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Environment and ageing

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[...]

Theoretical perspectives

Historical influences

From its inception, environmental gerontology has emphasised the theoretical understanding of person–environment relations as people age. For recent overviews see Oswald et al. (2006), Scheidt and Windley (1998, 2006), Wahl (2001) and Wahl and Weisman (2003). This is important because there is a tendency in scholarly work to ‘de-contextualise’ human ageing from the environment, the day-to-day surroundings in which a person’s growing older really takes place. Environmental gerontology has focused particularly on the physical/material and spatial component of the context of ageing, while acknowledging that there are close links between physical, social, psychological and cultural environments. The ‘Gestalt switch’ from ageing persons to ageing person–environment systems has not occurred accidentally; it has taken a number of theoretical avenues and there is still a need to continue to develop and refine existing conceptualisations. That said, we begin by considering the historical roots of environmental gerontology, including a discussion and critique of currently well-accepted theoretical approaches, returning to suggestions for future theoretical development later in the chapter.

The ‘birth’ of environmental gerontology has been linked to the eminently readable contribution by Kleemeier (1959). However, this work was influenced by a range of earlier authors from sociological and ecological traditions, including the Chicago School of Urban Sociology in the 1920s and 1930s (Park et al., 1925). Built environments such as

run-down urban districts were regarded for the first time on an explicit level as having a negative impact on health and welfare. The theoretical writings of German psychologist Lewin in the 1930s and 1940s (see Lewin, 1951, for an overview) – which promoted the view that behaviour should be regarded as a function of the person *and* the environment influenced contextual thinking in the behavioural and social sciences. At about the same time, Murray (1938), an American researcher of personality, introduced the term ‘press’ as an indication of how personal growth may be affected both objectively and subjectively by the context in which a person is situated. In addition, prominent learning theories in psychology and education during the 1950s and 1960s attributed much to the influence of environment in all stages of human development, and this proved an important stimulus for environmental perspectives in gerontology (see Baltes, 1996, for a review). In its most radical version, the message of learning theories applied to ageing is that it is not chronological age per se but constraining environments that can be non-reinforcing or helplessness-provoking that lead to age-related loss in physical and mental functioning (Seligman, 1975).

The second half of the twentieth century saw these earlier developments overshadowed by the impact of the social sciences within gerontology. Alongside the traditionally strong consideration of biology and medical conditions, social influences such as the role of economic circumstances, family and social surroundings, as well as housing and neighbourhood quality, became acknowledged as factors able to shape ageing. Finally, the emergence of environmental psychology in the 1960s and 1970s provided another set of roots for environmental gerontology. Old age became an attractive area for early work in this field (Pastalan and Carson, 1970) due to the assumed vulnerability of the ageing organism to environmental demands as well as the existence of specially designed environments for ageing people such as long-term care institutions. Such research influenced the development of ecological theories of ageing later in the twentieth century.

