his wife) arrived at a consensus regarding Lynn’s most prominent attributes. Social dominance led the list. He then gives an account of the various ways this kind of agreement could be verified, including the administration of standardized trait-measuring instruments to Lynn herself. If the results of the “drive home” exercise in person perception converged nicely with the results of rigorous measurement of Lynn’s self-perceptions, a considerable amount of “what is” information about Lynn would be known. We would know, for example, her scores on the Big Five trait clusters and take comfort in the knowledge that Lynn’s essential characteristics had been captured. McAdams speculates that the administration of a comprehensive self-report questionnaire would show Lynn to be high on Extraversion, moderately high on Neuroticism, high on Openness to Experience, medium on Agreeableness, and low on Conscientiousness.

There are, of course, many things we would not know about Lynn
were she to be objectified in this manner. For example, one of the problems with stopping at trait descriptions is that they are derived from the assumption that a person is a single entity that can be brought to mind and described. It is a unit that stands before us as a noun to which numerous adjectives are applied. This results in a static picture of the individual, a decontextualized statue permanently fixed by stable traits. A great deal of work has gone into determining the psychometric properties of trait clusters and the results of are undeniable value in describing persons, but trait descriptions alone fall short of providing personologists with a wide range of information that is necessary for arriving at a more comprehensive understanding of personality processes. In short, advocates of trait psychology rarely address the issue of what people do with their traits once they've got them. In the present instance, knowing Lynn's location on various trait dimensions provides no information about her present-day personal concerns, the tasks or personal projects that she has undertaken, the quality of her relationships and her styles of engaging in them, her coping strategies, how she perceives herself in a multifaceted interpersonal world, and a host of other matters that are among the most inviting and challenging areas of concern among personologists.

In beginning to address some of these issues, we pose the following questions. Does Lynn exhibit her high Extraversion qualities across many situations or is she dramatic and socially dominant only on certain occasions? Are Lynn's "mildly neurotic" qualities generalized or do they become manifest only under specific conditions? Does she experience negative emotions and become moody and erratic with some people or is she "moderately" that way most of the time? How are we to interpret Lynn's "medium" score on Agreeableness? Does it reflect an average across situations wherein she is sometimes quite warm, open, and intimate and other times cold and rejecting, or can we count on her to exhibit an average amount of warmth most of the time? In fact, we already have some information about Lynn that pertains to some of these questions. That is, Dan was struck by her social dominance. At the dinner table she was all extraversion. However, Rebecca experienced Lynn's agreeable qualities during a prolonged discussion of childhood memories on the patio. This implies that different situations bring out different aspects of Lynn. You, the reader, can verify this idea by noting that although you possess a quality of sameness across situations, you present yourself somewhat differently when you are with
different people in your life and when you perform different role-related functions.

The following section of our two-part discussion describes a strategy that has been designed to represent the structure of individuals’ self-perceptions within and across various spheres of their lives. Whereas the method can be adapted to address numerous research questions, particular emphasis is placed here on the manner in which the system can be used to breathe life into static scores on trait dimensions. We deem this approach to be a good beginning to the complicated task of seeing the world from the eyes of the beholder. Along the way, we seek to understand the fluid qualities of traits as individuals reflect upon and make judgments about their subjective experiences.

**Part 1: A Self-with-Other Perspective on Traits**

We begin this section by inviting readers to engage in this simple exercise. Write down the names of three individuals who are prominent in your life. Include someone with whom you are or have been intimate, someone who is or has been a “pain,” and someone at work or in your profession that you know personally and admire a great deal. These people will constitute your list of **targets**. Select one of these individuals and recall a specific interactive episode you have had with that person. Create a vivid mental representation of the episode and describe what aspects of you were expressed or experienced in the scene. Record the words and phrases that characterize the traits that were “activated” by the other, what you felt, and other qualities of self that were evoked during the episode. After you have described yourself in that situation, go to the second name on your list and record additional self-descriptive terms that characterize how you were and/or how you felt in a recalled “me-with” episode with that person. Do the same with the third individual. At the end of this exercise, you will have the beginnings of a comprehensive list of self-descriptive words that henceforth will be referred to as **features**.

This brief exercise is an introduction to a much larger task undertaken by Lynn, who, let us now suppose, has volunteered to participate in a study of self-perception. Following procedures that have been used in studying the “actual” lives of nearly 100 individuals over the course of several years, Lynn’s first task was to create a list of 25 or so “important people” in her life. Her instructions were to include individuals
who stood out in her mind as having played significant roles in her de-
velopment (for better or worse), as well as individuals with whom she
was currently engaged in her daily life. She was also asked to create
two smaller lists. In one she named her primary roles, and in the other
she gave brief descriptions of “projects” that she was working on or
that were on her mind. These three lists constituted her targets.

Lynn was given a few days to think about which targets to include.
She then participated in an interview wherein her list of important
others was reviewed for the purpose of assisting her in developing a
reasonably thorough list of self-descriptive features. This was accom-
plished by asking her to envision herself with specific people (as the
reader was invited to do above) and describing herself in specific “self-
with-other” episodes. When Lynn began to repeat already mentioned
features, she was asked to describe herself at her “best” and at her
“worst” in order to assure that an adequate range of self-descriptive
terms were recorded.

At the end of the interview she was asked to name two or three
people whom she had recently met, a few “strangers” with whom she
had had at least some interaction. To our good fortune, she recalled
being a guest at a dinner party where she met a married couple, Dan
and Rebecca. Dan had been seated next to her during the meal and had
asked her a few questions about her work. Rebecca had engaged her
in a conversation on the patio where they exchanged some childhood
stories.

Figure 1 contains the targets and features that Lynn generated during
her first session. These items are representative of the kinds of targets
and features commonly generated by individuals who have participated
in this research. The features list consisted solely of terms that Lynn
used to describe herself. (Had we been interested in how Lynn per-
ceived herself on items of our choice, we could have interspersed these
among her own.) Most of Lynn’s targets were self-generated as well.
Only three were provided for her. These were “me at my best,” “me
at my worst,” and “me as I usually am.” All of the remaining target
items consisted of “important people” in Lynn’s life (supplemented by
two strangers), her roles, and her present-day personal projects.

Prior to Lynn’s next appointment, all of her targets and features were
entered into a computerized data gathering system. The system was
programmed so that a target would appear on the screen with a fea-
ture shown beneath it. The target remained constant on the monitor as
each feature was replaced by another feature after a rating judgment
Important People
Mom
Dad
Son
Daughter
Former Husband
Present Husband
Part-Time Assistant
Past Close Friend
College Roommate
"Cosmo" Editor
High School Teacher
Former Co-Author
Travel Agent
Landlord
Sister
Brother
Neighbor
Mexican Informant
Mexican Bureaucrat
Great Aunt
Dan
Rebecca
Roles/Identities
Wife (Present)
Wife (Past)
Researcher
Writer
Traveler
Prize-Winning Author
Personal Projects
Get in shape
Complete present writing project
Make arrangements to see my children
Begin research for new writing project
Preserve past publications in a single bound volume
TARGETS
Mom
Dad
Son
Daughter
Former Husband
Present Husband
Part-Time Assistant
Past Close Friend
College Roommate
"Cosmo" Editor
High School Teacher
Former Co-Author
Travel Agent
Landlord
Sister
Brother
Neighbor
Mexican Informant
Mexican Bureaucrat
Great Aunt
Dan
Rebecca
Features
outgoing
on edge
controlling
dominating
awkward
intimidated
attractive
flamboyant
dramatic
competent
committed
passionate
intimate
showy
brash
sarcasmic
conservative
assertive
moody
defensive
drink a lot
feminine
masculine
open
friendly
warm
distant
nervous
smart
unsure of self
agreeable
loud
entertaining
optimistic
annoyed
introspective
guilty
serious
rejected
pessimistic
FEATURES
committed
passionate
intimate
showy
brash
sarcasmic
conservative
assertive
moody
defensive
drink a lot
feminine
masculine
open
friendly
warm
distant
nervous
smart
unsure of self
agreeable
loud
entertaining
optimistic
annoyed
introspective
guilty
serious
rejected
pessimistic
fully
confused
clear-thinking
aloof
careful
competitive
disappointed
pessimistic

