Reflections on the Human as an Occupational Being: Biological Need, Tempo and Temporality

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Abstract
Global health through occupation is contingent upon our understanding of the human as an occupational being. In this paper, I reflect upon two aspects of the human as an occupational being: 1) the biological need for occupation, and 2) tempo and temporality as a way of beginning to generate a blueprint for global health. Wilcock's theory on the human need for occupation proposes that people living in post industrial nations are diverted from engagement in occupations that function to meet biological needs. The theory largely addresses the issue of what kinds of occupations are likely to be health promoting, given a set of assumptions about the history of humans as occupational beings. On the surface it would appear that occupations that resemble those of prehistoric men and women would be optimal for promoting health and well-being, but these kinds of occupations are largely unsuitable for incorporation into contemporary lifestyles. Yet, there are elements of prehistoric occupations that can be recaptured in contemporary activity, and I speculate on the form such occupation might take as a way of addressing the general question of what kinds of occupations are likely to be health promoting.

The beginning blueprint for global health through occupation must also take into account the nature of occupational beings in relation to tempo and temporality. I argue that there is an intersection between tempo and temporality. The tempo of occupation is simply defined as its pace and rhythm. Temporality, in contrast, has to do with how we understand occupation in relation to past, present, and future events. When life is rushed as it is in the fast lane of modernity, the result can be the forgetting-of-being, or stated otherwise, doing without being. I suggest that healthier people and a healthier world could result from a blueprint generated through occupational science research that identifies the patterns of occupation that are likely to be maximally health promoting and the pace at which they should be undertaken.

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I wish to begin this talk today by thanking Ann Wilcock for inviting me to be a speaker at this Inaugural Occupational Science Symposium entitled “Global Health Through Occupation.” I have been enormously impressed by the work you have been doing in Australia and in New Zealand in occupational science and am honored to be able to contribute my thoughts to your discussion on an occasion such as this. In a recently published paper in the collection entitled Occupational Science: The Evolving Discipline1 my colleague Ruth Zemke and I compared the evolution of occupational science to that of the ontogeny of a child. Although occupational science was conceived at the University of Southern California through the vision of Elizabeth J. Yerxa, today, just as children do, it has a life of its own. Dr. Zemke and I wrote the following: “We think of the belief a mother may have when her infant is born—she may envision that the child, for example, will be popular, athletic and a star in every class play. But as the child matures, she discovers that she is shy, unpopular, scholarly, not athletic, and has no interest in drama. What the mother learns is that the development of this child is to a considerable extent out of her control”1(p.VII).

What Dr. Zemke and I had learned in the seven years since occupational science’s conception was that the discipline was developing in marvelous ways that we never could have imagined or predicted. Its shape, substance, direction and character were being molded by scholars throughout the world, and Australians and New Zealanders are among it most enthusiastic and significant contributors. Your thoughts, as well as those of others throughout the globe, are reflected in the collection of papers that have appeared in The Journal of Occupational Science: Australia (JOSA) and they have greatly enhanced my understanding of the complexities involved when we conceive of the human as an occupational being in these times of post industrial societies. Certain themes resound in the JOSA, concern with the plight of the structurally unemployed2-3, worries about the decoupling of biological needs and occupation in the post industrial age6-9, attempts to systematically study the relationship of time investment in occupation on health and happiness10-14, and the cultural and historical
differences in occupational patterns. I am impressed I might say not only by the themes that the journal addresses, but also by the moral high ground on which it seems to be consistently poised.

In addressing the theme “Global Health through Occupation” my aim today is to try to present aspects of the nature of humans as occupational beings that can give us clues as to how we might begin to design a blueprint for global health through occupation. The two aspects I will address are

1. the biological need for occupation, and
2. tempo and temporality, although if time permitted many other themes would certainly be relevant. So let me begin by plunging right into some thoughts on the biological need for occupation.

The Biological Need for Occupation

As we begin to consider aspects of the human as an occupational being, it makes sense to begin our reflection on our biological inheritance. Wilcock, relying in part on evidence from our primordial ancestors, has eloquently described this aspect of the human in great detail. At the same time, it is important to recognize that cats, dogs, chimpanzees and other mammals are also to some extent occupational beings, and because they are not as influenced as we are by symbolic systems, their daily regiments of occupations remain closely tied to their biological needs. Wood, in her review of the primatology literature, reports that on the average non-human primates spend the bulk of their time, nearly 98%, in three kinds of occupations:

1. resting and sleeping;
2. traveling and foraging; and,
3. in social activities such as playing and grooming.

In contrast, in her dissertation research, she found that chimpanzees in captivity living in a barren zoo enclosure were impoverished in their daily customary round of activity; they were what Wilcock would call occupationally deprived. Wood identified three adaptive strategies they used to stay healthy, although their days hardly resembled the patterns I have described that would be typical in the wild. First, the chimps seized upon opportunities for occupation; second, they would invent social games; and finally, they would employ occupations as a means of mitigating social conflict. However, despite these adaptive strategies, the chimpanzees daily repertoire of occupations in the enclosures was blemished by the presence of behavioral aberrations and passivity, as well as functional retardation. For example, the chimps would repeatedly thrash about making clumsy attempts at nest building, a skill their counterparts in the wild master. Wood concluded the intensity of the chimpanzees’ biological requirements for occupation, and the pathology that was a consequence of occupational impoverishment.

Just as chimpanzees need to be occupied, so too do humans; but not, it seems, in any haphazard or piecemeal way. Wilcock has developed a convincing theory that proposes that occupations that will best meet human needs are those which serve the following functions:

1. to provide for immediate bodily needs of sustenance, self-care, and shelter;
2. to develop skills, social structures, and technology aimed at safety and superiority over predators and the environment; and
3. to exercise personal capabilities to enable maintenance and development of the organism.

A study that my colleagues and I at the University of Southern California recently conducted can be interpreted as finding support for Dr. Wilcock’s perspective. The study was on the effects of occupation on health and subjective well-being. In this randomized field experiment, 361 well-elderly ethnically diverse individuals constituted the sample. They were all living in federally subsidized housing in downtown Los Angeles and were randomly assigned to either

1. an occupational therapy (OT) group led by a registered occupational therapist;
2. a nonprofessionally lead social control group; or
3. a non-treatment control group.

Both the OT group and the social control group received a pretest, 9 months of intervention, a posttest and follow-up testing 6 months later. In contrast, subjects in the no treatment control group were pretested, posttested after 9 months of no intervention whatsoever, and then given the follow-up testing.
Although in certain aspects the occupational therapy program capitalized on traditional occupational therapy, it was, nevertheless, largely guided by the occupational science literature. Its central theme was health through occupation, with the intervention aimed at helping participants to select and engage in occupations that were, in part, aimed at addressing the kind of biological functions Wilcock describes. For example, the elders were challenged to tackle safety issues, exercise their physical and mental capacities, and venture out into new territory and risk taking situations. In contrast, the social control program focused on a mix of diversional activities designed to encourage social interaction only.

Impressively, what we found was that in contrast to both control groups, between which there was no appreciable difference in outcomes, the OT intervention resulted in significant health benefits. In layman’s terms, simply “keeping busy did not keep our subjects healthy” any more than offering no program at all. But facilitated participation in occupation that exercised and even stretched capacities did. The study also provided a rigorous test of the relative effectiveness of a professionally versus a nonprofessionally designed activity program.

The results of this study raise questions about precisely what it was about the OT intervention that created the dramatic effects on health that were documented on the RAND SF-36 - Item Health Status Survey, the “gold standard” outcome measure used in medical research in the United States to assess health related quality of life. The subjects in the experimental group showed significant gains over controls on 7 of the eight subscales, and results on the eighth approached a statistically significant positive effect. In contrast to both sets of control subjects, who showed declines across the board on this instrument, the OT subjects actually showed improvements on five sub scales, and on the three on which they declined, the decline was substantially less than in the control subjects. Beyond this, experimental subjects also benefitted significantly in life satisfaction.

If we hope to create global health through occupation we must further pursue systematic research that uncovers the mechanisms that rendered these effects. Although one might argue that on the surface this intervention in no way resembled the life experienced by prehistoric men and women, for these elderly individuals trying to survive in downtown Los Angeles, it provided adventure, challenge, social bonding, travel, and numerous opportunities to solve and stretch one’s capacities.

We are now situated at the threshold of developing an understanding of the kinds of patterns of daily occupations that will preserve and promote optimal health, especially given the constraints imposed by economic concerns and the structures of paid work in post industrial societies. Cordain, a professor of exercise and sports science at Colorado State University in the United States believes that we need to take cues from our prehistoric ancestors. He calculates that Paleolithic men probably ran 10 miles a day carrying the equivalent of 25 pounds on his back. Women’s days were equally strenuous, carrying children, relocating campsites, gathering and lugging vegetables and other foods, and processing meat and hides. Dr. Cordain believes a comparable intensity of vigorous exercise is still required by our genetic blueprint just to maintain our physical capacities.

Would our customary round of activities be more health promoting if it required the exercising of physical capacities to this extent? Unfortunately the hours of most days for most people in post industrial nations are consumed by sedentary paid work. Sedentary Americans on the average burn about 1800 calories per day and with their typically high carbohydrate diet a significant number are predicted to be overweight with potential health risks in the year 2230. As a point of comparison, I would add that work performed by construction and agricultural workers (a rapidly dwindling segment of the U.S. workforce) consume approximately 3500 calories per day; endurance athletes may burn 5000. Hunter-gatherers are thought to have burned about 3000. In her article entitled “A Theory for the Human Need for Occupation,” Wilcock included a picture of a sedentary worker, exercising his mental capacities while working at a computer, whose biological needs for occupation are presumably unmet. This worker is at risk for poor health because of a sedentary lifestyle.

Our challenge in creating global health through occupation is not a simple matter of encouraging people to engage in occupations that require physical exertion. In the post industrial world, biological requirements for health and the demands on one’s time given the kinds of jobs that are available in the workforce are at cross purposes. Society is only now beginning to understand the deleterious effects of the post industrial lifestyle on health. After all, much of what has driven so called technological progress has been the desire to free humans from many of the very occupations and tasks we now believe may be health promoting. When machines were invented they saved time and labor, but they also brought about significant alterations in lifestyle design that had not been studied for their long term effects on health and
psychological well-being. Cars rendered the daily brisk walk or run optional rather than a functional necessity, and, at this very moment, faxes, computers, and e-mail, while having the advantage of building global communities, may also be creating a kind of social isolation as people become increasingly home bound and the social venues of work are disassembled. In order to create global health through occupation, in short, I believe occupational scientists will need to systematically tackle the problem of lifestyle redesign in the 21st century. To do this, they must take into account the biological needs of the human in relation to the existing requirements for economic survival in our post industrial nations, the impact of technology on how we spend our time each day, and theory and research on the effects of daily patterns of occupation on health and psychological well-being.

Tempo and Temporality

It is not only what occupational beings do that impacts their health and well being, but also the speed with which they do it. One can rush through a multitude of things, barely skimming the surface or, by contrast, one can move through occupations at a slower pace creating deeply meaningful experiences. Daily life has rhythm; it has tempo. Our occupations are embedded in the stream of time and we experience them not only by virtue of their tempo, but also because of their temporality.

Temporality has to do with the temporal character of occupation. By temporal character, I mean that occupations are imbued with meaning in relation to one’s sense of the past, present, and the future. According to the German philosopher Heidegger, as we act in the world we do so against a background of past experiences which we use to make interpretations in the present and to project future possibilities. Through temporality, the occupational being has a sense of where she is going and that she is living to realize future possibilities.

Temporality has not attended enough to the pace with which they do it and its personal meaning. Our occupational science research has been more concerned with what and how much people do, but not with the speed with which they do it and its personal meaning.

An extension of this idea is that tempo and temporality seem to intersect, that is that tempo effects memory, and memory, in turn, impacts our ability to grasp the temporal character of our occupations. The Czechoslovakian novelist Milan Kundera suggests through his novels and other writings that the fast pace of life in post industrial societies is resulting in the forgetting-of-being: speed and efficiency risks transforming humans into numbered objects. Going through the motions of “doing,” Kundera warns us, can erode our “being.” To elaborate on this theme he has recently published the novel, Slowness in which two stories occur in parallel. One is of modern people attending a professional meeting in entymology at a hotel in France that had once been the chateau of a marquis. Now a highway passes in front of it. The second story is of Madame T and her chevalier who are having a romance at the same chateau but in the 18th century. The two lifestyles are depicted in sharp contrast and ultimately provide a harsh critique of modern life.

Back now to memory and the forgetting-of-being, the intersection of tempo and temporality. In a highly philosophical passage of the novel, Kundera describes the “secret bond between slowness and memory, between speed and forgetting” (p. 39). He goes on to describe a very ordinary occurrence: “A man is walking down the street. At a certain moment he tries to recall something, but the recollection escapes him. Automatically, he slows down. Meanwhile, a person who wants to forget a disagreeable incident he has just lived through starts unconsciously to speed up his pace, as if he were trying to distance himself from a thing still too close to him in time” (p.39). Then Kundera goes on to interpret this experience as follows: “In existential mathematics, that experience takes the form of two basic equations: the degree of slowness is directly proportional to the intensity of meaning; the degree of speed is directly proportional to the intensity of forgetting” (p.39).

Assuming Kundera’s perspective is valid, the fast pace of life in post industrial nations may not only be producing stress and consequent ill health, but also robbing occupational beings of a satisfying and meaningful life course, of an essential feature of existence itself. It is not sufficient to simply participate in occupations, the occupational being must also be able to remember and understand them within the framework of an unfolding life story. At this point our occupational science research has been more concerned with what and how much people do, but has not attended enough to the pace with which they do it and its personal meaning.

Not only is Kundera critical of the pace of modern life in this novel, he clearly celebrates slowness. The eighteenth century is presented as a period in which moments are savored and remembered and in which occupational beings are absorbed in what they are doing, bound to slowness through cultural rules of etiquette. In contrast, the modern characters are unable

to remember such things as with whom they had their last sexual encounter, to give scheduled scientific presentations although standing at a podium, or to remember conversations even with intimate associates. Cars, motorcycles, and highways are presented in a negative light, assaulting the sensory systems of occupational beings and sometimes leading to their deaths. Kundera reminds us of how much power speed has over us as we travel on the fast lanes of modern life.

Like Kundera, the sculptor J. Seward Johnson seems to be celebrating slowness in ordinary occupation. His bronze sculptures typically capture passing moments in which an occupational being is caught up in the frenzied pace of modern life pauses, relaxes, and reclaims what he or she fundamentally (even biologically) needs: sitting on a park bench and knitting, laying down in the grass with a friend and watching the movement of clouds, or joining nature on the banks of a river and going fishing. In fact, Mr. Johnson’s most recent sculptures are not of post industrial occupational beings at all. These sculptures are of people who lived in the 19th century and were originally rendered in the paintings of the French impressionists. Johnson’s retreat into this period, like Kundera’s novel, is reminding us of what life was like when it moved more slowly.

Julier Schor, the Harvard economist who wrote the best seller “The Overworked American: The Unexpected Decline of Leisure” is quoted by Walljasper as stating “that the major cause in the speed-up of life is not technology, but economics” (p.43). Results of her research make a compelling case that work in the United States (for those who are employed) now demands a greater investment of hours. Walljasper quotes her as follows: “After a long workweek, the rest of our life becomes a rat race, during which we have little choice but to hurry from activity to activity, with one eye always on the clock. Home-cooked meals give way to frozen pizzas, and Sundays turn into a hectic whirlwind of errands” (p. 43).

By now perhaps I have convinced you, if you had not been so convinced before this conference, that the lifestyles of occupational beings from “advanced” post industrial nations are spiraling out of control. The question that now arises is how could this have happened? Why have so many of us joined the grand march that is resulting in the collapse of quality-of-life as well as the ecological integrity of the planet? Kinney’s paper which appeared in JOSA provides an answer that has to do with how occupation insidiously becomes linked with notions of money and power. Much of what people do with their time in post industrial societies Kinneycalls “charades of money, power, and work that undermine productive occupation in favor of activity which creates the impression of the power to command an impressive flow of money” (p.25). In short, and perhaps a bit too simply put, we have been seduced into participating in these charades so that we can appear wealthy.

However, I do not believe that such seduction is always a conscious choice. I think, as does Juliet Schor, that it is more typical to become trapped in a work and spend cycle. This egregious situation occurs because post industrial societies produce more and more products for people to buy. On weekends, after a long workweek, individuals travel to malls to buy unnecessary items they mistakenly think will bring them happiness. They accrue debt and then must work even longer hours to pay off their debt. As a final unfortunate note, the debt creates stress and so the cycle continues.

In all of this, both an asset and the Achilles heel of humans as occupational beings is their highly developed symbolic systems which allow them to adapt to the world in their unique culturally mediated style. This capacity allows humans to read the minds of others, imbue their occupations with meaning, and make sense of things they do in terms of their past, the present, and of their future. But it also makes them vulnerable to absorbing the culturally dictated valuations of occupation so that for example, going to the mall becomes more valued than hiking. As a result, they are at risk for lives of boredom and desolation, which may nevertheless, have economic benefits for business and industry. For cats, dogs, and even chimpanzees, valued occupations are likely always to be those that meet biological needs. In humans, the value of particular occupations is primarily appropriated by culturally driven discourses and practices. Our challenge, as occupational scientists, is to create a new discourse, substantiated by research, that begins to illuminate not only what people need to do to stay healthy, but also the tempo with which they should do these occupations. Results of our research may launch a full-fledged questioning of the frenzied pace of activity in post industrial societies and may thereby result in widespread lifestyle redesign.

In conclusion, I believe our work in occupational science has the potential for creating a blueprint for global health through occupation. I envision that the focus of this blueprint will at the very least be on the intersection of biological need, occupation, tempo, and temporality. If followed, the outcome will be a world in which occupational beings are happier and
healthier, better able to savor, remember, and give meaning to their moments of absorbedness in occupation, and able to appropriate value to occupations other than employment. Our blueprint is likely to return humans to their roots as greater numbers of people enjoy ecologically sound occupations closer to nature and its natural rhythms. We must remember that the ecological integrity of the planet is partly contingent upon what people do with their time every day. Through this plan not only is the earth more likely to flourish, but so too will the occupational beings who live on it and who will now have the time to link, as Dr. deRozario explains, their doing with being.

References


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