1 Introduction

Although peoples have moved across continents and borders since human beings first appeared, the world is currently experiencing very large population flows due to political, economic, ecological and military events. The psychological, cultural and political impact on these arriving populations is profound, as are the impacts on those societies which receive them. These events make the study and understanding of why people move, how they engage each other and their eventual settlement a matter of urgency for social and behavioural scientists, and for policy and programme developers.

This Element seeks to provide some concepts and empirical findings that may contribute to this understanding, and perhaps also to more successful policies, programmes and outcomes for all groups and individuals involved. Two research domains (*acculturation* and *intercultural relations*) have developed markedly in recent years (see Berry, 2017; Sam & Berry, 2016) and provide a base on which we may be able to achieve such understanding and positive outcomes.

From early in the appearance of human beings, all the world's peoples have been in contact with cultural others. Although there must have been just one starting point for the human species, the cultural diversification of populations began to appear due to two fundamental factors: *adaptation to ecological context* and *acculturation due to intercultural contact* (Fagan & Durani, 2016). These two features have shaped human life up until the present time, and are basic to understanding the diversity of human behaviour (Berry, 2018, 2019).

Variations in these phenomena began with variations in ecological settings that induced cultural adaptations (Boyd & Richerson, 2005). These constantly evolving habitats and continuing changes in them (brought about by human activity, natural catastrophes and moving to new locations) require changing responses by human groups and individuals. Second, contacts with other cultures, whether through colonization, immigration or other kinds of intercultural engagements, induced acculturation, bringing further cultural changes (Redfield, Linton & Herskovits, 1936) and individual behavioural changes (Graves, 1967; Sam & Berry, 2016).

This line of thought runs through this Element: ecology and contact ➔ differing cultural adaptations ➔ variations and changes in behavioural development and expression. In any account of human cultural and psychological variation, these two exogenous factors (ecology and contact) need to be conceptualized and assessed, and then linked to cultural and psychological outcomes for groups and individuals. Ecological adaptation sets the stage,

while intercultural contact demands further adaptations through the process of acculturation.

Where did these ideas come from? While I have learned (Berry, 1995) from Feldman (1975) and Jahoda (1995) that these ideas had a long history in anthropological and psychological thought, my initial orientation to research stemmed from my own personal experiences, rather than from the academic literature. These early experiences have been outlined (Berry, 1997a) in a kind of academic autobiography, where I identified personal experiences and circumstances (both ecological and sociopolitical) that shaped my views about human behaviour in general.

I grew up in a French-speaking village in rural Quebec, as a member of the only English-speaking family living there. This village was adjacent to a Mohawk community. Daily contact with the 'others' had a profound impact on my views about human diversity and the cultural and psychological variations that accompanied this diversity. Later, during summers while in high school, I worked in the bush alongside Algonquian and French *bucheron*, and then as a merchant seaman in Canada. I continued working at sea for a few more years, first working on a Norwegian ship along the coast of Africa (Angola, Belgian Congo, South Africa, Mozambique and Mauritius). I then signed on as an engineer on a marine biology research ship in the Canadian Arctic, visiting many Cree and Inuit communities in Hudson Bay and James Bay. These all became community research sites for many years thereafter. When confronted by the choice ('the sea or me') from my future wife, I then came ashore to work as an upholsterer in a factory, and then as a stock clerk for a manufacturer of wine and beer bottles (containing the essential ingredients of a happy life) in Montreal, working alongside mostly immigrant colleagues.

During this latter period, I began to take night courses at Sir George Williams University in Montreal, from which I received a BA in 1963. Most of my courses in psychology were taught by James W. Bridges, who had been born in 1885 in the small province of Prince Edward Island, and who received his PhD at Harvard in 1913, under the direction of Hugo Munsterberg. Since Munsterberg had received his PhD under Wundt, I can claim some apostolic (academic) succession to that great man! Bridges had been trained as a psychologist, and had helped to devise the Army Alpha and Beta intelligence tests (Yerkes, Bridges & Hardwick, 1917). He also later trained as an anthropologist and, with his friend and colleague Otto Klineberg, he promoted the importance of linking these two disciplines. Bridges usually inserted the phrase 'in our culture' in his lectures in order to limit the claims to generality of any psychological finding being reported. Bridges showed me the way to think of psychology as a culturally embedded and global discipline, rather than as one that was limited to a small part of the world.