Figure 1
"Lynn’s" Targets and Features

was made. When the target was a person’s name, Lynn was trained to create a mental image of an episode with that person and decide if the feature presented beneath it characterized her in that mental representation. For example, one of the targets was the name of her husband and the first feature was “annoyed.” If she envisioned herself to be “annoyed” in the me-with-husband episode she held in mind, she would enter a “1.” If “annoyed” did not apply to her in that scene, she would enter a “0.” Immediately after that judgment was recorded, another feature (e.g., “entertaining”) replaced “annoyed.” Lynn would again consult her mental representation of the me-with-husband episode she had selected and decide if she perceived herself as “entertaining” in the scene. After me-with-husband was assessed on all features, a beep alerted Lynn that her husband’s name had been replaced by a different target. When the new target was a role, a personal project, or “me at my best,” “me at my worst,” or “me as I usually am,” she shifted from a “me-with” perspective and rated the target directly. That is,
when "writer" (one of her self-generated roles) came up, she brought to mind an image of herself as "writer" and determined which features characterized her in that role and which did not. Likewise, when one of her projects appeared, she envisioned herself engaged in it and assessed herself vis-à-vis each feature.

Lynn completed the task of rating 37 targets using 47 features in 70 minutes. This entailed making 1,739 separate rating judgments and the amount of time taken is about average for a matrix of that size.

After Lynn completed her final rating ("me-with-college roommate" on feature "showy"), the resulting 37 (targets) by 47 (features) matrix consisting of "0's" and "1's" was automatically transferred to a computerized algorithm labeled HICLAS (for Hierarchical CLASses). HICLAS was developed by De Boeck and Rosenberg (1988) as a method for recovering the underlying structure of binary matrices that has certain advantages over other clustering techniques. Although it resembles Boolean factor analysis and additive clustering methods, it parts company with most alternative models in that it postulates an order relation among targets and among features, using a set-theoretical framework. Instead of requiring the initial computation of proximity measures (as is true of most other clustering models), HICLAS accepts the raw binary matrix itself and renders a graphic representation of target groupings and feature groupings, the hierarchical arrangements of both, and simultaneously describes the links and associations among target and feature groupings.

These capacities make HICLAS well suited to an endeavor to discern what aspects of self are evoked by different cues according to the subjective experiences of the actor. When applied to self-with-other ratings, HICLAS identifies which "others" (targets) are grouped by virtue of equivalent and disjunctive ratings, and, when there are partial overlaps among groups, HICLAS renders the hierarchical structure of the overlapping configuration. In this manner, one can know which people evoke in-common aspects of self. Although that alone would be informative, HICLAS also computes the hierarchical structure of features and links it with the structure of targets. The resulting representation provides information about which feature groupings are associated with target groupings and vice versa.
The Structure of Lynn's Representations of Self

The first author abandoned all reservations and violated major rules governing this kind of research by performing the computer-assisted rating exercise "as if" he were Lynn. Never before (and never again) has the strategy of making up ratings for someone else been used in this work. It is acceptable for this presentation only in that it provides a convenient vehicle for summarizing observations and results reported in much greater detail elsewhere (Ashmore & Ogilvie, 1992; Ogilvie, 1994; Ogilvie & Ashmore, 1991).

A primer for reading HICLAS displays. A visual representation of the HICLAS solution to Lynn's rating matrix is contained in Figure 2. The top half of the figure displays the structure of target groupings and the bottom half represents how groups of features are organized. The squiggly lines indicate links of association across the line that divides targets from features. Each group of targets and features is called a class. Target classes are labeled with capitalized "A's," "B's," and "C's," and corresponding feature classes are identified by lowercase "a's," "b's" and "c's." There are seven target classes and seven feature classes. The three target and three feature classes closest to the dividing line (i.e., Level 1 in the figure) are called bottom classes. These classes define the base of the two hierarchies. The hierarchy of targets is right-side up and the hierarchy of features is displayed upside down. Classes located in Levels 2 and 3 are superset classes in that they are partly described by elements that are also descriptive of the classes to which they are linked. For example, Target Class-A-B contains one item, "actual self." A-B is a higher order class that is linked with Target Classes A and B. This means that Lynn rated her actual self ("me as I usually am") in a manner that overlapped with her ratings of many items in Target Class-A and in Target Class-B. The same logic applies to feature classes. Note that Feature Class-a-b-c, located at the bottom of the figure, contains "smart." This means that Lynn entered a "1" for "smart" in nearly all of her ratings, making it a strong candidate for one of her "cardinal" traits. What she stated, in effect, is that "no matter what I am doing or who I am with, I am smart." The number next to "smart" in parentheses is .842. Indeed, every item in the structure has a number attached to it. This number describes that item's "goodness of fit" in its class. Had Lynn entered a "1" every time that "smart" appeared on the screen, the parenthetical number would have been 1.000.
Figure 2
HICLAS Representation of “Lynn’s” Ratings

Note. HICLAS = Hierarchical CLASses.
The actual figure, .842, shows that she entered “1” most of the time, but not on every occasion. We bring this matter to the attention of the reader to ward off any temptation to view these percentage figures as correlations. Instead, they indicate the degree to which items can be viewed as “exemplars” of a class. Parenthetical numbers indicate how steadfast an item is in its membership of a class in the recovered space.

Whereas class units will occupy most of our interpretive attention, they will be conducted within the broader context of units technically referred to as bundles. Every class pictured in Figure 2 is a member of one or more bundles. There are three target bundles and three feature bundles. These bundles are identified in the following manner. Any target class that is identified with an “A” (i.e., A, A-B, A-C, A-B-C) is a member of the A-Bundle. All targets in any one of these classes share some elements of similarity with the items in the other classes within that bundle. Classes within the B-Bundle and the C-Bundle are identified in the same manner. Reiterating this observation at the level of features, Feature Class-a-c forms memberships with Feature Bundle-a and Feature Bundle-c. This means that when Lynn rated herself to be “on edge,” “pessimistic,” “disappointed,” etc. (i.e., she entered a “1” on most items in Feature Class-a), and when she entered a “1” for “assertive,” “showy,” “controlling,” etc. (items contained in Feature Class-c), she affirmed the presence of most of the traits in Feature Class-a-c (“annoyed,” “drink a lot,” “sarcastic,” etc.) and affirmed the absence of traits located in Feature Class-b. This may appear to complicate an otherwise simple structure, but this broader context must be taken into account in any interpretive venture.