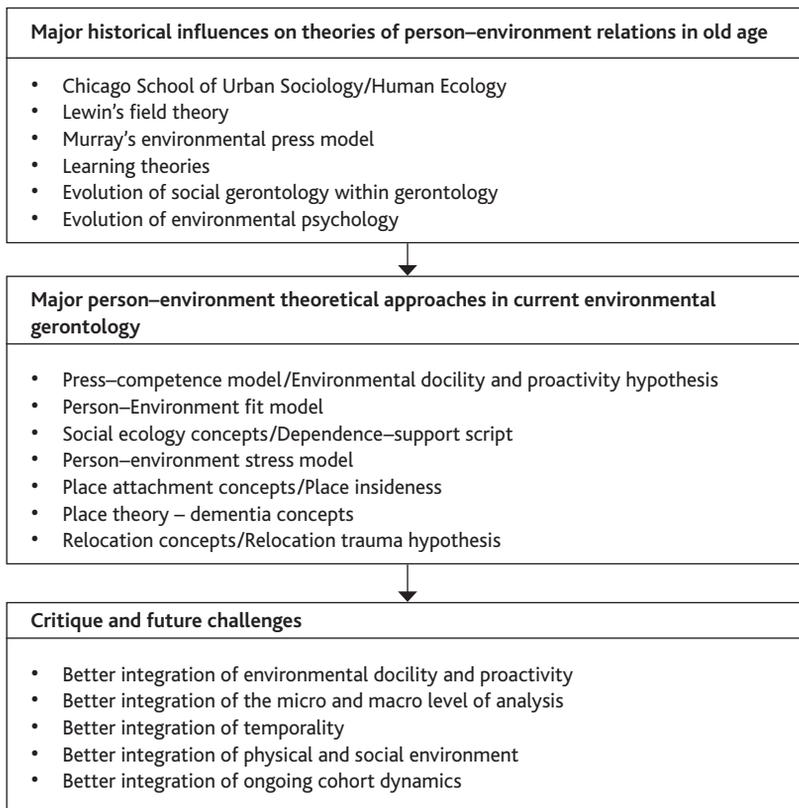
Ecological perspectives

The press-competence (PC) model

In Figure 13.1, the central box provides a synopsis of the major person-environment theoretical developments in environmental gerontology, a field that has been dominated by North American researchers. In the press-competence model suggested by Lawton and Nahemow (1973) with direct referral to Murray (1938) and Lewin (1951), there is a major assumption that the lowered competence of the older person in conjunction with

strong ‘environmental press’ negatively impacts on behaviour and well-being (Figure 13. 2). In earlier conceptual and empirical work, the term ‘environmental docility hypothesis’ was coined to address this basic mechanism in person–environment relations (Lawton and Simon, 1968). Lawton and Simon revealed how the patterns of social interaction of older people in institutional settings depended on physical distances, with greater distances more strongly undermining social relations – thus pointing to the ‘environmental docility’ of the older organism.

Figure 13.1: Historical influences on theory development in environmental gerontology



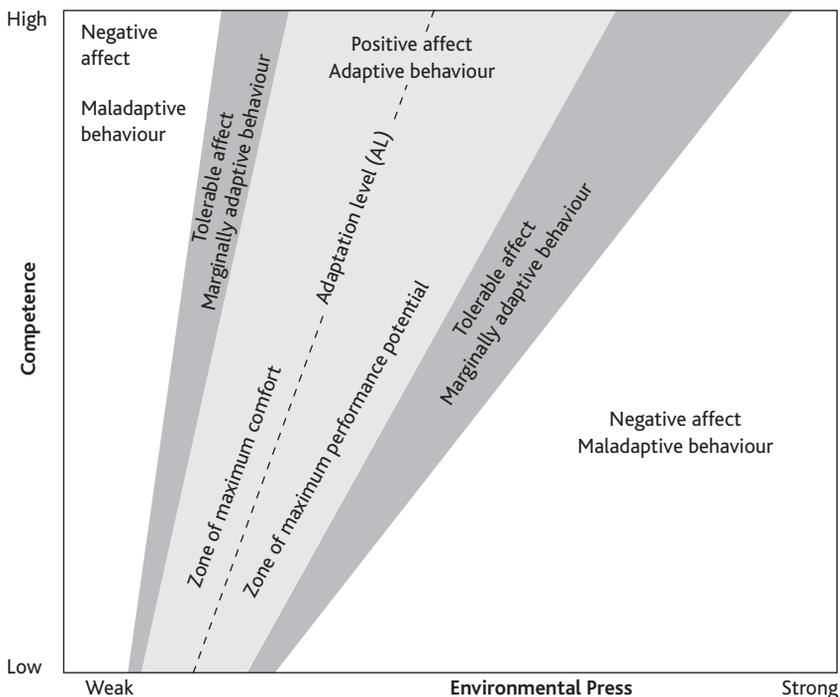
The press–competence model has been criticised for promoting a one-sided image of older people as ‘pawns’ of their environmental circumstances. In the 1980s, Lawton introduced the concepts of *proactivity* and *environmental richness* (Lawton, 1985, 1998) in order to address this criticism.

The press–competence model takes quite a general approach in defining both ‘competence’ and ‘environmental press’. For example, ‘competence’ could relate to sensory loss, loss in physical mobility, or cognitive decline;

and ‘environmental press’ could relate to low housing standard, bad neighbourhood conditions, or underdeveloped public transport. Also, ‘behaviour’ can mean basic activities of everyday living (such as dressing or washing) or leisure involvement; while ‘well-being’ covers positive and negative affect as well as cognitive evaluations such as satisfaction with life. The most central theoretical consequence of the PC model is that there exists for each ageing person an optimal combination of available competence and given environmental circumstances leading to the highest possible behavioural and emotional functioning for this person conceptualised by the adaptation level (Figure 13.2). Much empirical work in environmental gerontology, as well as practical work in terms of housing adaptation and designing institutions for the aged, directly or indirectly adheres to the PC model (Peace and Holland, 2001a; Scheidt and Windley, 2003; Wahl et al., 2003).

However, while acknowledging the importance of environment, it should be noted that the model recognises the complexity of interaction beyond environmental determinism. There is also recognition that in different circumstances levels of environmental press can be seen as positive, as well as negative, being stimulating and promoting engagement (Weisman, 2003).

Figure 13.2: Ecological/Press-competence model



Source: Lawton and Nahemow (1973) © American Psychological Association

The person-environment fit (PEF) model

Complexity is also noted in the person-environment fit model, a parallel development that has strongly underlined the role of motivation and personal needs rather than competence within person-environment processes. The basic assumption is that there is a mismatch between personal needs and environmental options, leading to lowered behavioural functioning and well-being. Empirical support for this assumption has emerged from studies conducted in institutional settings (Kahana, 1982).

Carp and Carp (1984) suggested further differentiation for the PEF model in distinguishing between older people's basic and higher-order needs in relation to the potential and limits of a given environment. Here 'basic needs' are conceptualised in a similar way to 'competence' outlined above (for instance, facilitating sensory and walking ability), whereas 'higher-order needs' may relate to issues such as privacy and affiliation which facilitate greater self-actualisation – reflecting Maslow's (1964) model of human needs. According to the Carp and Carp extension of the PEF model, different outcomes of misfit in both of these domains are to be expected. While person-environment misfit in the basic needs domain will predominantly result in reduced behavioural autonomy, misfit in the higher-order realm will predominantly undermine emotional well-being and mental health.

Social ecology (SE) concepts and the person-environment stress (PS) model

The third theoretical perspective outlined here can be defined as *social ecology* (SE) concepts which assume close links between physical surroundings and the social behaviours of persons acting within these settings (Moos and Lernke, 1985). The study of institutional settings has also formed an ideal arena for applying the learning theory perspective to ageing within social ecology thinking, the assumption being that staff will have different reactions to residents' antecedent behaviours, leading to different outcomes.

The empirical application of this model has produced profound insights into the role of the social environment for dependent behaviour in old age by repeatedly identifying robust interaction patterns characterised as a 'dependence-support' script (Willcocks et al., 1987; Baltes, 1996). According to this interaction script, staff tend to overly support dependent behaviours of residents, while independent behaviours are mostly overlooked. There are direct links here to Goffman's work on institutionalisation and the development of 'batch-living' (Goffman, 1961).

The interrelationship of all of these theoretical developments is apparent, nurtured by research that has been dominated by studies within age-segregated institutional settings. The person-environment stress (PS) model argues that environmental conditions, such as a lack of privacy or control due to the built or organisational environment specifically in institutions for the aged, should be regarded as stress..., evoking (Schooler, 1982). How people cope with stress-inducing environments will vary. For instance, some ageing individuals may feel psychological threat, apathy or indifference when faced with similar 'environmental press', rather than the satisfaction of facing such a challenge. Where older people have experienced negative psychological reactions, supportive interventions such as the systematic enhancement of control in institutional settings may enable them to achieve an optimal level of behavioural and emotional functioning (Langer and Rodin, 1976; Rodin and Langer, 1977). However, as already mentioned, institutional control may devalue personal autonomy. Environmental gerontologists work with these issues both theoretically and practically. For example, in Britain, a national study of residential care homes in the early 1980s (Willcocks et al., 1987) suggested the development of 'residential flatlets' that had potential for enhanced levels of privacy and autonomy for older people. This design and organisational innovation foreshadowed developments in both care homes and extra care housing (Netten, 2005; Parker et al., 2004).