Although graduating from a little-known university, I was accepted by Professor James Drever to do a PhD at the University of Edinburgh. At the time, Drever was President of the International Union of Psychological Sciences (1963–6; following Otto Klineberg, 1960–3), and was spearheading the development of the *International Journal of Psychology*. He encouraged me to pursue the broader international vision instilled by Bridges, and was very supportive of my carrying out fieldwork away from Edinburgh in Africa, in the Arctic and in northern Scotland.

In summary, these personal experiences and academic influences made it imperative that I confront the Eurocentric bias of Western Academic Scientific Psychology (WASP) and become a cross-cultural psychologist. I knew intuitively that a research finding somewhere, at some time, and with just some people, could not be a valid basis of understanding human behaviour in all its diversity. My goal has been to contribute to the achievement of a global psychology, one that incorporates psychological concepts and empirical findings from all the peoples of the world (Berry, 2013a), which may then serve as a valid basis for human betterment.

This Element is an account of, and a personal reflection on, the phenomena of acculturation viewed as part of the broader fields of cross-cultural and intercultural psychology. Both fields seek to understand the development and display of human behaviour in their cultural contexts. However, intercultural psychology focuses on behaviours that result from intercultural contact, mainly occurring in culturally diverse societies. In contrast, cross-cultural psychology requires independent cultural contexts in order to make valid comparisons and generalizations.

This Element does not aspire to be a systematic review of the field of acculturation psychology, which is of course now beyond the scope of any one person or publication.

1.1 Approach to Research

I have approached research guided by a few beliefs. The first is that I accept the philosophical perspectives of realism. That is, I accept that things actually exist, beyond our perception of them. They have qualities and characteristics that can be discovered and interpreted through the use of the scientific method. I reject any claim that 'there is no there there.'

Second, I accept that both individuals and societies exist as distinct entities, and do so at their own levels; one is not reducible to the other. As J. J. Rousseau opined: 'a thing called society exists outside the individual, as a mass of rules, relationships, injunctions and customs.' This conception means that societies and individuals need to be examined in their own right in any research project in

cross-cultural or intercultural psychology. On the basis of their independent conceptual and empirical status, their relationships can then be examined and discovered.

Third, I have never had an overall plan or strategy for developing a research programme, other than seeking as much cultural variation as possible. However, I have had some guides to assist in deciding what to do, including having fun and being useful when doing research. These guides have also assisted in deciding what *not* to do; this is why I have never done an experiment or worked in a laboratory or clinic. One key focus has been my interest in understanding hunters and gatherers living in many parts of the world, and how they have dealt (both culturally and psychologically) with their colonization, subjugation, dispersal and relocation.

Fourth, I have adopted the method called *etak* that is used for navigation in Polynesia and Micronesia. This system uses observations of events (such as the sun, stars, currents, winds and clouds) in order to navigate successfully between islands. A key assumption of *etak* is that the island of destination itself moves and comes to the navigator (rather than the navigator moving to the island of destination). This conception has influenced my own research strategy: I have not set out on a voyage with a specific goal in mind. While I do have some principles and beliefs (as noted earlier), I lie in wait, seeking opportunities to come my way, just as the island of destination comes by in the *etak* system. This has meant that I have usually had a variety of research projects underway at the same time. This is a benefit, because when a barrier crops up, you can back off (or just anchor) and wait for another opportunity (island) to come your way.

My early and continuing involvement in the fields of cross-cultural and intercultural psychology has been the foundation of my professional life. My aim has been to be 'first in, last out'. I have published in the first volumes of the *International Journal of Psychology* (1966) and the *Journal of Cross-Cultural Psychology* (1970). I have continued this programme of publications up until now, submitting my international work to international journals and books and my Canadian research to Canadian journals and books. I have not submitted any to US journals, because I do not do research there. My few publications in those journals were either invited or were done to assist colleagues there in promoting the fields of cross-cultural and intercultural psychology. Many colleagues advised me that my decision to publish in this way would never lead to a successful academic career.

1.2 Ecocultural Framework

My main theoretical perspective is the ecocultural approach to cross-cultural and intercultural psychology. I first outlined this in my PhD thesis (Berry,

1966a), and it was first published in Berry (1966b, 1967, 1976). I developed this approach to use as a guide to studying the contrasting perceptual skills, cognitive abilities and social attributes of hunting/gathering and agricultural populations, and later as a framework for consolidations of the field of cross-cultural psychology (e.g., Berry et al., 2011). As noted earlier, acculturation (resulting from intercultural contact) has been an integral component in the ecocultural framework from the beginning of my research, along with these ecological influences on behaviour.