Finally, the feature “passionate” appears in the bottom right portion of Figure 2 under the label Residuals. This indicates that Lynn either rated self as “passionate” very rarely or in a manner that did not square with her other rating patterns. In either case, HICLAS could not locate that item within the computed space. No residual targets appear in the figure, meaning that all targets were accounted for by the HICLAS solution.

Labeling domains of Lynn’s self-structure. Now that the reader has gained some familiarity with the language of HICLAS and has a general sense of what is mapped out in the display, we can proceed to the task of interpretation. Before doing that, however, we want to point out that yet another fundamental rule of this brand of research is being violated. In the literature on this topic (e.g., Ogilvie, 1994), the im-
Importance of leaving interpretations in the hands of the research participants is emphasized. The preferred procedures involve the development of a collaborative arrangement with research participants wherein the researcher serves as a "walk-through" guide to the representational space. In that exercise, attention is drawn to what constitutes a class and a bundle, how associative links among them are represented, and other technical details of the diagram. After the map is understood, the task of interpretation is left in the hands of the participants. Their narratives, their observations are far more meaningful than anything that a researcher may be tempted to infer from visual inspections of other people's ratings of self. "They" are the specialists on their lives. "We" are not. We operate with the conviction that research participants are frequently "sent home" prematurely in psychological studies. They know far more about themselves than they are usually given credit for, and without their input, investigators are too free to read results in ways that conform to their conceptual systems.

In the context of that caveat, let us proceed "as if" Lynn had provided us with interpretative input that led to some stamps of relative certainty regarding the meaning of the contents of Figure 2. Extraversion, Agreeableness, and Neuroticism will be the primary foci of this discussion. Recall that it was previously determined that Lynn was high on Extraversion, average on Agreeableness, and moderately high on Neuroticism. The question asked earlier was what parts do items that are located within particular trait constellations play in the subjective experiences of the actor? We can address this question by investigating the contents of bottom Feature Classes a, b, and c. Beginning with Feature Class-a, items within it are suggestive of Neuroticism. The lead item in that grouping (i.e., the trait with the highest degree of "fit") is "on edge." "On edge" is in the company of other features (e.g., "confused," "defensive," "nervous," "moody") that support a Neuroticism interpretation. By contrast, Feature Class-b includes "warm," "outgoing," "open," "friendly," "intimate," and other items that as a group are easy to associate with Agreeableness. Finally, Feature Class-c contains "assertive," "showy," "controlling," and other features that suggest the operation of Extraversion. Keep in mind that each of these classes is modified by the contents of higher order, superordinate classes, thereby making them members of larger galaxies of traits known here as bundles. That fact is reassuring because if the structure of features consisted solely of three bottom classes with no structure above them, that would indicate that Lynn perceived herself as oper-
ating in the world of others with three discrete, independent "selves" that were not embodied by a larger whole.

Now we are in a position to address the issue of what self-with relationships, roles, and/or projects are most likely to evoke Neuroticism. HICLAS identified Target Class-A as the class most strongly associated with Feature Class-a. This means that items in Target Class-A were grouped together, in part, by receiving in-common ratings on neurotic features and, in part, because they were not characterized by features located in different groups. Items in Target Class-A, then, can be considered as most likely to evoke Lynn's Neuroticism. Some of these items are "as wife (past)" (Lynn's image of self in the role of wife with her former husband), "with Time-Life editor" (an individual who, several years ago, led Lynn to believe that a contract was in the making and then suddenly changed her mind), the project "get in shape" (an activity that Lynn knows she should begin but also finds repulsive), and several other targets that brought about a fair amount of discomfort when Lynn performed her ratings.

In a similar fashion, we can identify targets that brought out Lynn's agreeable qualities. These include "with brother" (a person whom Lynn perceived as her primary preadolescent confidant), "with Mexican informant" (a person with whom Lynn had formed a close relationship during her recent research project), "as prize-winning author" (a hoped-for, "possible self" that Lynn had included in her list of roles), and "with Rebecca" (a stranger with whom she had had a pleasant conversation on a friend's patio).

Lynn's experiences when with her travel agent, her sister, a neighbor, and the other "stranger" on her list, Dan, were characterized by traits related to Extraversion (e.g., "assertive," "showy," "dominating," and the like). She acknowledged that these individuals provided occasions for her to be boastful, to be centered in the limelight, and, simultaneously, to exercise her competitiveness and dramatic skills.

Further observations can be made about Lynn's self-perceptions as we move into the higher regions of her target structure. Target Class-A-B contains one item, "actual self." Lynn rated "me as I usually am" in a manner that overlapped with Target Classes A and B, which were strongly associated, in turn, with neurotic and agreeable feature classes. This means that Lynn perceives her present-day "now" self as comprising a combination of being "on edge," "pessimistic," etc. (Neuroticism); and "warm," "outgoing," etc. (Agreeableness).

Proceeding across Level 2 of the hierarchy of targets, it can be ob-
served that a Mexican bureaucrat (a man whose job seemed to be to create as many obstacles as possible for Lynn when she was conducting research for her article) and her present husband lead the list of targets that bring out a combination of Lynn's neurotic and extraverted traits. Indeed, we envision her to be surprised by the close convergence between self-with-Mexican bureaucrat and self-with-present husband patterns of ratings.

Lynn's image of her "ideal self," her roles "as writer" and "as traveler" and other items in Target Class-B-C are represented as a combination of agreeable and extraverted traits. Finally, Lynn's ratings of self in the role of "researcher" were performed in a fashion that drew upon traits from all classes. This indicates that Lynn experiences something like a "symphony" of self in that role.

Much more information can be gleaned from representational structures than can be dealt with here. Every observation made would harken back to our central point that the method permits traits to be shaken from a decontextualized tree and allows them to gravitate in a pattern that provides information about the texture of a person's life. The approach enables investigators to track the ebb and flow of traits as they pertain to specific domains of a single individual's life experiences and, thereby, to move into pastures that are singularly unavailable in research that begins and ends at static trait descriptions.

We will return to Lynn later in this article when we use a discussion of her projects as an introduction to a new way to categorize motivations behind personal projects. Prior to that undertaking, we return to data collection procedures that were described above and, in particular, discuss some aspects of the theoretical contexts from which the "self-with-other" concept has taken shape.

Theoretical Roots of Self-with-Other Representations

We launch this discussion by referring to Kelly's (1955) proposal that individuals, operating as lay scientists, develop theories about other people that are composed of basic elements (bipolar descriptors) that are combined into larger units called "personal constructs." Personal constructs are internally organized into a hierarchical system that serves as a guide for structuring observations of others. Kelly's Repertory Grid method for measuring and displaying construct systems was a welcome
Two Approaches

contribution to a field searching for respectable methods to empirically represent multiple components of personality within a single framework. In this instance, a great deal can be learned about a person by knowing critical elements of his/her theories about others.

