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## **Nurturing the Human Spirit for Occupation<sup>1</sup>**

### **Introduction**

It is fitting that a Dorothy J. Killam Memorial Lecture should focus on nurturing the human spirit for occupation: enhancing people's need and desire to act on the world. For, the Killams avidly participated in life through their immersion, not only in business, but in playing bridge, swimming, watching baseball and especially fishing (How). Since I have been known to angle a bit, learning that Dorothy Killam caught a 46-pound salmon, larger than any her husband had ever hooked, connected me with *their* spirit for occupation and thus to their personhood. Fishing and swimming were said to have kept them alive.

Let me begin with some snapshots:

- Reinhold Messner soon will walk 1,200 miles across the frozen Arctic Ocean from Siberia to Canada via the North Pole. If he succeeds he will, at age 50, be the first person to accomplish this feat. He said, "It's the only thing I know how to do. It's too late at my age to stop, not to do it . . ." (*Los Angeles Times* 1 March 1995: A1).
- Infants were subjects of a classical conditioning experiment (Papoušek). If they turned their heads to the correct side at a signal, they received milk as a reward. One infant succeeded so often that he imbibed twice as much milk as usual. But he continued performing the correct action, with obvious pleasure, smiling and bubbling. Some

motivation other than hunger was involved: predicting and mastering the environment were more important than an external reward.

Brian Keenan was held by Lebanese captors for four and a half years in a windowless, barren cell. His daily food ration included one tiny wedge of foil-wrapped cheese. He secretly hoarded the bits of foil until he could form small balls. Then he used them to engage in a fiercely competitive game of skill, a mini-basketball contest, with his cell mate. The activity became so important that the two prisoners spent several hours each day in increasingly expert competition. Now free, he still treasures the memory of creating a challenging activity which preserved his sanity in the midst of total deprivation.

These incidents reveal the "spirit for occupation" in the lives of human beings in a variety of life situations. They introduce three themes. First, why is the human spirit for occupation important? Second, what are some of its roots? And finally, how might it be nurtured?

I view people as multi-layered, open systems, who interact with their environments. Although I might concentrate on a single level for description, this is only a conceptual convenience. A real person is alive, whole, and, as Adolph Meyer, the psychiatrist who helped found occupational therapy, said, always an "indivisible individual," a he or she with a "wide range of differentiation of capacity and function" (Meyer, *Psychobiology* 6).

Why is the human spirit for occupation important to the individual and society? The spirit for occupation is felt in the desire to act on the environment, to be an agent, cause an effect, and experience a sense of efficacy (White), mastery (Bruner, "Eye, Hand and Mind"), purpose (Yerxa et al.) or "flow" (total immersion) (Csikszentmihalyi). It is manifest in both one's actions on the environment and in one's experiences while acting. The infant who precariously toddles to explore each novel object and the octogenarian who tills his garden while balancing on a walker demonstrate this spirit. It is powerful yet subtle, dramatic yet as everyday as breakfast, obvious, commonplace, but elusive.

This spirit is actualized, in a healthy way, through engagement in occupation: self-initiated, self-directed activity which is productive for the person, even if the product is fun, and contributes to others. These

elemental routines which occupy us (Beisser, *Flying*) may be categorized as play, work, leisure, creative pursuits, and other activities of daily living, along with their organization into patterns. "Occupacio" derives from a word originally meaning to seize (Engelhardt). We are seized by our occupations. Dewey's criteria for *child's* occupation were that it be of interest, worthwhile intrinsically, awaken curiosity and lead to development (*How We Think*). Since it is so complex and familiar, occupation may be missed by scholars. But, if their spirit for activity is ignored, people may not thrive, adapt, or achieve a decent quality of life. Unable to achieve satisfaction as agents, they often seek it in obsessive or destructive pursuits (Klapp). The human spirit for occupation is built into human beings to enable us to survive, contribute and experience joy in our own actions.

What, then, are some of the roots of this spirit? I shall explore the biological, psychological, social and spiritual roots of occupation with a few examples at each level.

## 1. Biological Level

### a) Play

Many non-human primates and other mammals play, even though play does not appear to have immediate adaptive significance (Symons, "Question"). It is an "active, oriented behavior whose structure is highly variable, which apparently lacks immediate purpose and is often accompanied by specific signal patterns" (Fagen 850), such as a "play face" or play posture. Play is spontaneous and self-rewarding. Most observers can differentiate an animal's "serious," obviously goal-directed, behavior from its play for fun or for its own sake, (Symons, *Play*), even though the concept of play is as difficult to define as a cobweb (Reilly, *Play*).

Many evolutionists assume that this common, cross-species behavior must have been naturally selected for its adaptive significance. For example, Poirier, Bellisari and Haines consider play to be adaptive for both the group and the individual, contributing to peer integration and individual learning. Mammals who have evolved the greatest capacity for learning are those that play most often (Poirier & Smith).

The term "effectance motivation" was coined by White as the tendency for animals to explore their environments without the immediate objective of satisfying a physiological function such as hunger. Young mammals playfully interact with those aspects of their surroundings that provide novelty and changing feedback, sniffing here and there, running about with interest and intensity. Through play they learn how to manipulate and change their environments, thus increasing their chances for survival. The desire to achieve optimal levels of sensory stimulation appears to activate play (Poirier, "Functions"). The drive to explore the environment, based on curiosity, assures adequate stimulation for learning (White).

What are some evolutionary functions of play? Primates, including humans, have a long period of immaturity providing time for learning to adapt to a variety of environmental conditions with flexible behavior. Play may have a major role in the evolution of "non-instinctual" responses to challenges. Frequent variation and innovative behaviors are essential to primate behavioral plasticity. Playful animals may interact with their peers in ways that stimulate learning how to be a member of a social group. This promotes social cohesion (Poirier, "Functions") and mitigates aggression (Reilly, *Play*).

Play may develop survival skills. Symons (*Play*) observed that the "aggressive play" of rhesus monkeys perfects skills for avoiding predators and winning battles. He concluded that play *is* a product of evolution. The adaptive significance of play is demonstrated by the amount of time devoted to it: sleeping, obtaining food and eating are the only other activities more frequently observed (Poirier, "Functions").

The most important function of play may be *learning* motor, social, and perceptual skills which enhance neural development (Baldwin and Baldwin). Though play is fun, it is transacting serious business (Reilly, *Play*).

## **b) Tool-using**

Humans are not alone in employing tools. Chimpanzees in the bush use sticks to threaten predators, pick their teeth and "fish" for termites. They employ rocks to crack nuts (Schurig). Tool use requires that an animal differentiate itself, the subject, from a tool, the object, and possess a *purpose* for a planned action. Natural objects become "tools" when they

are used to accomplish the animal's goals (Schurig). Tool-using reveals both intentionality and higher levels of behavioral organization.

An evolutionary theory of tool-using behavior in chimpanzees demonstrates the precursors of "homo faber," man the fabricator (Arendt). Evolutionary stages of tool use range from (1) "body tools" such as claws or teeth; (2) "instinctive tools," innate for survival such as chimpanzee nest building; (3) "learned instrumentation of external objects," use of tools in the natural habitat for adaptation, for example, using stones to open nut-like fruits; (4) "intelligent tool use," to achieve goals expediently, with planning and foresight; and (5) the "systematic transformation of objects and materials in nature via *work* in a *society*" (Schurig 22-23). Chimpanzees meet the prerequisites for level 3 and 4 tool use, but only humans are fully capable of level 5.

How do chimpanzees learn to use tools? They playfully explore objects in their environments when it is safe and they observe others, usually their mothers, using tools (Schurig). Learning to use tools may produce a whole new behavioral organization. Because of fierce competition for food, chimpanzees usually immediately eat all food seen. However, when they learn to use stones as hammers, they also begin to gather and store their food in a new organized behavior (Schurig). They gather several pieces of fruit at one time, open them in an ideal place and *then* eat them. This complex, goal-oriented action is an important foundation for the development of human economies and decisive for hominization, as in hunting-gathering.

Both tool-using and the new organizations of behavior are *learned*, not species-specific. Higher levels of tool-using (levels 3 and 4) are not universal, but are only found in specific populations and habitats. Although chimpanzee tool using seems simple in comparison to human tool use, it marks an evolutionary leap. For, in contrast to instinctual behavior, it requires a goal, planned action and foresight, agency on the part of the animal and an objectification of space and time (Schurig) creating new organizations of behavior which may be foundational for work.

### c) Exploration and curiosity

White's concept of motivation applies to humans and other animals. Monkeys solved a problem when the only reward was the opening of a

window, allowing them to see the normal activities occurring in a lab. Animals demonstrate a persistent tendency to explore their environments with the proverbial curiosity that led to the cat's demise. White's experiments validated an independent "exploratory motive" which requires no external reward except the opportunity to explore a novel environment.

Other theorists have posited two additional motives besides exploration, for activity and manipulation. When animals are given the opportunity they will explore, manipulate novel objects and act. The common biological significance of these three motives is learning "competence," how to interact effectively with the environment (White). They are energized not by external rewards but by the "feeling of effectance." The organism seeks satisfaction through exploratory, varying and experimental actions producing changes in its experience. It learns how the environment can be altered and the consequences of such changes.

#### d) Development

Wordsworth, in his "Ode on the Intimations of Immortality," wrote of the *intentional* nature of the child:

See, at his feet, some little plan or chart,  
Some fragment from his dream of human life, shaped by himself with  
newly-learnéd art. (150)

A man from the United States—of course—stuffed 100 rattlesnakes into a bag in 28 seconds! (Donaldson). Such activity reveals a fundamental quality of human nature. People are remarkable "intention generators" (7) who set goals of the most amazing diversity, beginning in infancy. Neonates, rather than being passive, have intentions and voraciously explore events in their environments to accomplish them.

Exploration *directed* by the infant has important consequences for later development, including capabilities of the mind (Donaldson). Innovative research methods now enable infants to exercise control in experiments. They may learn to focus a picture by a certain frequency of sucking. Babies in the first six months of life quickly learn to exercise agency and seem pleased when they do. The infant's intense concentration upon the environment appears to be motivated by delight at being a cause (Groos).

Does this desire have any practical value? Jerome Bruner related the early arousal of intention to the development of the hand-eye-brain system which enables not only high manual adaptability but also the "emergence of the tool" (1). The *capacity* for intentionality is present from birth. Patterns of behavior, called "subroutines," initially reflexive and instinctual, are converted into intentional action, *when the infant has an opportunity to observe the results of her own acts*. Through playful, curious, exploratory behavior the neonate constructs goal-directed and eventually skilled action out of subroutines modified by feedback (5). Skilled acts are constructed to fit the tasks the infant wants to do.

## 2. Psychological Level

### a) Flow

In 1930, Bühler, a German child psychologist, used the term "Funktionlust" for the pleasurable sensation people experience when they use their biological potential to the fullest. The human spirit for occupation is manifest in one's desire to exercise capabilities, to make the most of what one has, especially in a novel or self-challenging way (Csikszentmihalyi).

Csikszentmihalyi, a social psychologist, studied artists at work. They were so deeply devoted to painting or sculpting, that they worked day and night, often with minimal monetary reward. However, when they finished a work they seemed to lose interest in it. The *process* of engaging in the work was what mattered, not the product or even a reward. Csikszentmihalyi consequently developed a theory of enjoyment called "flow theory." It emphasizes "auto-telic" activity (from the Greek "auto," self and "telos," purpose): activity engaged in for its own sake, rather than for some external reward.

People immersed in a wide range of activities, from rock climbing to performing surgery to playing chess, experienced "flow." An expert rock climber said: "You are so involved in what you are doing [that] you aren't thinking of yourself as separate from the immediate activity . . ." (39). Engagement in these activities gave participants a sense of discovery, a feeling of novelty and a challenge to explore the limits of their abilities: an experience of "Funktionlust" (Csikszentmihalyi).

The elements of flow include (1) a merging of action with awareness so the person is deeply involved, "in ludus"; (2) being totally present in

the activity; (3) being unself-conscious; (4) being in control; (5) experiencing coherent demands for action with unambiguous feedback; and (6) having no reward outside of the activity itself (Csikszentmihalyi). People will go to extreme lengths, pursuing their *unique interests* to experience flow. Perhaps that is what Reinhold Messner seeks at the North Pole.

The ability to enter or remain in a flow state requires a certain set of *perceptions*. If the person *perceives* the opportunities for action as evenly matched by capabilities, the activity may be pleasurable. However, if the person *perceives* his or her skill as *greater* than the challenge, boredom may result. If the challenge outpaces the self-perceived skill then worry or anxiety may occur. The individual may return to flow by either modifying the challenge or the skill required to meet it (Csikszentmihalyi).

#### b) Self-efficacy

Rodin ("Control") proposed that self-efficacy, the desire to make decisions affect outcomes and exercise control, is a basic motivator of human behavior. People want to believe that they can control their environments through their own actions. Perceived self-efficacy influences choices of activities and settings. My belief that I could *not* succeed at typing caused me to avoid taking typing classes. I still don't do it myself! I spend months preparing a lecture but I approach my VCR with dread and am discouraged in moments by its intransigence. The most effective teacher of efficacy is *direct mastery experiences*. In implementing the human spirit for occupation, nothing succeeds like success. I tend to do those activities in which I believe I shall succeed, working harder to accomplish them.

Perceived control is the opposite of Seligman's notion of "learned helplessness" in which people erroneously believe that they *cannot* affect an outcome through their own actions. The latter leads to passivity or inappropriate action such as self-abuse. Having even an *illusion of control* "may be an important characteristic of much adaptive human functioning" (Rodin 5).



### c) Interests

*Interests* fuel the human spirit for occupation and express its individuality. *Interests* are motives which attract and hold attention, occupying and engaging people in activity and directing their employment of time (Matsutsuyu 323). My interest in reading led me to purchase so many books that, long ago, I ran out of shelf space and now co-exist with towers of books. My credit card statement informs me that reading is one of my strongest—and most expensive—interests.

Matsutsuyu, a theorist from occupational therapy, related interests to competence via six propositions. First, "Interests are family influenced" (325): the family channels the child's developing potentials into individual patterns which become more differentiated throughout life. Second, "Interests evoke affective response" (325): they are felt as likes, dislikes, indifferences of preferences. Third, "Interests are choice states" (325): making interest choices enables one to be committed to one's live work as well as other occupations such as play, recreation and leisure. Fourth, "Interests can be manifest in effective action" (325): they lead people to engage in activities which are satisfying and have adaptive value. Fifth, "Interest can sustain action" (325): interest both attracts us and directs our attention, providing the energy for sustained effort. During the awkward phases of learning a skill, interest often sustains action in the face of frustration. Finally, "Interests reflect self-perception" (325): when I express an interest, I reveal something of who I am.

The authors of a recent study of the interests of men with spinal cord injuries, Rohe and Athelstan, expected that a reduced ability to *act* on interests would "change the composition and intensity of interests themselves" (93). Instead, the interests of these men who used wheelchairs, were as stable as those of their non-disabled peers. Pre-injury interests remained strong. Rohe and Athelstan concluded that such interests are unlikely to change. Rather, we should ascertain interests and then develop strategies for enabling people to act on those that are no longer physically possible by modifying the environment and by using ingenuity. The human spirit for occupation, motivated by interests, seeks to continue its unique expression in spite of even severe physical impairment.

### 3. Sociocultural Level

#### a) Culture

The human spirit for occupation is expressed and modified in the context of a community which has its own culture. Cultures are historically created designs for living (Kluckhohn 923). Occupation is embedded in culture which is not merely a "tissue of externalities" but rather is "built into" the person (Kluckhohn 967). People want their occupations conducted in particular ways, whether these be the way they eat (Kass), carry out daily routines, or have fun and relax.

Bruner (*Acts*) argued that actions need to be understood as emanating from culture and its quest for meaning. Cultural invention overcomes biological limits, for example, through development of new skills, organization and technology. "The tool kit of any culture can be described as a set of prosthetic devices by which humans can exceed or even redefine the 'natural limits' of human functioning" (21). People construct meanings within their own cultures. To understand humans you must try to understand (1) how their acts are shaped by their *intentions* and (2) that these intentions are realized only through participation in the symbolic systems of culture (33).

#### b) Daily Routines

The learned disciplines have *underestimated* the significance of the culturally shaped daily round of activities. These "activities of daily living" form the glue which connects people to their culture. An 11-year study of the long-term survival of people with spinal cord injuries compared the characteristics of those who were still alive ( $n = 179$ ) with those known to have died ( $n = 46$ ) (Krause and Crewe). Researchers hypothesized that (1) the survivors would have superior adjustment to the non-survivors and (2) "medical adjustment" would be more central to survival than either psychosocial or vocational adjustment. Recent medical history or emotional state did *not* predict survival. However, strong support was found for a relationship between *activity level* and survival. People who were more active, vocationally and socially, were more likely to have lived. Thus, "Counseling must go beyond facilitating emotional adjustment" (Krause and Crewe 84). Rather, people with

disabilities need to be taught the *skills* required to become active participants in life, skills which may influence survival itself.

A Finnish psychiatrist asked, "Why is work so important to our patients? Why can't some other activity take its place?" Arnold Beisser (*Flying*), severely paralyzed by poliomyelitis just as he was finishing medical school, observed: "I was quite literally separated from the earth [due to living in an iron lung] . . . But *more important* [emphasis added], I believe, was being separated from so many of the elemental routines that occupy people . . . I felt no longer connected with the familiar roles I had known in family, work, sports. My place in the culture was gone" (166-67). The spirit for occupation, organized by cultural demands and values, seeks a place in the world through the individual's daily activities.

Being a worker not only means receiving a paycheck, important though that is, but it creates a social identity (Argyle). When meeting new people one of our first self-descriptors is the work we do, as categorized by society; for example, I say, "I *am* an occupational therapist."

Work is also one of those "elemental routines" which focusses and organizes the spirit for occupation. Shortly after I "retired" as a professor of occupational therapy, I awoke in a cold sweat. My work had been the major organizer of my time and resources. Now I had an unstructured 24 hours ahead of me and a closet full of good but unused business suits. I felt that my place in the culture might have disappeared, if even temporarily. Work as paid employment is not only valued because it contributes to economic productivity but because it connects people to their cultures, organizes their time into daily routines, and provides them with an identity.

### c) Rules

Culture shapes and sharpens the spirit for activity through the transmission of rules via socialization. "Rules" are a "shared understanding of how people ought to behave" (Edgerton 24). These cultural prescriptions, often implicit, are important, since they enable any member of a culture to predict and to assign meaning to others' behavior. Rules shape people's "personal routines . . . , the practices that make up much of the taken-for-granted ways of everyday living" (35). They require little conscious awareness once put into place through *habits* which are automatic, repetitive (35), and essential to adaptation (Dewey).

How are rules learned? Edgerton (*Rules*) hinted at the importance of play. All play has rules even if the only rule is "this is play" or when and where play is appropriate. Reilly (*Play*) identified three classes of rules which children learn through playful exploration of their environments: rules of objects (how *things* act and work), motion (how the *body* acts and works) and people (how to *interact* with others). Play is a "rule processing" form of behavior which relates to the development of competence within a social context: "To be competent man must know what he is doing and knowing can be defined as knowing the rules" (16).

Man the tool maker is also man the rule maker, providing new tools of mastery. Rule learning through occupation follows a developmental sequence. It begins with sensorimotor mastery in the play of early childhood, to social role behavior in the symbolic play of later childhood, profit and loss in the co-operative and competitive games of adolescence, and finally craftsmanship and sportsmanship which support adult workmanship (Reilly, *Play* 16). Play and work, rather than being dichotomous, form a significant *continuum* of learning within a culture.

#### d) Work

Success in work requires not only skills but ability to follow implicit rules and demonstrate acceptable work habits. Mothers who had been on welfare when placed in jobs quickly went back on welfare (*Los Angeles Times* 10 April 1995: A19). They could not get to work on time, dress appropriately, or treat the boss with respect. Knowing and following the rules of the work culture are at least as important as physical skills. Success of workers with cerebral palsy depended as much on good work habits as degree of impairment (Cromwell). Learning culturally mandated rules is a necessity for competence. Work is a cultural imperative. People who do not work may become depressed, ill, or lose their sense of life purpose (Argyle).

The need to do something valued by the culture and oneself is not limited to the so-called "able-bodied." Vash, a psychologist who uses a wheelchair, observed that the impact of disablement is largely contingent on the extent to which it interferes with "*what you are doing*" (15). Occupations interrupted by disability are often as central to people's happiness as the impairment. At the pinnacle of his career, Reynolds Price, a prize-winning novelist, developed cancer of the spinal cord. His

life had always meant steady work, consisting of 16-hour days "chained to an easel or desk" (187). His productivity increased during his illness. In the 10 years after a tumor was found, he completed 13 books. Work provides culturally sanctioned evidence of one's capability, a precious commodity especially when disability and handicap may erroneously symbolize incompetence.

#### **4. Spiritual-Transcendental Level**

Occupation relates to the sacred, creative, transcendent experiences of living. These elusive qualities may be seen in the human search for coherence and meaning through pattern making. Donaldson proposed that a "value-sensing" mode concerned with emotions, parallels the development of the intellect in humans. Much human suffering stems not so much from external circumstances but from the ways we deal with them. Insufficient attention has been given in Western societies to learning how to regulate emotions, not only in ridding ourselves of undesirable ones, but in achieving valued emotions such as serenity and peace.

Humans may seek to reduce suffering or generate desirable feelings through occupation which creates new patterns of meaning. Reynolds Price believed that almost any kind of work has a "ready-made routine for muting painful cries from the self" (187). His "hungry will" to work transcended both the reality of disability and threat of death (59).

##### **a) Work in Solitude**

Anthony Storr, a British psychiatrist, proposed that intimate relationships are not the only source of happiness. Sigmund Freud believed that psychological health was constituted of the ability to love and work. Storr observed: "We have over-emphasized the former, and paid too little attention to the latter" (8). Creative people, classed among the world's great thinkers, have often lacked close personal ties. Descartes, Newton, Locke, Pascal, Spinoza, Kant, Leibnitz, Schopenhauer, Nietzsche, Kierkegaard and Wittgenstein lived alone for most of their lives (Storr). People of genius may find their chief value in the "impersonal" rather than the personal. The impersonal included interest in doing almost anything: "interests, whether in writing history, breeding carrier pigeons, speculating in stocks and shares, designing aircraft, playing the piano or

gardening, play a greater part in the economy of human happiness than modern psycho-analysts and their followers allow," Storr believed (xii).

Two opposing motives operate throughout life, one to bring us close to other humans and the second for autonomy. The second motive is as important to adaptation as the first and it often contributes to creativity. "The creative person is constantly seeking to discover himself, to remodel his own identity and to find meaning in the universe through what he creates." Creativity is a valuable integrating process which, "like meditation or prayer, has little to do with other people, but which has its own separate validity" (xiv). The most significant moments in the creative life often occur in solitude. The need for solitude and preoccupation with personal integration through activity, seen in the lives of gifted, creative individuals, are also needs of more ordinary human beings. But few works in the social sciences mention "interests" nor do they link the pursuit of interests to experiences of meaning, happiness, discovery or creative contribution.

Beethoven demonstrated the significance of solitude in the life of a creative artist. His deafness, which probably began in 1796 when he was 26 years old, represented both a humiliation and barrier to forming close relationships. However, this "enforced solitude" might have contributed positively to his creativity by permitting total concentration upon composition. That was the only thing that kept him from despair or suicide.

Storr criticized his fellow psychiatrists for de-emphasizing the importance of interests to the human search for some pattern that makes sense of life. In situations of extreme deprivation such as solitary confinement, maintaining and nurturing interests may prevent mental collapse and subsequent death (Storr 153). Remember the example of Brian Keenan. The capacity to be alone while pursuing and expressing one's interests, is a valuable spiritual resource.

## **b) Health**

I view health as a positive attribute, a "well-beingness," integration, and completeness rather than as the absence of impairment. A person may achieve this state while still having an "imperfect" body, as seen by an outsider. The spirit for occupation may potentiate health even for the millions with chronic impairments.

Adolph Meyer contributed uniquely to occupational therapy's view of human beings ("Philosophy"). His "naturalistic psychiatry," developed in the early twentieth century, focussed on the person's everyday doings and actual experiences as primary resources for health (*Psychobiology*). Health depended upon one's levels of activation as well as capacity for satisfying engagement in activity. Satisfaction in living was attained through a balance of *Performance and Mood over Capacity, Opportunity and Ambition* in the light of a *Vision of Ultimate Attainment and Appreciation by others*, expressed in this formula (81):

$$\text{Satisfaction} = \frac{\text{Performance and Mood}}{\text{Capacity; Opportunity, Ambition}}$$

: = (in the light of) Vision of Ultimate Attainment  
and Appreciation by Others

These relationships were qualitative, dynamic and interrelated. For example, capacity was modified by *opportunities* for acting as well as *ambition* or motivation to act. All of these affected performance and mood. Meyer placed this relationship within the context of culture, showing that other people's appreciation of what we do contributes to our satisfaction. He exuded an optimistic view of people including his patients. All people possessed potential capabilities. "A study and use of the assets, at the same time we attempt a direct correction of the ills, is the first important condition of a psychobiological therapy" (157). Capabilities discovered and nurtured could overcome psychiatric problems which Meyer ("Philosophy") viewed as "problems of adaptation."

People organize themselves in a kind of rhythm as they carry out their daily activities. They must be attuned to "the larger rhythms of night and day, of sleep and waking hours, of hunger and its gratification and finally the big four—work and play and rest and sleep which our organism must be able to balance even under difficulty" (56). He believed that only by "actual practice" could this balance be obtained, to provide healthy living as a basis for wholesome feeling, thinking and interests (56).

Meyer realized that nurturing the human spirit for occupation was not only important for the health of people with psychiatric conditions but for *all* people. Humans needed *opportunities* to work, to find pleasure in their

own achievement, to learn a happy appreciation of time and the sacredness of the moment. Though his patients had severe symptoms rarely seen today, Meyer viewed them as part of the mainstream of humanity (*Psychobiology*).

Almost half a century later, Mary Reilly ("Occupational"), one of the great thinkers of occupational therapy, articulated a similar, powerful hypothesis. She proposed "that man, through the use of his hands as energized by mind and will can influence the state of his own health" (2).

How can the human spirit for occupation be nurtured? In 1976 Langer and Rodin reported the results of their study of the effects on a group of nursing-home residents of enhancing personal choice and responsibility. Experimental group members were told, by the administrator, that they were responsible for making their own decisions about daily life. They could choose a small plant to care for, if they so desired. A second group, in the same home, was informed that it was the staff's responsibility to assure the residents' happiness. They, too, were given a small plant, but it was selected for them and cared for by the nurses. A significant improvement was seen for the first group in active participation, alertness, and a general sense of well-being. Eighteen months later, the researchers found sustained beneficial effects (Rodin and Langer). While overall death rates averaged 25% for the entire nursing home, only 15% in the responsibility-induced group had died, compared to 30% in the comparison group.

Let us try to identify some of the conditions which nurture occupation.

## 1. Challenge

Rather than desiring a homeostatic state humans seek or create challenges to overcome through our own actions (Csikszentmihalyi; Donaldson). These might range, in difficulty, from working a crossword puzzle to climbing Mount Everest. Challenges vary in the extent to which they provoke us to action without guaranteeing success. Responding to challenges successfully provides a sense of mastery and enables us, ultimately, to achieve adaptation.

Challenges speak to us symbolically. Some say: "You could do this in your sleep. What a bore!" Others say: "You'll never accomplish this. Just forget it before you fall flat on your face!" Somewhere in between these extremes is a challenge which says: "It's not going to be easy, but



you can do it!" The last alternative is a "just right challenge," neither too easy nor too difficult, but matched to the individual's capabilities. The environment presents the sort of dare which provokes and interests, goading us into optimal action, without overwhelming or "underwhelming" our capabilities. The "just right challenge" is highly individualized. One woman's boredom is another's anxious inaction, depending on interests, past experiences of success or failure, expectations, feedback from one's own performance or coaching.

J. P. Burke, a theorist from occupational therapy, proposed four ways of posing an appropriate challenge: (1) creating "expectancies of success" by matching abilities to the task at hand; (2) fostering an "internal orientation" of being in control, rather than one in which the person feels powerless—I choose therefore I have control; (3) encouraging the development of a "belief in skill" in a safe, non-threatening, even playful environment; and finally, (4) promoting a "sense of efficacy" by creating the conditions so that people may produce a desired change in their environments (White).

Acting to discover self-efficacy reminds me of a recovering alcoholic who complained to her Alcoholics Anonymous sponsor: "What am I going to do? I have no sense of self-worth." To which the sponsor replied, in the blink of an eye: "How long has it been since you've done something worthy?" The sense of efficacy obtained through the exercise of skill contributes to both self-valuing and ability to overcome real environmental challenges (Dawes). Burke's four motivational factors create a "just right" challenge from the environment and foster an adaptive response.

## 2. Affordances

J. J. Gibson, a psychologist, introduced the term "affordance." "The affordances of the environment are what it *offers* the animal" such as shelter and raw materials for tools (127). Eleanor Gibson, his wife, asked how a child comes to perceive the world as a place that *affords actions*. Babies spend nearly all of their first year discovering the affordances in their environments. Exploration generates knowledge which evolves in due course into the ability to make predictions about the world.

The environments in which the spirit for occupation is activated, need to be better understood, especially those of the everyday world in which

people live and act (Lave; Reed). "Just right" affordances stimulate curiosity and encourage exploratory learning. Environments which nurture occupation seem to be those in which incoming information is discrepant or conflictual (Berlyne, *Conflict*). In a safe environment properties of novelty, complexity, surprise and ambiguity encourage exploratory action to reduce uncertainty (Berlyne, *Conflict*; Reilly, *Play*). Lessening ambiguity produces positive emotions such as the sense of triumph we feel from solving a puzzle. Novelty, complexity and change encourage exploration when they are neither excessive nor minimal (Berlyne, *Curiosity*). This "right amount" of environmental demand is similar to the appropriate challenge that contributes to the experience of flow (Csikszentmihalyi).

Environments which are unsafe or devoid of positive affordances may stifle the human spirit for occupation. Instead they may foster boredom, depression, inflexibility, learned helplessness, and self-destructive or antisocial behavior (Anderson; Klapp; Storr). W. Wood, an occupational scientist, observed the deleterious effects of a barren environment upon the actions of chimpanzees. Animals in affordance-poor zoo environments engage in self-destructive or aggressive behaviors more frequently than when provided with novel opportunities for action. The proper environmental affordances give the organism-environmental system possibilities for agency, the raw materials for exploratory learning and adaptation.

### 3. Discovery of Unique Potential

Institutions often fit people into preconceived patterns of activity without discovering or cultivating interests which could spark self-directed actions. People in such environments still have intentions (Kohn). An environment which discerns what each person desires to do, offering free choices and opportunities for agency, nurtures the internal motivation to act.

If the goal is self-direction and agency, then it follows that institutional environments need to both assess and cultivate individual goals and interests (Law; Matsutsuyu). Robert Murphy, hospitalized with a spinal cord tumor, observed that the exercises he was supposed to do seemed "silly." Yet, as a professor of anthropology, he had broad interests and goals. Two of *his* priorities were to be able to continue his work and organize and control his own schedule, in spite of having a severely

disabling condition. These goals were not understood nor were his capabilities nurtured in the hospital. For example, a social worker asked, "What *was* your work?" revealing not only a lack of knowledge of his capability but implying that his work life had ended when he acquired a disability.

#### 4. Responsibility and Choice

W. Hacker, an industrial psychologist, empirically tested the conditions in a hundred jobs which enhanced worker productivity and satisfaction. These were: (1) enriched opportunities for workers' *autonomous goal setting* with freedom to predict and control their own activities; (2) potential for *making decisions* about procedures used; (3) opportunities to apply *one's own intellectual resources* in implementing the work; (4) chances to *co-operate* and obtain social support; and finally (5) opportunities to *engage one's capabilities* in work requiring frequent *action* (273). These principles might also apply to people undergoing rehabilitation. Participants might be more productive and satisfied if given opportunities for autonomous goal setting with freedom to predict and control their own activities.

One experiment tested such an approach (Wright). One hundred patients with severe disabilities underwent rehabilitation in a hospital which encouraged their maximum involvement. Patients designed their own schedules and solved problems as they arose. If a wheelchair needed repair, the patients worked out how to get it done. A year after discharge these more "autonomous" patients were compared to a control group who completed a conventional program at the same hospital. The "autonomous" group demonstrated greater sustained improvement and a lower mortality rate.

#### 5. Balance

Adolph Meyer believed that an optimal balance in one's daily round of activity was essential to health and satisfaction. Recently, a marijuana smoker said that he smoked the drug because "I'm bored, man," and that when he smoked it, "I feel that I could do anything." This revelation suggests a lack of opportunity to experience mastery through engagement in the real activities of daily life. In an information society, boredom is

common in spite of bombardment with information. For example, J. P. Robinson, who studies how Americans used time, found an inverse relationship between amount of time spent watching television and degree of satisfaction in the experience. O. Klapp, a sociologist, observed that boredom often results from dysfunctional *overloads* of information. We are bored because our environments are unbalanced, providing us with either too much redundancy or "too much noise" (11).

Such boredom is due to a lack of *interesting* information, not sheer amount. Our information-saturated environment has not produced greater meaning. In fact, the media-rich environment may override meaning (Klapp). Rather than "social placebos," such as drugs or alcohol, which may make people feel better without alleviating the information imbalance, occupation which is organized into satisfying patterns may enable people to achieve meaning through their own activities.

Adolph Meyer's idea of "giving opportunities rather than prescriptions" ("Philosophy" 641) may be read as nurturing occupation which not only replaces boredom with interest but obtains a balance between "good" variety such as discovery and "good" functional redundancy, such as rules, skills, habits and rituals. For example, the admonition, "Say no to drugs," is likely to be more effective when supplemented with "Say yes to occupation" as a positive alternative. Say no to a social placebo (drugs) while saying yes to discovery, interest and ritual (occupation). Tedium and noise may be replaced by action providing a balance of novelty and redundancy, thus transmuting boredom to engagement.

## 6. Optimism about Potential

A person in remission from cancer believed that the term "false hope" is an oxymoron. Desires are always realities to the person who has them. The social environment conveys hope or hopelessness, optimism or pessimism about each person's potential capability. M. Reilly ("Occupational") observed that the occupational therapy profession is based upon an optimistic view of human nature. It emphasizes people's potential rather than inadequacies. What effects do such optimistic expectancies have upon the human spirit for activity?

People are expected to be "realistic" about their capabilities. Some recipients of rehabilitation services may be criticized for holding onto unrealistic expectations. They may be counselled to adopt more "realiz-

able" goals, as Carolyn Vash was urged to become a secretary rather than a psychologist.

While "gross miscalculation" of competence may be troublesome, Bandura believed that optimistic self-appraisals of capability are advantageous for performance. "Veridical judgments can be self-limiting" (343), dampening the spirit for occupation. Overestimation of capabilities is linked to the extra effort needed to perform at a higher level, and then the discovery that one can perform successfully.

In elementary school, after suffering the humiliation of being the last one chosen for baseball teams, I spent many free hours practising batting. My mother convinced me that I could succeed. I still remember the satisfying "thunk" of the bat against the ball, seeing the ball fly for increasing distances. My feeling of competence was enhanced by my successful performance and later by my popularity as a team member. But, my mother's optimism energized my efforts. Later, my own optimism minimized any failure as temporary. A large amount of research supports the importance of the attitudes displayed by people in one's environment (Bandura). Optimism about potential helps people adapt to environmental challenges and develop beliefs about their capability so that they can act to control events that affect their lives.

The rehabilitation environment may overemphasize patients' liabilities and underestimate people's assets. Wright and Fletcher viewed this "pessimistic" context as counterproductive to the goals of rehabilitation. Providers are often so preoccupied with the negative (impairments) that they do not perceive what is right (abilities), underestimating people's resources and capabilities. Professionals need to attend to the strengths and assets of individuals and their real life environments while de-emphasizing deficiencies.

M. Montgomery, a theorist from occupational therapy, echoed Wright and Fletcher. She viewed the hospital-based occupational therapy department as a "resource reclamation center" (21). The occupational therapist's optimism about the patients' potential centered upon discovering their strengths, gained through evolution, ontogenetic development and learning. These resources, enhanced through occupation, changed patients into agents.

## 7. Valuing of Occupation

The information "saturated" society of the twentieth century seems to have forgotten the significance of having something meaningful to do. We de-emphasize the contributions of interests and skills to the quality of lived experience. Consequently, the value of occupation is in danger of being lost in the noise of random information.

The value of occupation is seen most dramatically when it is threatened by traumatic life events such as the onset of an impairment or by major social upheavals such as surges in unemployment or neighborhood deterioration (Anderson). Vash, severely paralyzed as a teenager, stated that "the impact of disablement is largely contingent on the extent to which it interferes with what you are doing" (15). Since the significance of being able to pursue one's interests and achieve mastery is not the most obvious quality associated with having a disability, it is likely to be overlooked while impairment is given centre stage.

Arnold Beisser (*Flying*) was both an ardent tennis player and a medical student just about to enter his residency when he became totally paralyzed and dependent upon an iron lung. He felt that his "place in the culture was gone," because he was unable to engage in the "elemental routines that occupy people" (166-67) or to connect with the familiar roles he had known in his family, work or sports.

Many people, looking at Beisser or Carolyn Vash would view their inability to move as their most salient characteristic. But, important though such impairment certainly is, preoccupation with the loss of motor control might blind us. We might fail to appreciate the equivalent loss of "something important to do," the frustrated spirit for occupation, no longer served by either their bodies or environments.

Beisser could not become a surgeon but he did become a psychiatrist. Although he could no longer play tennis, he did become an enthusiastic sports fan, authoring a book, *The Madness in Sports*, combining his interests in athletics and psychiatry. Beisser's "acceptance" was grounded in his discovery of the same satisfactions in new enthusiasms as he had known in the old. He needed his environment to create opportunities for something involving for him to do, and that it value occupation as essential for both his sense of competence and connection to society.

The roots of occupation emanate from all parts of the human system. Engagement in self-directed action reifies people's intentions, provides them with feedback, and enables them to achieve a goodness of fit with their environments. Being seized by one's occupation relates to survival, contribution, confidence, health, being in place in one's culture, creating joy and meaning through one's own acts and experiencing well-being and satisfaction in daily life.

The spirit for occupation is nurtured through opportunities for self-responsibility and choice, "just right challenges," safe and even playful environments which offer novel affordances, discovery of each individual's unique potential and interests, chances for autonomous goal-setting and decision-making, balances in one's daily routines, opportunities to work in solitude, optimism about potential and, most importantly, by affirming its significance to human life.

By nurturing the human spirit for occupation as essential to health, satisfaction, competence and social productivity, we strengthen the evolutionary glue which connects people to their environments and cultures, enabling them to find their place in the world along with a spiritual resource which sustains, transcends and delights.

## NOTE

1. The theme of the lecture on which this article is based was suggested by Reilly ("Occupational").

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