At its core, the ecocultural approach combines the ecological, cultural and intercultural perspectives on understanding the development and display of human behaviour. This perspective considers that all group and individual features of human populations can only be understood when situated in their contexts. The *ecological* approach examines phenomena in their natural contexts (habitats) and attempts to identify relationships between the cultural and behavioural phenomena and these contexts. The *cultural* approach examines individual behaviours in the cultural contexts in which they develop and are displayed. When these examinations are carried out comparatively, the *cross-cultural* approach results. When these are carried out with populations that are in contact with each other, the *intercultural* approach results. Essential to understanding all these approaches are the concepts of *interaction* and *adaptation*. Interaction implies reciprocal relationships among elements in the system; adaptation implies that changes take place that may (or may not) increase their mutual fit or compatibility within the system.

In addition to this ecology ➔ culture ➔ behaviour line of thinking, another line in the ecocultural framework originates from contact with other cultures. This second source of influence links the *sociopolitical* context that brings about contact with other cultures, which in turn shapes both the original ecological and cultural features of the group and then the behaviour of individuals in the group. In this case, there are both interactions among peoples of diverse cultural backgrounds, and mutual adaptations to intercultural contact. This second line of relationships is now widely studied using the concept of *acculturation*. Research on the impact on cultures and individuals from contact with outside cultures has been advancing greatly in recent years (Sam & Berry, 2006/2016). This domain has come to the fore because of the dramatic increases in intercultural contact, migration, globalization and culture change (Berry, 1980a, 2008).

By combining the ecological and sociopolitical sources of influence on how groups and individuals develop, interact and adapt to change, the ecocultural approach to understanding human behaviour is generated. Its core claims are that cultural and biological features of human populations interact with, and are

adaptive to, both the ecological and sociopolitical contexts in which they develop and live, and that the development and display of individual human behaviour are adaptive to these contexts.

To operationalize this ecocultural perspective, an ecocultural research *framework* was developed, starting in the 1960s (Berry, 1966a, 1966b). This framework has evolved through a series of conceptual elaborations and empirical studies devoted to understanding similarities and differences in perceptual, cognitive and social behaviours in relation to their ecological, cultural and intercultural contexts (Berry, 1967, 1976, 1979; Berry, van de Koppel et al., 1986; Georgas, Berry, van de Vijver, Kagitcibasi & Poortinga, 2006; Mishra & Berry, 2017; Mishra, Sinha & Berry, 1996). The ecocultural approach has also been used as an organizing framework in a series of books that seeks to integrate the vast field of cross-cultural psychology (Berry, Poortinga, Breugelmans, Chasiotis & Sam, 2011; Berry, Poortinga, Segall & Dasen, 1992, 2002; Segall, Dasen, Berry & Poortinga, 1990, 1999).

In more detail, the ecocultural framework (see Figure 1.1) seeks to account for human psychological diversity (both group and individual similarities and differences) by considering the two fundamental sources of influence noted earlier: *ecological* and *sociopolitical*. In adaptation to these contexts, two features of human populations (*cultural* and *biological* characteristics) become established in the group. These population variables are then transmitted to individuals by various *transmission* variables such as *enculturation, socialization, genetics* and *acculturation*. The outcomes of these exogenous variables impacting cultural and biological adaptations are then transmitted to individuals as the development of behaviours. These can be directly observed, and from these observations, we can make inferences as to the presence of underlying psychological characteristics.

The use of this framework to study and compare groups and individuals is made possible by the presence of shared cultural and psychological universals in all humanity. Without such commonalities, no research using common concepts and instruments, or any comparisons, would be possible. This position, known as *universalism*, maintains that: (1) all human beings share *basic* cultural features and psychological processes; and (ii) cultures and behaviours become developed and expressed in varying ways, generating the *surface* variability that can be observed in everyday life.