Kelly's work was a source of encouragement to Ashmore and Ogilvie (1989) as they endeavored to fashion a model for studying aspects of self as it meets the social world. This project was undertaken in the context of increasing interest in the "relational self" in several branches of psychology. The relational perspectives of James (1890), Baldwin (1897/1973), Cooley (1902), and Mead (1934) had taken a back-burner status during an era wherein "ego" and "alter" were treated as separate topics of investigation. Complementing the personal construct approach to studying perceptions of others (alter) were numerous investigations of self-perception (ego). Whereas the dominant approach to this topic was to view self as a single entity to be evaluated (see Wylie, 1974, for a compendium of thousands of such studies), advances were made when self was viewed as a household composed of numerous members. Candidates for membership have included competing roles (e.g., Stryker & Serpe, 1992; Thoits, 1983), identities (Ogilvie, 1987; Rosenberg & Gara, 1985), possible selves (Markus & Nurius, 1986), "real," "ideal," and "ought" selves (Higgins, Klein, & Strauman, 1985), and other subunits of self.

A relational perspective required that an ego versus alter approach be substituted by a model that takes advantage of the idea that self is, in the words of Markus and Cross (1990), "an interpersonal achievement, derived almost entirely from the individual's relations with others" (p. 576). This statement not only summarizes a new consensus among social psychologists, developmental psychologists, and personality psychologists, but also captures the flavor of relational models in modern-day psychoanalytic psychology (e.g., Kernberg, 1976; Kohut, 1977; Mitchell, 1988; Stolorow & Atwood, 1992).

Ogilvie and Ashmore (1991) propose a unit of analysis called "self-with-other representation" for inclusion in studying individuals' perceptions of their social selves. Self-with-other presumes that we not only create internal mental representations of others and images of self in different roles and undertakings, but that we also form mental representations of self as experienced in the company of specific others. This idea bears the markings of the theoretical work of Stern (1985). Indeed, the parallels between Stern's conceptions of the infant's interpersonal
world and the self-with-other approach to adult models of self in the world of others are so direct that we take a moment to briefly review his model.

Stern (1985) amasses impressive experimental evidence showing that infants, much earlier than previously believed, possess capacities for making basic cognitive distinctions among objects. He theorizes that these capacities are also used by infants to make distinctions among and to organize experiences of self “when with” significant others. He postulates that this takes place as follows. On the basis of repeated experiences with a caregiver, the infant forms an internal mental representation of self-with-caregiver that summarizes multiple episodes that contain elements of similarity. Different “working models” are formed from self-with experiences with different caregivers (or from self-with experiences with the same caregiver in different mood states). A particular self-with working model is evoked by the particular arrangement of now-familiar environmental cues, and the model serves as a template that enables the child to anticipate events in the present self-with episode and determine how to “appraise” the situation, what to do in order to maintain interactions or to terminate them, etc.

Working models are composed of “RIGs”—Representations of Interactions that have been Generalized. A RIG contains generalized memories of interactive episodes that are drawn together primarily by the repetition of particular affective experiences. Stern writes, “I am suggesting that each of the many different self-regulating other relationships with the same person will have its own distinctive RIG. And when different RIGs are activated, the infant reexperiences different forms or ways of being with the self-regulating other” (Stern, 1985, pp. 110–111). The introduction of the concept of self-with-other representations can be viewed as lifting the concept of RIGs into the arena of adulthood for the purpose of discovering the nature and organization of working models that individuals use as templates for structuring their experiences of self in various areas of their lives.

Stern suggests that infants form distinctive RIGs for each of their major relationships with caretakers. This is analogous to James’s observation that we have as many selves as there are people who recognize us (1890, p. 294). The validity of these propositions may be seen in Figure 2, wherein it is shown that no two self-with-targets have exactly the same goodness-of-fit scores. In the context of unique characterizations, however, it is clear that there is a quality of sameness in the patterns of scores given to targets that reside in a particular class. It is
this quality that Ogilvie and Ashmore (1991) address when they propose that "a specific representation is likely to be a member of a constellation (or 'family') of relationships that share some common elements" (pp. 290–291). Each member of a family of targets is perceived as one of several items that are housed in a particular working model of self. In other words, it is proposed that individuals, oftentimes nonconsciously, form associations among several specific self-with-other representations that become shaped into larger, more generalized working models of self. These working models are variously responsive to situational cues and, when evoked, serve as orienting templates for anticipating and managing self-experiences.

These notions are operationalized by the data collection and analysis strategies described above. We believe that the approach holds promise for introducing a new degree of rigor for studying personality processes. It provides a different platform for studying "what is" from the multifarious perspectives of the person. Integrated visual representations of clusters of particular self-with-other representations (e.g., Figure 2) offer conceptually manageable ways to discern how individuals internally organize what James referred to as the "blooming, buzzing confusion" of subjective experiences. Most individuals give a surprising degree of order to the "mess" by grouping interpersonal episodes that evoke in-common patterns of self-experiences into identifiable constellations that, when activated, serve as templates for predicting and controlling interpersonal affairs.

Some practical implications of this approach in the area of clinical work are described by Ogilvie (1994). That article discusses the therapeutic value of a collaborative patient/therapist investigation of a self-with-other representational space. The procedures outlined in that article have the effect of speeding up the process of recognizing the ways that an individual has linked episodes and makes apparent other working models, clearly depicted in a diagram, that are available as viable alternatives for experiencing and participating in troubled relationships.

Finally, in addition to some practical applications of this work, we look forward to its use in basic research in personality. Particularly enticing in this regard is its potential for studying the issue of stability and change. As a note of caution, however, there is an undeniable and unavoidable labor-intensive quality to this approach, a problem that remains at the heart of the idiographic versus nomothetic dilemma that pervades the field. But progress is being made on this front by researchers who have developed strategies for extracting certain nomothetic prop-
erties from idiothetic representations for the purpose of making cross-person comparisons (Ashmore & Ogilvie, 1992; Haviland, Davidson, Ruetsch, Gebelt, & Lancelot, 1994; Reich, 1994; Rosenberg, 1988; Rosenberg, Van Mechelen, & De Boeck, in press). The emergence of research models that permit investigators to slide easily between person versus group boundaries is very encouraging.

Lynn's Personal Projects

We have arrived at a point of transition in this article. The substance of both Part 1 (self-with-other representations) and Part 2 (motives behind personal projects) emerged from a longitudinal study of gender and identity (Ashmore & Ogilvie, 1989) that entailed the creation of methods for conducting research on the lives of a panel of college students. One of the interviews administered over the course of this study involved the elicitation of personal projects (Little, 1983), which were operationalized quite broadly as “things that you are working on, matters that are occupying your attention, tasks that you have undertaken.”

The method of collecting data on personal projects was transported by Ogilvie to a course entitled Adult Development and Aging, where it became part of a required term paper. Students were instructed to interview at least three people 20 years apart in age and have them describe projects in which they were engaged. The six or seven projects mentioned by each of the interviewees were written down and became the source of several interviewer probes and structured rating exercises. Students were then required to incorporate this information in a life span development paper that brought life to various concepts and theories in the field. Papers were submitted in duplicate, and over the course of 5 years, thousands of personal projects from hundreds of respondents have been packed into filing cabinets.

Lynn's projects are typical of the kinds of projects recorded by interviewers. They include (a) “get in shape,” (b) “complete present writing project,” (c) “make arrangements to see my children,” (d) “begin research for new writing project,” and (e) “preserve past publications in a single bound volume.” By examining the locations of these projects in Figure 2, we know that for Lynn, Projects a, b, and c evoked elements of her neuroticism, Project-d brought out a combination of extraverted and agreeable qualities, and Project-e was associated with Agreeableness. The manner in which personal project information for the life span course was collected prevents us from generating displays that show
how interviewees “held” their projects in the contexts of their interpersonal lives as we have done with Lynn. But we can continue to use Lynn’s personal projects in order to exemplify a taxonomy of project purposes that has emerged from recent work with the hundreds of interview protocols at our disposal. We have found that it is at the level of motivations that interviewees attribute to their personal projects, not at the level of specific projects themselves, that some meaningful comparisons can be made. Part 2 of this article describes our taxonomy of purposes, places it within the context of literature on personal projects and related concepts, and presents some results of applying it to the projects of a cross-sectional sample of adults.

Part 2: An Old Behavioral Taxonomy in a New Motivational Context

After participants listed six to seven personal projects in the Adult Development and Aging interview, each project was returned to several times in order to gain a more complete understanding of the nature of such undertakings. One of the questions asked in regard to the project was, “Is there a particular purpose behind your involvement in this activity?” This open-ended probe, derived from methods proposed by Little (1983, 1987), resulted in a vast array of motivational attributions. In the process of compiling a large data base to contain all aspects of the interviews in both raw and coded forms, we encountered the issue of what to do with project purpose statements. Specifically, we wondered if a data reduction system could be developed that would group differently worded purpose statements into meaningful units.

We began with an inductive approach. The purposes people had given to their projects were written onto cards which were then sorted into piles according to criteria that we hoped would become apparent after the stacks had been composed. What we originally believed would be a relatively easy task became a nightmare. One day 20 categories would be fashioned that would be decomposed the next day into 30 or 40 categories. Hope would rise and fade again as we desperately sought a comprehensive list of categories into which project purposes could be slotted with an acceptable degree of reliability. In the process of struggling with categories, we occasionally had a sense that there was a natural order among purposes that continued to escape our attention. But we eventually began to suspect that our intuition about an underlying order was an illusion born of frustration.
The solution to our dilemma was a product of pure serendipity. It came about in the following way. The first author awoke one morning and began to rehearse the four primary constructs of operant conditioning to be presented in an upcoming lecture on Skinner's work and its place in personality psychology. As was his custom, he got stuck when he attempted to recall the distinction between negative reinforcement and negative punishment. He decided to postpone working out this distinction until he had an opportunity to read his lecture notes for the course. Having given up on that mental exercise, his thoughts turned to the frustrations being experienced in our work with project purposes. That was an even more frightening way to begin the day, so his mind wandered back to operant conditioning concepts and he found himself playing a mental game of translating operant conditioning concepts into motivational terms.

Dressed up in more formal terms than were available to him in bed, here is a brief overview of reinforcement principles. In operant conditioning, what occurs immediately after a given behavior is termed a consequence. The four primary consequences in operant conditioning are positive reinforcement, negative reinforcement, positive punishment, and negative punishment. Positive reinforcement and positive punishment both refer to event occurrences, but a reinforcing occurrence increases the recurrence of the behavior, whereas a punishing occurrence decreases this recurrence. Negative reinforcement and negative punishment both refer to the removal of a given condition, but a reinforcing removal increases the behavior's recurrence whereas a punishing removal decreases this recurrence.

The question that we posed was, could these contingencies of learning be freed from behaviorist assumptions—assumptions that pertain to increasing or decreasing the frequency of a specific behavior—and reformulated in motivational terms? After putting some thought into this prospect, our earlier struggles rapidly dissipated in the context of the following exercise. Ogilvie described the four contingency concepts in operant learning theory, and Rose in turn provided motivational labels for each. Projects for which purpose statements indicated expectations of positive outcomes (positive reinforcement) were labeled ACQUIRE. Projects that were undertaken in order to avoid negative outcomes (positive punishment) were labeled PREVENT. Projects intended to getting rid of an existing negative (negative reinforcement) were labeled CURE. Projects that had as their aims the retention of existing positives (negative punishment) were labeled KEEP. So taken by our terms,
one of our colleagues, Len Hamilton, provided the mnemonic PACK (Prevent, Acquire, Cure, Keep), which will be used hereafter to refer to this taxonomy.1

Previous to this attempt, such a translation of learning contingencies was completely out of the question (e.g., Silver, 1985), primarily because such an act violated the major assumptions of learning theory. In fact, it is difficult to find work that even addresses learning theory as a major influence on current motivation theories (for a hesitant exception, see Ford, 1992). This matter did not concern us, however, for neither author had formed an allegiance with traditional learning theory. This allowed us to construe these categories in the following fashion.

In terms of learning theory's contingencies, "positive" refers to the addition of a currently absent state, whereas "negative" refers to the taking away of a currently existing state. Under the motivational interpretation, though, it makes more sense to refer to this distinction more simply as "absence" and "existence." Also from this alternative perspective, the word "positive" is more appropriately used to refer to the individual's perception of a given state as being accompanied by a pleasant experience (e.g., happiness) and "negative" as being accompanied by an unpleasant experience (e.g., illness). Note that a learning theory purist would debate this assignment of evaluations to reinforcing and punishing events, not only because it implies internal processing, but also because such an interpretation transcends the neutrality so characteristic of Skinner's approach (see Brody, 1983). However, the interpretation of these categories from a motivational perspective frees them from strict behavioristic constraints. The shift in perspective from consequences to causes of behavior is accompanied by a shift from short-term immediate effects of environmental conditions to long-term internal mental processes concerning the anticipated results of action within a more extended time frame.

Drawn from the motivationally transformed definitions of the four learning theory contingencies, we constructed a 2 × 2 framework for interpreting the PACK taxonomy: (a) positive versus negative and (b) existence versus absence (see Figure 3).

We have developed an extensive coding manual for applying the

1. Little (e.g., Little, Lecci, & Watkinson, 1992) refers to personal projects and related constructs as "PAC" units. PAC stands for "personal action construct" and should not be confused with this article's acronym, PACK, which is a taxonomy for categorizing motivations behind PAC units.
PACK taxonomy to personal project purposes. This manual gives complete definitions and examples for each category, and it illustrates rules for making coding decisions. Brief definitions of the PACK categories, arranged in the order that operant conditioning concepts are usually listed, are as follows:

Positive reinforcement: ACQUIRE. An ACQUIRE motivation reflects a desire to obtain a potentially positive future condition or situation. Some examples of ACQUIRE motivations are “to improve my figure,” “to earn more money,” and “to be a nicer person.”

Negative reinforcement: CURE. A CURE motivation reflects a desire to get rid of or alleviate an existing negative condition or situation. Some examples of CURE purposes are “to lose weight,” “to get away from my parents,” and “to relax.”

Positive punishment: PREVENT. A PREVENT motivation reflects a desire to avoid a potentially negative future condition or situation. Some examples of PREVENT purposes are “so I won’t ever be in debt again,” “to avoid being yelled at by my mother,” and “so my dad won’t have to live in a nursing home.”

Negative punishment: KEEP. A KEEP motivation reflects a desire to maintain a currently existing positive condition or situation. Some examples of KEEP purposes are “to stay healthy,” “to keep in contact with my friends,” and “to preserve my high standing in the community.”