Place attachment

In contrast to the foregoing approaches that focus mainly on the role of the objective environment, research concerned with the concept of place attachment addresses the gamut of processes operating when ageing individuals form affective, cognitive and behavioural ties to their physical surroundings (Gurney and Means, 1993; Peace et al., 2006; Oswald and Wahl, 2005; Rubinstein and Parmelee, 1992). Attachment to place may be reflected in the strength of such bonding, as well as in different meanings associated with places such as the home environment or specific landscapes.

One approach suggested by Rowles (1978, 1983) has focused on what he calls the many faces of *insideness of place* in old age. Whereas *social insideness* arises from everyday social exchange over long periods, *physical insideness* is characterised by familiarities and routines within given settings such as the home environment, such that the individual is able 'to wear the setting like a glove' (Rowles, 1983, p. 114). He labels the third element of place attachment as *autobiographical insideness* in that 'place becomes a landscape of memories, providing a sense of identity' (p. 114). Rubinstein (1989) focused on the more immediate environment of the home, developing

a complimentary model of psycho-social processes linking person to place. According to his terminology, *social-centred processes* include social norms and relationships to other people, *person-centred processes* concern the expressions of one's life-course in features of the environment, and *bodycentred processes* include the 'ongoing relationship of the body to the environmental features that surround it' (Rubinstein, 1989, p. 47).

Place theory and dementia concepts

The body of knowledge is always evolving and within environmental gerontology researchers are conscious of the changing characteristics and circumstances of older people within an ageing world. Gerontologists, particularly those living within developed nations, are concerned for those living with cognitive impairment, and the prevalence of dementing illnesses has increased from the late twentieth century. Consequently, 'place theory and dementia concepts' refers to the theoretical and practical challenge of providing good environments for older people with dementia, which optimise the person-environment interchange processes characteristic of this very specific human condition (Lawton, 2001). This work is driven not least by the hope that environmental design and re-design can make a difference for older people, even when major personal resources such as cognitive capacity are exhausted. Weisman's (1997, 2003) 'model of place' has received due recognition in this regard, and a cornerstone of this concept is its reference to environmental attributes important to secure the life quality of older people with dementia living in institutional settings. Numerous such environmental attributes have been suggested, covering the whole range from basic safety to stimulation, privacy and personal control (Marshall, 2001; Regnier and Pynoos, 1992; Weisman et al., 1996).

Relocation of older people

Finally, there has been a long standing debate within environmental gerontology concerning residential decisions across the life-course. Early research in the 1960s and 1970s was mainly driven by the 'relocation trauma hypothesis' in which negative health effects of relocation from home to an institutionalised setting were stressed (Coffmann, 1981). The empirical evidence was controversial, however, and was plagued by methodological problems such as selectivity of study samples towards the more frail, and missing control groups. Focusing on later life, Litwak and Longino's (1987) distinction between first, second and third moves relied on the assumption of a substantial association between chronological age and the type of move and the motivation for it. Whereas first moves often

take place early in the ageing process (close to retirement), and are usually prompted by the amenities associated with the desired place of residence, second moves (roughly appearing in the person's seventies or early eighties) are predominantly characterised by moving back to the place of origin, reflecting a higher need for support and proximity to kinship. Third moves often are to institutions in very old age (Oswald and Rowles, 2006).

Other ways of looking at relocation processes and their differential outcomes concern available coping resources (Golant, 1998) and the distinction between basic and higher-order needs (Carp and Carp, 1984) as motivations for moving (Oswald et al., 2002); while detailed housing histories (Holland, 2001; Peace et al., 2006) have also extended knowledge of the complexity of moving and 'staying put', showing stability and change across the life-course and identifying older people in the UK as migrants, movers and locals. To these debates there is a need to add more recent discussion of cross-national migration, both permanent and seasonal, and to reconsider 'relocation trauma' in the light of the position faced by the diversity of older migrants, whom as Wames et al. (2004) have indicated [...] range from those who are deprived and socially excluded to those with wide personal resources but where all are currently disadvantaged through ageing as migrants.

Final remarks

In sum, pluralism seems to be essential to theorising within environmental gerontology (Wahl and Weisman, 2003). However, this should not be seen as a disadvantage or as an indication of weakness in the field. Instead, the complexity of person-environment relations in later life probably demands a diversity of perspectives and a level of methodological complexity which all contribute to a greater understanding of how environments impact on the course and outcomes of normal and frail ageing – contextualising ageing.

[...]

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