This ecocultural framework provides a broad structure within which to examine the development and expression of similarities and differences in human psychological functioning (both at individual and at group levels) by considering two main contexts: ecology and sociopolitical influences. That is, the framework considers human diversity (both cultural and psychological) to

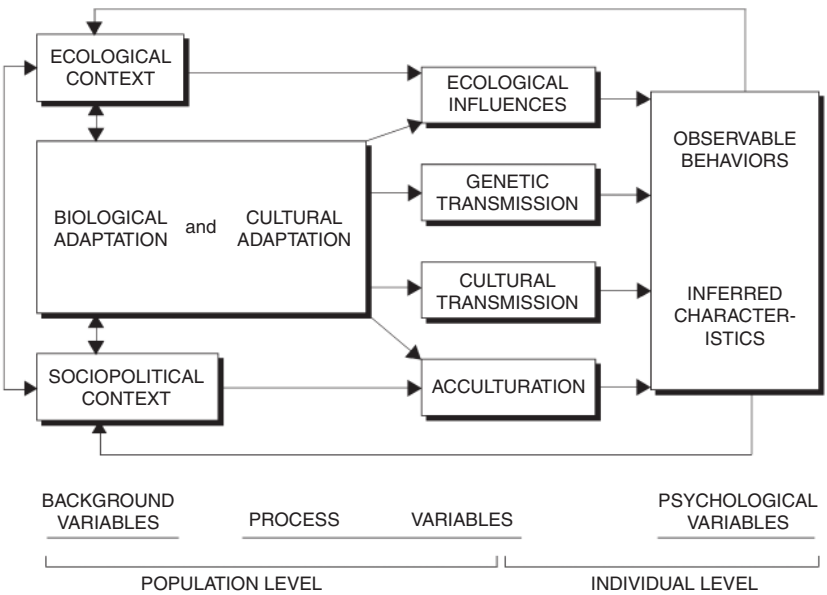

Figure 1.1 The ecocultural framework (modified from Berry, 1976)

be a set of collective and individual adaptations to context. Within this general perspective, it views cultures as evolving adaptations to ecological and sociopolitical influences and psychological characteristics in a population as adaptive to their cultural context as well as to the broader ecological and sociopolitical influences. The ecocultural perspective argues that, together, ecological and sociopolitical influences can be held to account for behavioural development and expression. Note that while the arrows linking components within the framework move from left to right (from exogenous contexts to behaviour), the relationships are usually interactive, with mutual influence changing both elements in the relationship. For example, human behaviour impacts the habitat of the group, and contact between groups alters the cultural characteristics of both groups. The upper and lower arrows that feed back to the exogenous contexts are intended to signify these mutual relationships within the framework.

1.2.1 Ecology ➔ Culture Link

Relationships between ecology and culture have been postulated for a long time in anthropology, as noted by Feldman (1975) and Jahoda (1995). The claim that culture is adaptive to ecology has roots that go back to Forde's (1934) classic analysis of relationships between physical habitat and societal features of

cultures in Africa. In that work, Forde examined 16 cultural groups, classifying them as food gatherers, cultivators or pastoral nomads. He was able to demonstrate 'complex relationships between the human habitat and the manifold technical and social devices for its exploitation', as well as other social and political features of their cultures (Forde, 1934, p. 460).

This theme of cultural adaptation to habitat asserts that cultural variations may be understood as long-term adaptations to differing ecological settings or contexts (Boyd & Richerson, 1983). This line of thinking is known variously as cultural ecology (Vayda & Rappaport, 1968), ecological anthropology (Moran, 2006) or environmental anthropology (Townsend, 2009). These ideas are closely related to the theory of cultural materialism (Harris, 1968). Note that these views are unlike earlier simplistic assumptions about how the environment *determined* culture and behaviour (e.g., the school of 'environmental determinism'; Huntington, 1945). Instead, the ecological school of thinking in anthropology has ranged from the notion of *possibilism* (where the environment sets some constraints on, or limits the range of, possible cultural forms that may emerge) to an emphasis on *resource utilization* (where active and interactive relationships between human populations and their habitats are examined in relation to the resources available, such as water, soil and temperature).

1.2.2 Ecology ➔ Biology Link

The links between habitat and biology go back at least to Darwin (1859) and continue to this day. Species and their individual members adapt through a process of natural selection that allows adaptive traits to survive and to be passed on over generations. This line of thinking parallels that of culture as adaptive to ecological context, and takes place in tandem with it. In the ecocultural framework, biology and culture are seen as complementary ways in which populations adapt to their habitats. The growing study of how biology and culture both play a role in ontogenetic development has been outlined by Keller (2011). An evolutionary approach to this culture–biology relationship has been emphasized in recent work (Boyd, Richerson & Henrich, 2011) where the two are viewed as jointly changing in response to habitat change.