2. The current version of this manual, which includes the PACK taxonomy as well as a taxonomy of project beneficiaries, can be requested from the first author.
Let us recapitulate the four categories by briefly applying them to four of Lynn's projects. One of her projects was "get in shape." The purpose for that project was "to avoid having a heart attack or some other dreadful disease." Although she is merely thinking about the project, she hopes that it will eventually lead to an improvement of her eating habits and a regular exercise regime. Those actions, she believes, would work against (PREVENT) an eventual deterioration of her health. A second project that Lynn mentioned was "begin research for new writing project." She expressed enthusiasm about this project and deemed it to be "my next notable accomplishment." This statement permits us to infer that Lynn envisions this project as leading to a positive outcome and, hence, it is labeled ACQUIRE. Another of Lynn's projects was to set up arrangements to see her children. She was not looking forward to spending time with them "because we have so many problems to iron out. I am not optimistic about resolving them, but one must at least try." In this instance, Lynn is dealing with an existing negative and desires a CURE. Finally, Lynn mentioned a project that involved putting her articles into a single bound volume. She had hired someone to assist her in this undertaking and viewed it as a way to preserve her major accomplishments. "Who knows?" she reported. "Someday I may have grandchildren who will sit down with me and look at what I have written." The purpose behind this project is a good example of KEEP in that she was motivated to do it in order to preserve an already existing accomplishment.

We have now told the middle part of our story—how a taxonomy of motives was derived from a taxonomy of reinforcement concepts. Before telling the end of the story where we describe some results of applying the motivational taxonomy to the project purposes of differently aged groups of people, we need to back up and locate our work in the current landscape of the rapidly growing field commonly referred to as "conative psychology" (Little, 1993).

**Units of goal-directed behavior**

We begin this discussion by referring to Allport's (1937) call for the need to study the "whole behavior" of the person "teleonomically" (p. 205). Allport proposed the construct of the "behavior trend," a series of interrelated behaviors whose observation over time could be used to derive an underlying directional or purposive quality (p. 204). The appeal of the "behavior trend" was that it took into account mul-
tiple observations of a given individual's natural behavior, rather than a one-time assessment of constructs imposed by the researcher (Karoly, 1993). Inspired by this possible alternative to the commonly used trait construct for exploring personality, contemporary investigators have further developed these units of analysis to represent abstractions of directional behavior patterns that are guided by superordinate goals (e.g., Cantor & Kihlstrom, 1987; Cantor, Norem, Niedenthal, Langston, & Brower, 1987; Emmons, 1986; Emmons & King, 1988; Klinger, 1977; Klinger, Barta, & Maxeiner, 1980; Little, 1983; Palys & Little, 1983).

Conceptually, these new units of goal-directed behavior lie midway between the following pairs of constructs: (a) the person and the situation (Cantor, 1990), (b) abstract wishes and specific intentions (Ford, 1992), and (c) abstract goals and specific action plans (Little, 1983). In order of increasing abstraction, these units have been variously called "current concerns" (e.g., Klinger, 1977), "personal projects" (e.g., Little, 1983), "life tasks" (e.g., Cantor, 1990), and "personal strivings" (e.g., Emmons, 1986). This increasing abstraction refers to a movement from idiosyncrasy to typicality (Cantor, 1990; Cantor & Kihlstrom, 1987; Little, 1993; Zirkel & Cantor, 1990) and from transience to stability (Emmons & King, 1988; Klinger, 1977; Klinger et al., 1980; Little, 1993). See Table 1 for definitions of these various units.

Justification for goal-directed behavior units. In a comprehensive review of motivation theory, Ford (1992) states that these units of goal-directed behavior are "powerful in terms of organizing behavior and personality" (p. 196). Investigators in this area have provided ample justification for the utility, validity, and personal relevance of these units of goal-directed behavior (e.g., Emmons, 1986; Klinger, 1987; Klinger et al., 1980; Little, 1983, 1987, 1993; Zirkel & Cantor, 1990). In order to justify units of goal-directed behavior as viable alternatives to traits, researchers have attempted to link their units to traits directly (Cantor et al., 1987; Little et al., 1992), to demonstrate that these units may account for more variance than traits in terms of both subjective well-being (Emmons, 1986; Emmons & King, 1988; Little, 1987; Omodei & Wearing, 1990; Palys & Little, 1983) and affect (Cantor et al., 1987; Emmons, 1986; Emmons & King, 1988; Zirkel & Cantor, 1990), and to suggest that these units are more amenable to a combined idiographic-nomothetic approach (e.g., Emmons, 1986). It has been suggested that while traits may provide a good basis for examining the stability of personality, units of goal-directed behavior are better suited to examin-
Table 1
Units of Goal-Directed Behavior: Definitions

<table>
<thead>
<tr>
<th>Source</th>
<th>Unit</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klinger &amp; Kroll-Mensing (in press)</td>
<td>Current concern</td>
<td>&quot;The latent state of an organism between commitment to striving for a goal and either goal attainment or disengagement from the goal.&quot;</td>
</tr>
<tr>
<td>Little (1983)</td>
<td>Personal project</td>
<td>&quot;A set of interrelated acts extending over time, which is intended to maintain or attain a state of affairs foreseen by the individual.&quot;</td>
</tr>
<tr>
<td>Cantor, Markus, Niedenthal, &amp; Nurius</td>
<td>Life tasks</td>
<td>&quot;The problems that people see themselves as working on and devoting energy to solving at a particular period in life. . . . [T]he basic units into which people lump their daily activities and by which they give specific and concrete meaning to their current goals.&quot;</td>
</tr>
<tr>
<td>Emmons (1986)</td>
<td>Personal strivings</td>
<td>&quot;Represent what individuals are characteristically aiming to accomplish through their behavior or the purpose or purposes that a person is trying to carry out.&quot;</td>
</tr>
</tbody>
</table>

ing changes in personality (Little, 1989), such as those that occur as a person moves from one life stage to the next (Cantor, 1990).

**Purposes behind goal-directed behaviors**

By definition, units of goal-directed behavior (e.g., personal projects) contain within them information about superordinate goals. In fact, investigators in this area often assume that the goal of a goal-directed behavior is readily apparent from the statement of the behavior itself (e.g., Roberson, 1990). Others posit that goals are reflected (Klinger
et al., 1980) and guided (Cantor, 1990) by these behaviors, or that goals help to explain the meaning behind these behaviors (Little, 1987). Further, details about the goal-directed nature of a given behavior can be obtained by examining the relationships between the given project and the other reported projects (Emmons, 1986; Emmons & King, 1988; Little, 1983; Palys & Little, 1983), or by assessing the ratings of the given project along various dimensions such as stress, importance, and sense of control (Cantor et al., 1987; Emmons, 1986; Klinger et al., 1980; Little, 1983, 1987; Little et al., 1992; Omodei & Wearing, 1990; Palys & Little, 1983; Zirkel & Cantor, 1990).

As stated previously, Little (1983, 1987) specifies that personal projects lie midway between abstract goals and specific action plans, and he proposes specific procedures for getting at this information. After respondents list their personal projects, they are asked to return to each project and explain specific actions that they are taking in order to carry out the project (i.e., “how”). After completing this step for each project, respondents are asked to return once again to each project and specify the underlying purpose or purposes of that project (i.e., “why”). Little suggests that this method can be used to assess the level of abstraction of the project, since projects can vary in terms of this quality. Specifically, projects that fall on the molecular end of a molecular-molar dimension tend to lack meaning (e.g., “checking the mailbox at 3:30 P.M.”). Molar projects, on the other hand, may be so abstract that they lack action structures and therefore can be difficult to accomplish (e.g., “making an impact on society”). Cantor (1990) has supported the utility of Little’s distinction by showing that students who list molar life tasks experience more difficulties in carrying them out than students who list molecular life tasks.

Rather than using purpose statements to judge the abstractness of personal projects, we endeavored to develop a system for making motivational distinctions among them. This resulted in the emergence of the PACK taxonomy. This work has brought us into the good company of others who have developed motivational frames of reference for making goal-related distinctions. We now turn our attention to making some explicit links between our motivational categories and literature on this topic.

Theoretical roots of PACK

Readers will recognize that we have renamed categories that have existed in psychological literature for quite some time. Indeed, some
of these categories are built upon ancient philosophy. For example, Epicurus (341–270 B.C.) described the Good Life as seeking pleasures (ACQUIRE) and freedom from pain (CURE and PREVENT). It would be of benefit to comprehensively trace aspects of PACK throughout the history of philosophy and psychology, but for now, we will merely attempt to point the reader in the direction of extant theory and research that is conceptually similar to various PACK distinctions. Although the link is often indirect, a significant amount of existing literature addresses at least some aspect of the PACK taxonomy. This discussion will revolve around the earlier stated theoretical dimensions, positive versus negative and existence versus absence. From the standpoint of each of these dimensions, we will refer to research on units of goal-directed behavior as well as some of the more comprehensive theories of motivation.

**Positive versus negative.** The positive-negative dimension has a strong background, both in goal-directed behavior research and in motivation theory. In the most directly linked research (e.g., Klinger & Cox, 1986; Klinger et al., 1980), respondents are asked to rate each of their “current concerns” along several quantitative rating dimensions, including “positivity” and “negativity.” In addition to this quantitative assessment, respondents are also asked to classify each of their current concerns into 1 of 10 or more categories that best describes their wish or anticipated action regarding each concern (Klinger et al., 1980; Roberson, 1990). Each of the PACK categories is represented to some extent by at least one of these more specific categories. For instance, an ACQUIRE item is “get, make, obtain, accomplish, gain, attain,” a KEEP item is “keep, maintain, continue,” a CURE item is “restore, repair, get back,” and a PREVENT item is “prevent.” These studies typically discuss related findings either in terms of the frequency of each category, or in terms of a qualitative positive-negative dimension. For instance, Roberson (1990) finds that employees who are most satisfied with their jobs have a greater proportion of positive goals and a smaller proportion of negative goals. This finding remains true even if the respondent predicts that the attempted avoidance of negative outcomes will be successful.

Most other research that can be discussed from the positive-negative perspective is in the arena of approach and avoidance: Situations one approaches tend to be positive and situations one avoids tend to be negative. Respondents who list personal strivings are explicitly asked to include what they are trying to approach as well as to avoid (Emmons,
Ogilvie and Rose (1986; Emmons & King, 1988). Emmons and McAdams (1991) further examine the approach-avoidance dimension by comparing personal strivings coded either “approach” or “avoid” to the “activity inhibition” level obtained from the Thematic Apperception Test (TAT). Activity inhibition, assessed by calculating the frequency of the word “not” in the TAT responses, is positively correlated with the avoidance of negative outcomes as discerned from descriptions of personal strivings. These results are used to support the motivational nature of personal strivings.

Several motivational theories address the tendency to approach situations that will result in positive consequences (ACQUIRE), and to avoid (PREVENT) or get out of (CURE) situations that will result in negative consequences. Lewin’s field theory (1943), goal-setting theory (Locke & Latham, 1990), attribution theories (Weiner, 1986), expectancy-value theories (Atkinson, 1957; McClelland, 1971), and self-regulation theory (Karoly, 1991) involve the hope or expectancy of success (ACQUIRE) and the fear or expectancy of failure (PREVENT). These motivations are based on attaining or avoiding a possible future state or situation. Although their assumptions are based on the influence of drives rather than goals, psychoanalytic (Freud, 1920/1961) and drive theories (Hull, 1931) also emphasize one’s tendency to seek pleasure (ACQUIRE). Instead of focusing on avoiding future negative conditions (PREVENT), however, focus in this class of theories is more on the immediate drive to decrease existing anxiety (CURE).

Existence versus absence. Although the positive-negative dimension has received a significant amount of attention in the literature, the existence-absence dimension has by comparison been a topic of neglect, especially in research on units of goal-directed behavior. Research in this area often assumes that goals involve what we do not yet have but want to ACQUIRE or PREVENT (the absence pole). If “existence” goals (KEEP and CURE) are considered, they are virtually always interpreted from a positive-negative rather than an existence-absence perspective (see previous section).

Although in pure form the existence-absence dimension is not well represented in literature on motivation, several motivational theories address a maintenance versus change dimension (Ford, 1992). This dimension overlaps the two dimensions proposed here (positive-negative and existence-absence). “Maintenance” would refer to KEEP and PREVENT, and “change” would refer to CURE and ACQUIRE. Herz-
berg’s (1966) two-factor theory makes the clearest distinction between these two poles. In the workplace setting, he makes use of two factors: “hygiene” (a maintenance factor including KEEP or PREVENT) and “motivator” (a change factor including ACQUIRE). Other investigators make finer distinctions within either the “maintenance” or “change” pole. Cognitive dissonance (Festinger, 1957), equity (Adams, 1963), self-worth (Covington, 1984), and reactance (Brehm, 1972) theories focus on the “maintenance” pole by making distinctions between KEEP and PREVENT as motivations to maintain stability. In these theories, KEEP refers to the need to maintain (KEEP) some positive state or characteristic (e.g., consistency, equity, positive self-concept, freedom), and PREVENT refers to the need to avoid (PREVENT) some negative state or characteristic (e.g., inconsistency, inequity, internalization of failure, loss of freedom). Focusing instead on the “change” pole, Maslow (1943) describes needs that are motivated by either deficiency (CURE) or growth (ACQUIRE).

**Summary of PACK structure.** Although there has been some work on the more immediate motivations (KEEP and CURE), primary focus in the literature on both goal-directed behavior and motivation has been on “absence” goals—those oriented well into the future (i.e., ACQUIRE and PREVENT). This focus may be due in part to the extreme future focus of motivation theories in an effort to separate themselves from the immediacy of behaviorism. This polarization then results in the neglect of the fact that present circumstances often require immediate attention. However, although CURE and KEEP purposes are more immediate than ACQUIRE and PREVENT purposes, they are still future-oriented in accordance with Ford’s (1992) assertion that motivation theories emphasize a future perspective.

In sum, PACK is a two-dimensional classification system that accounts for motives to KEEP or ACQUIRE positive states, and to CURE or PREVENT negative states. Although PACK emerged as a system for categorizing project purpose statements, we cannot resist taking a moment to note its potential applicability to other topics of investigation. It may be that the taxonomy can be converted into a typology suitable for studies of individual differences in characteristic modes of coping with life experiences. That is, are there PREVENT-types, and if so, how are they different from CURE- or KEEP-types? Broken down another way, it may be that motives change in accordance with the stage of development of a particular project. (For example, although we
were in an ACQUIRE mode when we first began writing this article, CURE characterized our later revision activities.) The system can also be used in cross-cultural studies wherein it would likely be shown that some societies (particularly our own) are heavily ACQUIRE-oriented in comparison with other societies that support KEEP or PREVENT motives. Organizational development and leadership styles are other areas in which the application of the system may clarify the nature of institutional tones and their consequences.

Rather than speculating any further about how the system may be used by others, we return to the activities in our lab and conclude this article by discussing some results of applying the system to a cross-sectional sample of interview protocols. The question we posed was, are there any discernible shifts in purposes over the life span?

Life span development
This section reports some findings of a pilot study of 806 purpose statements that 120 interviewees attributed to their personal projects. The sample contained an equal distribution (females and males) of adolescents (15 to 17 years old), middle-aged adults (35 to 46 years old), and older adults (66 to 82 years old). These as yet unpublished results are part of a longer-term project on which some recent undergraduate and graduate work is based (Rose, 1995; VanMeenen, 1994).

ACQUIRE. One of the major limitations of research in the area of goal-directed behavior is that although researchers occasionally address the issue of life span development (e.g., Cantor, 1990; Klinger, 1977), empirical research involving noncollege respondents is sparse. Therefore, any attempt to create personal project taxonomies and apply them to different age groups would be biased by the motivational characterizations of the typical college student sample. Our work with the PACK taxonomy shows that although the majority of purposes behind personal projects are ACQUIRE purposes, adolescents, when compared to middle-aged and older age groups, have the highest percentage of ACQUIRE purposes behind personal projects.

This finding corresponds with what one would expect of adolescents in a future-oriented culture. A potential problem with this perspective, however, is that it could be hardened into a restrictive frame for understanding the motivations of other age groups. In fact, in a comprehensive review of literature on goal setting and resulting task per-
formance (Locke, Shaw, Saari, & Latham, 1981), the majority of goals described can be classified as ACQUIRE goals (e.g., increasing one’s performance on a mathematical task). Another instance of this bias is that Raynor (1982) explains age group differences by noting that young people are in the process of “becoming” while older people see themselves as “having been” (p. 287), but “having been” qualities are rarely scrutinized in research.

Our research with PACK categories, based on data from adolescents to those well beyond retirement, demonstrates that although ACQUIRE is the most frequent category for people’s purposes behind personal projects, other PACK categories play a major role in age groups beyond adolescence.

CURE. The earlier stated neglect of the “existence” pole (i.e., CURE and KEEP) is especially important when considering the goal-directed behavior of people in age groups other than those of the adolescent and the young adult (Klinger, 1977). In addition to becoming a more important motivation beyond adolescence, CURE may also be important during life transitions and during times of conflict (Emmons, King, & Sheldon, 1993; Erikson, 1968/1980). This can be interpreted in terms of CURE in that conflict is an existing negative condition that must be resolved, and the hope for resolving this conflict becomes one’s motivation for performing certain behaviors.

Rutter and Rutter (1993) contend that “adult life brings with it a host of stresses, rewards, challenges and transitions” (p. 306). This suggests that CURE motivations may rise in prominence in middle age when work and family demands are at their peak. Our preliminary findings support this statement: Project purposes of middle-aged adults are more frequently CUREs than are the project purposes of adolescents and older adults.

KEEP. People cannot preserve things that they do not have. The first half of life can be viewed as a time to ACQUIRE material goods, interpersonal ties, a sense of who one is, etc., and the second half of life as holding onto one’s most valued possessions. This perspective on life span development is nicely documented by the finding that older adults report a greater number of KEEP project purposes than do younger and middle-aged groups. This result is particularly encouraging in that it provides empirical support for a long-suspected trend (e.g., Raynor, 1982).
PREVENT. Raynor (1982) distinguishes between success-oriented (ACQUIRE) and failure-threatened (PREVENT) individuals. Liber (1982) posits that at retirement, the former becomes apathetic and the latter flourishes. The reason for this is that success-oriented individuals value themselves when they are in the process of "becoming," so at retirement they experience a loss of self-worth. Those with a PREVENT orientation on the other hand will experience relief at retirement since the fear of career failure will then be irrelevant (Ridley, 1982).

Interestingly, although the focus on the PREVENT motivation in research has been second in frequency to the ACQUIRE motivations, our research has shown that within all age groups, PREVENT is the least frequently occurring PACK category. This finding suggests the interpretation that as a culture we are not PREVENT-oriented. Another equally plausible interpretation, however, is that other motives can operate in the service of PREVENT. That is, some individuals may engage in ACQUIRE or KEEP activities in order to PREVENT negative outcomes. Such subtleties are not captured by the present system.

Summary and Conclusion of Part 2

A summary of the life span trends described above includes the following major findings: ACQUIRE peaks during adolescence, CURE rises during middle life, and KEEP characterizes later life. It should be pointed out that these normative results mask individuals in all age groups who are exceptions to the shape of the curves. One of the oldest males in our sample listed seven projects, all of which contained ACQUIRE purposes. An adolescent had six projects, five of which were CUREs. Other individuals are predominantly PREVENT oriented. Shift in the average distribution of purposes across age reflects something important about our cultural expectations for different age groups. The fact that there are large numbers of individuals whose purposes do not match cohort averages clears the way for penetrating beneath the cultural mold by investigating how projects containing different purposes are evaluated by respondents. For example, are CURE or PREVENT projects rated as more stressful than ACQUIRE and KEEP projects, or does this relationship depend on the age and/or gender of the respondent? Do adolescents rate themselves as more confident and in control on their ACQUIRE projects, or does confidence and control in these sorts of undertakings increase with age?

We have only begun to address such questions, but so far remain
pleased with the results of having crossed one of the borders that shapes and divides the field of psychology. Concepts that have been kept alive by learning theorists for over 50 years appear to be surprisingly relevant to human motivation once they are dressed in different clothes. A simple taxonomy of motives has been derived from a tradition that, on the surface, has no bearing on molar purposes. But a shift in focus from behavioral consequences to motivational causes has resulted in a model that provides a frame of reference for arranging and comparing motivational constructs used in research on goal-directed behaviors. Eventually, it may be shown that the PACK taxonomy is too simple, too parsimonious, too $2 \times 2$. And yet Skinner and his followers have used their four behavioral classifications to organize the entire field of operant conditioning. We wonder if PACK can serve a similar function for the field of motivation.

**CONCLUSION**

Finally, we appreciate the willingness of Lynn, our imaginary friend, to accompany us on this journey. She has facilitated our description of how researchers can probe beneath static trait descriptions and investigate matters of internal organization. The condensation of numerous self-with-other representations (and other sorts of targets) into a single display adds a new degree of specificity to research into aspects of the social self and situations that evoke their expression. The approach provides a framework for inquiries into the compositions of primary working models of self and it is offered as a method to complement other procedures that have shaped the field of personology. Lynn has also aided us in making a transition from one realm of investigation to another. Our discussion of her personal projects and where they were configured in her self-representational space brought us to a shift in focus from personal projects themselves to the purposes behind them. Lynn's projects and the purposes that she attributed to them allowed us to breathe life into components of a taxonomy of motives and make the kinds of distinctions that we have found helpful in structuring our research into life span changes in the "whys" behind goal-directed behaviors. We suspect that the taxonomy has a broad range of (as yet untapped) applicability to a variety of issues, interests, and concerns of others seeking to understand the nature of human strivings.
REFERENCES


*Manuscript received May 1994: revised December 1994.*
This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.