1.2.3 Ecology ➔ Culture ➔ Behaviour Link

The linking of human behavioural development to cultural and biological adaptation, and thence back to ecology, has an equally long history in psychology (Berry, 1995; Jahoda, 1995). Contemporary thinking about this sequence (ecology-culture-behaviour) is often traced to the work of Kardiner and colleagues (e.g., Kardiner & Linton, 1939). They proposed that *primary institutions*

(such as subsistence economic and socialization practices) lead to *basic personality structures*, which in turn lead to s*econdary institutions* (such as art, governance, religion and play). In this sequence, there are ecological beginnings with cultural and then psychological outcomes. This sequence may form a feedback loop in which the evolved behaviours return to influence the ecological and cultural settings in which they emerged. This line of thinking served as a basis for the work of John and Beatrice Whiting (Whiting & Whiting, 1975) in the development of their psychocultural perspective. With respect to transmission, our understanding of both cultural and genetic transmissions has been strongly advanced by work on culture learning (e.g., Keller, 2002) and cultural transmission (Schönpflug, 2009).

1.2.4 Sociopolitical Context ➔ Culture ➔ Behaviour Link

At the lower level of the model, contact with other cultures is a major exogenous influence on the cultures and behaviours. These contacts have come about as a result of exploration and colonization of Indigenous Peoples, by enslavement and by the movements of refugees and immigrants. The features of a culture and the behaviours of individuals within it are both transformed by these external influences. This means that individuals must now adapt to more than one cultural context. When many cultural contexts are involved (as in situations of multiple culture contacts over years), psychological phenomena can be viewed as attempts to deal simultaneously and successively with two or more (sometimes inconsistent, sometimes conflicting) cultural contexts. Such contact brings about cultural and biological change in the population, and initiates the process of psychological acculturation. Research on these various sociopolitical influences on culture and behaviour has come to dominate much of the fields of cross-cultural and intercultural psychology in recent years (Berry et al., 2011; Sam & Berry, 2016).

1.2.5 Ecology ➔ Sociopolitical Contexts Link

The two main exogenous variables in the framework (ecology and sociopolitical contexts) are not independent of each other. This is because of two factors. First, contact between cultures (mainly due to colonization, but also due to migration) is influenced by the habitats of both the source and the destination. Some locales are ecologically degraded, from which people flee, and some are attractive for colonization and settlement. The presence of resources (such as minerals, water and arable land for agriculture) have influenced where people have invaded, migrated and settled. Second, the impact of colonization and settlement on resident populations has been variable: those with a highly

structured political and military organizations are more able to resist occupation and domination. Related to this is psychological evidence (e.g., Berry, 1976) showing that hunter/gatherers (which are usually smaller-scale societies with limited political structures to deal with the demands of invaders) have been more negatively impacted by acculturation pressures than more politically structured societies. Thus, we can claim that these two major inputs are related to each other and interact in ways that produce a complex pattern and flow across the ecocultural framework.

Over time, the ecocultural framework has been elaborated. I (1966b, 1971) originally called my framework an 'ecological-cultural-behavioural' model (later shortened to 'ecocultural' in 1976). Bronfenbrenner (1979) named his approach 'ecological', and the Whitings (Whiting & Whiting, 1975) referred to their approach as 'psychocultural', and also used the concept of the 'ecological niche'. Super and Harkness (1986, 1997) coined the term 'developmental niche', and Weisner (1984) continued the use of the term 'ecocultural'. All of these approaches attempt to understand the development and display of human behaviour as a function of the process of group and individual adaptation to ecological, cultural, biological and sociopolitical (intercultural) settings.

To summarize, the ecological and sociopolitical lines of influence have equal conceptual status as factors in the development and display of human behaviour. The actual degree of influence of each factor is variable across settings, populations and individuals. The inclusion of the sociopolitical line in the ecocultural framework sets the stage for a more detailed examination of the processes and outcomes of acculturation.

2 Acculturation

2.1 Definition of Acculturation

Acculturation is the process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members. At the cultural group level, it involves changes in social structures and institutions and in cultural norms (Redfield et al., 1936). At the individual psychological level, it involves changes in people's behavioural repertoires (including their food, dress, language, values and identities) and their eventual adaptation to these intercultural encounters (Thurnwald, 1932). Acculturation is a mutual process in which these changes take place in all groups and individuals in contact. The concept is also complex and multifaceted (Rudmin, 2009) with widely varying definitions (Ward, 2001). Despite this complexity, two formulations of the concept of acculturation have been widely quoted, and remain a foundation for the field. The first is: