A Macropsychology Perspective on Culture and Behaviour

John W. Berry

Introduction

This chapter presents an approach to psychology that is rooted in the concept of culture. The cultural approach is relevant to this volume because from the beginning of its use in anthropology in the nineteenth century (Tylor, 1871), the concept of *culture* has been a "macroconcept", with its focus on (and locus in) whole societies, nations, and institutions (Kroeber & Kluckhohn, 1952). However, relatively recently, it has also become a "microconcept", with a focus on individuals as creators, carriers, and transmitters of culture. This social constructionist approach has proposed that culture is constructed in the daily interactions of individuals (Shweder, 1990). With this approach, the locus of culture has changed; this "interiorization" of culture (Munroe & Munroe, 1997) has moved culture from being only in the external context into the heads of people (D'Andrade, 1984). Despite this change, within anthropology, culture has remained a macroconcept, being "holistic" and "multifaceted" (Ember, Ember, & Peregrine, 2018). It continues to incorporate social, biological, physical, ecological, and linguistic features of population and includes all the world's peoples.

The concept of culture is relevant to this volume also because it is central to the attainment of the United Nations Sustainable Development Goals. In the view of UNESCO (2017):

> … the international development agenda refers to culture for the first time. This has been lauded by UNESCO as "an unparalleled recognition". The safeguarding and promotion of culture is an end in itself, and at the same time it contributes directly to many of the SDGs — safe and sustainable cities, decent work and economic growth, reduced inequalities, the

J. W. Berry (✉)
Queen's University, Kingston, Canada

International Laboratory for Sociocultural Research, National Research University Higher School of Economics, Moscow, Russia

M. MacLachlan, J. McVeigh (eds.), *Macropsychology*,
https://doi.org/10.1007/978-3-030-50176-1_6

> environment, promoting gender equality and peaceful and inclusive societies. The indirect benefits of culture are accrued through the culturally-informed and effective implementations of the development goals.

In a profound sense, there can be no development without the protection and promotion of cultures as a basis for all human life.

In this chapter, I attempt to bridge these two conceptualizations of culture by arguing that culture exists both "out there" in the external context (and hence it remains very much a macroconcept) and also becomes incorporated into individuals' heads during the process of cultural transmission ("in here"). This dual perspective posits that cultures exist before any individual arrives in a society (by birth or migration) as a shared set of institutions, practices, beliefs, and norms that "lie in wait" for a newcomer and that cultures are incorporated into individuals, being changed and (re-)created through daily interactions among individual members of a society.

The concept of culture also has a long history of use in the discipline of psychology (Jahoda & Krewer, 1997). The inclusion of the concept of culture in a volume devoted to basic psychological processes (Berry & Triandis, 2006) cemented its place in the discipline of psychology. The broad and systemic view of culture outlined above became a basis for the emergence of the field of cross-cultural psychology, where we root many of our concepts, theories, methods, and scope of enquiry in the discipline of anthropology (Berry et al., 1997; Berry, Poortinga, Breugelmans, Chasiotis, & Sam, 2011; Sam & Berry, 2017). Essentially, this macrocultural context provides the nexus in which individual human development takes place and in which human behaviours are expressed. Although this cultural context changes from one generation to another, and from one interaction to another, there is a remarkable continuity from one generation to the next (Berry, 1980a).

As noted by MacLachlan, McVeigh, Huss, and Mannan (2019, p. 6):

> Psychology has focused on 'understanding down' by dismantling complex behaviour into subcomponents that are proximate, individualistic, subcutaneous or reductive, which is often constructed as conferring 'insight'… Central to macropsychology is the assertion that psychological characteristics and social settings co-construct one another.

This perspective is shared with that of cross-cultural psychology, particularly in the use of the ecocultural approach in which individuals are viewed as being shaped by (and shaping) the ecological and cultural contexts in which they develop.

In this chapter, I present first the ecocultural approach that has become a widely used framework in the field of cross-cultural psychology (Berry, 2011). Then, I will address some theoretical issues that will advance the macro perspective towards the goal of achieving a "global" psychology, one that is rooted in some basic "universal" processes and which has the potential for applications around the world (Berry, 2013). Finally, I will illustrate the use of the ecocultural framework with research with a variety of populations that vary across ecological settings and acculturative experiences.

The Ecocultural Approach

The macro perspective in psychology is closely related to the *ecocultural* approach in cross-cultural psychology, which was first outlined by Berry (1966, 1976). The ecocultural approach combines ecological and cultural perspectives on understanding the development and display of human behaviour. Both perspectives consider that all group and individual features of human beings can only be understood when situated in their natural contexts. The *ecological* approach examines phenomena in their natural contexts 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 this is carried out comparatively, the *cross-cultural* approach results. Essential to 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 line of thinking (from ecology to culture to individual behaviour), there is a second line of thinking in the ecocultural framework that 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 culture and the behaviour of a group through the process of *acculturatio*n. In these cases, there are interactions among peoples of diverse cultural background, bringing about mutual adaptation to these intercultural contacts (Berry, 2017). From the beginning (Berry, 1974), this second line of enquiry was part of my ecocultural approach. Intercultural contact takes place in historical and contemporary contexts, and the process of acculturation needs to be examined in these settings (Berry, 2019; Sam & Berry, 2016).

By combining the ecological and cultural contact approaches to how groups and individuals 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 cultural contact contexts in which they develop and live and that the development and display of individual human behaviour are adaptive to these contexts.

To operationalize the ecocultural perspective, an ecocultural *framework* was developed, starting in the 1960s (Berry, 1966). The framework has evolved through a series of conceptual elaborations and empirical studies devoted to understanding similarities and differences in cognition and social behaviour in relation to their ecological and cultural contexts (Berry, 1966, 1967, 1976, 1979; Berry et al., 1986; Georgas, Berry, van de Vijver, Kagitcibasi, & Poortinga, 2006; Mishra & Berry, 2017; Mishra, Sinha, & Berry, 1996). Some of these studies will be reviewed in a later section of this chapter. 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, Segall, & Dasen, 1992, 2002; Berry et al., 2011; Segall, Dasen, Berry & Poortinga, 1990, 1999).

The ecocultural framework (see Fig. 1) proposes to account for human psychological diversity (both group and individual similarities and differences) by taking into account two fundamental sources of influence (ecological and sociopolitical) and two features of human populations that are adapted to them (cultural and biological characteristics). These population variables are transmitted to individuals by various "transmission variables" such as enculturation, socialization, genetics, and acculturation. Both cultural and genetic transmissions have been strongly advanced by work on culture learning (e.g. Keller, 2002) and cultural transmission (Schönpflug, 2009). The existence of cultural and biological universals is the basis for the presence of fundamental similarities of all members of the human species. These basic features are then developed and expressed in varying ways, generating the surface variability that can be observed in everyday life. Research on the impact on cultures and individuals from contact with outside cultures (i.e. through the process of acculturation) has also been advancing in recent years (Sam & Berry, 2016). This domain has come to the fore because of the dramatic increases in intercultural contact, globalization, and culture change (Berry, 2008).

In more detail, 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 group levels) by taking into account two fundamental sources of influence (*ecological* and *sociopolitical* on the left of Fig. 1). These include *cultural* and *biological adaptations* at the population

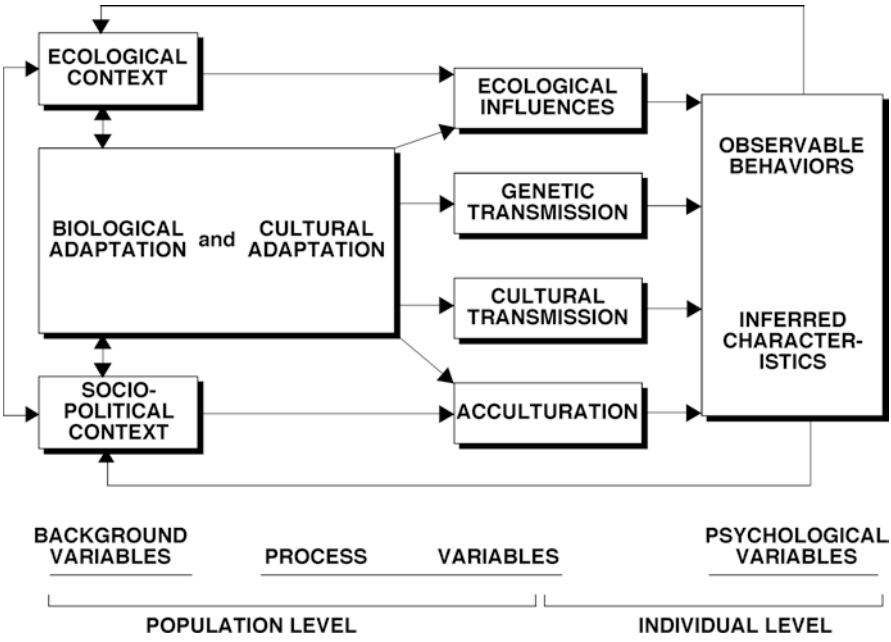

Fig. 1 Ecocultural framework linking contexts to behavioural outcomes. (Adapted from Berry, 1976)

level (also on the left) and four *transmission variables* in the middle (enculturation, socialization, genetics, and acculturation). These transmission variables are the routes by which the population variables are inculcated into individuals' *behavioural repertoire* (on the right). That is, the framework considers human diversity (both cultural and psychological) to 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. This sequence is similar to the macro → meso → micro sequence noted by MacLachlan et al. (2019, p. 6); this sequence is not just a one-directional relationship but can work both ways.

Ecology-Culture Link

Relationships between ecology and culture have been postulated for a long time in anthropology (Feldman, 1975). 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 in Africa. In that work, Forde examined 16 cultural groups, classifying them as food gatherers, cultivators, or pastoral nomads. He was able to demonstrate that there were "complex relationships between the human habitat and the manifold technical and social devices for its exploitation" (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). The line of thinking is known variously as cultural ecology, ecological anthropology, or environmental anthropology. Note that, unlike earlier simplistic assumptions about how the environment *determined* culture and behaviour (e.g. the school of "environmental determinism"; Huntington, 1945), the ecological school of thinking 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 analysed in relation to the resources available, such as water, soil, and temperature).

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 those traits that are adaptive to survive and be passed on over generations. This line of thinking finds its parallel in the view that culture is also adaptive to ecological context and takes place in tandem with biological adap-

tation. In the ecocultural framework, biology and culture are seen as complementary ways in which populations adapt to their habitats, rather than as opposing each other. That is, both biology and culture are viewed as ways to increase the fit between contexts and human characteristics. As Boulding (1978, p. 335) has phrased it, "human adaptation can be seen as 'the survival of the fitting'… what survives is that which finds a niche that it 'fits' into in the complex multidimensional structures of ecosystems". 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.

Ecology-Behaviour Link

The linking of human behavioural development to cultural and biological adaptation, and hence 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.

Sociopolitical Context-Behaviour Link

At the lower level of the model, contact with other cultures is a major influence on cultures and behaviours. Both the features of a culture and the behaviours of individuals within them are transformed by these external influences. Individuals must now adapt to more than one context. When many cultural contexts are involved (as in situations of multiple cultural 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 acculturation. Research on these various sociopolitical influences on culture and behaviour has come to dominate much of the field of cross-cultural and intercultural psychology in recent years (Berry et al., 2011; Sam & Berry, 2016).

In the field of psychology, as well as in anthropology, ecological perspectives have become more and more prominent, with the development of the field of environmental (or ecological) psychology. The early work of Brunswik (1956)

attempted to specify the links between ecological context and individual human development. More recent advances (e.g. De Young, 2013) have developed the field into a highly differentiated set of topics.

In parallel with environmental psychology, the field of cross-cultural psychology has generally viewed cultures as *differential contexts* for development and views behaviour as adaptive to these different contexts. In the 1960s, there began a series of articles and books more explicitly focused on the psychological outcomes of the process of adapting to ecological, cultural, and biological contexts (Berry, 1966, 1967, 1975, 1976; Bronfenbrenner, 1979; Whiting, 1977; Whiting & Whiting, 1975).

To elaborate this development, Berry (1966, 1971) originally called his framework an "ecological-cultural-behavioural" model (later shortened to "ecocultural" in Berry, 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 "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.

One hallmark of cross-cultural psychology (see Berry et al., 2011), which is shared by the macropsychology perspective, is the emphasis on the analysis of both the natural (ecological) and the cultural (human-made) features of the environment in order to achieve a complete understanding of human behaviour in context. We have argued that ecological and cultural influences operate in tandem (Berry, 1976).

Operationalization of the Ecocultural Framework

In order to be able to conceptualize and assess a number of possible human adaptations to varying contexts, an ecocultural dimension was developed and operationalized (Berry, 1966, 1976) over the range of subsistence economic activities from gatherers to hunters to agriculturalists to urban industrial peoples. This ecocultural dimension had both ecological and cultural features. The *ecological* component distinguished between the forms of subsistence economic activity ranging from hunting and gathering to various forms of agriculture to industrial practices. Various *cultural* and *social* features of the group were linked to these distinctions: *population size* (which increases linearly from the hunting end to the other end); *settlement style* (ranging from nomadic to sedentary); *political and social structures* (little permanent or structured authority at one end and more intense and hierarchical structures at the other end); and pressures towards *social conformity* and *social tightness* that also varied along with such hierarchy. These components were combined into a single dimension, to be used as a predictor of various cognitive and social behaviours.

With respect to *cultural transmission*, socialization practices vary in a curvilinear way, from an emphasis on *assertion* in hunting societies to an emphasis on *compliance* in agricultural societies (Barry, Child, & Bacon, 1959) and again to assertion in urban industrial societies. These socialization practices serve to inculcate the cultural features of the society into the behavioural repertoire of individuals growing up in these varying ecological and cultural settings. The behavioural consequences of the cultural adaptation and cultural transmission features of the framework have been studied across many societies (Berry, 2013a; Berry et al., 2011; Sam & Berry, 2018) including perception, cognition, personality, and social behaviours.

The sociopolitical line of influence takes place again through cultural adaptations (but now to intercultural contact) and cultural transmission (now from both cultures in contact). Much research has shown that individuals change many of their behaviours, which include the same domains (perception, cognition, personality, and social behaviours) (Berry, 2013b; Sam & Berry, 2016).

Individuals also develop various *intercultural strategies* (Berry, 1980b) that may or may not improve their fit or their well-being. This concept refers to the ways in which people seek to relate to each other in culturally plural societies. These strategies and expectations can be held by both the dominant and non-dominant individuals and groups that are in contact. Four strategies have been derived from two issues facing all acculturating peoples. These issues can be responded to on attitudinal dimensions, on which generally positive or negative orientations to these issues intersect to define four ways of acculturating. From the point of view of non-dominant ethnocultural groups, when individuals do not wish to maintain their cultural identity and seek daily interaction with other cultures, the *assimilation* strategy is defined. In contrast, when individuals place a value on holding onto their original culture and at the same time wish to avoid interaction with others, then the *separation* alternative is defined. When there is an interest in both maintaining one's original culture, while in daily interactions with other groups, *integration* is the option. In this case, there is some degree of cultural integrity maintained while at the same time seeking, as a member of an ethnocultural group, to participate as an integral part of the larger society. Finally, when there is little possibility for cultural maintenance (often because of enforced cultural loss), and little interest in having relations with others (often for reasons of exclusion or discrimination), then *marginalization* is defined. In most studies, the integration strategy is found to be the most common, probably because individuals find it to be the most adaptive (e.g. Berry, 1997; Nguyen & Benet-Martinez, 2013).

In many cases, there are interactions between these ecological and sociopolitical input variables (Berry, 1976; Mishra & Berry, 2017). For example, many hunting-based societies have been readily displaced, with loss of habitat and serious disruption of their social and political structures. Being less structured (such as lower societal size and social hierarchy), they did not have the customs and institutions to confront or deal with the outside intrusions. In contrast, many agricultural societies had the social and political features (such as larger populations and hierarchical leadership) that permitted some resistance to outside cultural influences. The impact of the experiences stemming from the sociopolitical line of the framework has thus come to the fore. This differential impact of contact with outside cultures was shown

by Berry (1976) where the acculturative stress levels (a form of maladaptation) of samples with lower hierarchy were higher than among those with higher social stratification. These differential levels of maladaptation have been found more generally across indigenous and refugee populations, especially in comparison with immigrant and settled populations (Berry, 2006).

Finally, it is important to note that the ecocultural approach offers a "value-neutral" framework for describing and interpreting similarities and differences in human behaviour across cultures. As adaptive to context, psychological phenomena can be understood "in their own terms" (as Malinowski insisted), and external evaluations should be avoided. This is a critical point, since it allows for the conceptualization, assessment, and interpretation of culture and behaviour in non-ethnocentric ways. It explicitly rejects the idea that some cultures or behaviours are more advanced or more developed than others (Berry, Dasen, & Witkin, 1983). Any argument about cultural or behavioural differences being ordered hierarchically requires the adoption of some absolute (usually external) standard. But who is so bold, or so wise, to assert and verify such a standard?

Empirical Studies

The *ecocultural model* has been used by Berry in a series of research studies (Berry, 1976; Berry et al., 1986, 2006; Georgas & Berry, 1995; Mishra & Berry, 2017; Mishra et al., 1996). Some of these studies have provided support for the main claim of cross-cultural psychology that individual behaviour may be traced back to their ecological and sociopolitical roots, through the various transmission processes, and to the biological and cultural features of the populations in which individuals have developed. These studies established early on that this ecology-culture-behaviour sequence is one that reveals variations in psychological outcomes that can be predicted by an ecological analysis (Berry, 1980c).

Perceptual-Cognitive Studies

Initially (Berry, 1966), the link between ecology, culture, and behaviour was elaborated into a framework in order to predict the differential development of visual disembedding (defined as the process of distinguishing small items that are hidden within a larger visual context) and analytic and spatial abilities between hunting-based and agriculture-based peoples. The first step was to propose that the "ecological demands" for survival that were placed on hunting peoples were for a high level of these perceptual-cognitive abilities, in contrast with people employing other (particularly agricultural) subsistence strategies. Second, it was proposed that "cultural aids" (such as socialization practices, linguistic differentiation of spatial information, and the use of arts and crafts) would promote the development of these abilities. As predicted, empirical studies of Inuit (then called Eskimo) in the Canadian

Arctic and Temne (in Sierra Leone) revealed marked differences in these abilities. Equivalent research with Scots in northern Scotland showed that the Inuit were similar in these abilities to this urban sample.

Further studies were carried out, and during the course of this programme of empirical work, the ideas became further elaborated into the ecocultural framework. In each case, considerations of ecological and cultural features of the group were taken as a basis for predicting differential psychological outcomes in a variety of domains. For example (Berry, 1967, 1979), differential degrees of reliance on hunting and of social stratification (ranging from "loose" to "tight"; Pelto, 1968) and variations in child socialization practices (ranging from emphases on "assertion" to "compliance"; Barry et al., 1959) were used to predict variations in the development of the functional abilities noted above (disembedding, spatial and analytic abilities). In addition to these abilities, higher levels of social conformity were found among individuals living in agricultural societies than in hunting societies. This finding is an early precursor of later research on independence and interdependence (e.g. Markus & Kitayama, 1991).

Central to much of this early work has been the concept of *cognitive style*. This concept is rooted in the *cognitive processes* that underlie any cognitive activity. The most influential conceptualization of cognitive style has been that of Witkin et al. (1962) who developed the dimension of the field-dependent/field-independent (FDI) cognitive style. At one end of the FDI dimension are those (the relatively field independent – FI) who rely on bodily cues within themselves and are generally less oriented towards social engagement with others; at the other end are those (the relatively field dependent – FD) who rely more on external visual cues and are more socially oriented and competent. As for any psychological dimension, few individuals fall at the extreme ends; most fall in the broad middle range of the dimension.

The FDI cognitive style is referred to by Witkin, Goodenough, and Oltman (1979, p. 1138) as "extent of autonomous functioning". The FDI construct refers to the extent to which an individual typically relies upon or accepts the physical or social environment as given, in contrast to working on it, for example, by analysing or restructuring it.

According to Witkin et al. (1962), the origins of the FDI cognitive style lie in early socialization experiences: those raised to be independent and autonomous were found to be relatively FI; those who were controlled more tightly were found to be relatively more FD. When examined across cultures (Witkin & Berry, 1975), many early studies revealed that societies that emphasized "compliance" in socialization practices (Barry et al., 1959) and conformity to group norms (Berry, 1967, 1979) tended to develop the field-dependent cognitive style. These are typically those societies that rely on agriculture for their subsistence, that are socially complex in interpersonal coordination, and that are hierarchical in social structure. In contrast, societies that are based in hunting economic subsistence tend to develop the field-independent cognitive style, emphasize "assertion" in socialization, and are less conforming to social norms.

Subsequent research on perceptual and cognitive abilities (aligned in part to the FD-FDI cognitive style) resulted in four volumes (Berry, 1976; Berry et al., 1986;

Mishra & Berry, 2017; Mishra et al., 1996) reporting results of studies in the Arctic (Cree), Africa (Biaka "pygmy"), Australia (Aborigines), New Guinea (highland peoples), and India Adivasi ("Tribal").

The ecocultural framework has also been used to understand sources of variation in other aspects of perceptual-cognitive development, such as the acquisition of Piagetian stages (Dasen, 1984; Nsamenang, 1992). Continuing research on spatial orientation frames of reference with children in Nepal and elsewhere in Asia (e.g. Dasen & Mishra, 2011; Mishra, Dasen & Niraula, 2003) found two frames (egocentric and ecocentric). These refer to the use of either the person or the environment as the bases for orienting oneself in the environment.

Most recently, the ecocultural framework has been used to guide research on the development of cognitive style in Canada, China, Ghana, and India among adults engaged in hunting, agriculture, and industrial activities and among children in hunting-gathering and agricultural groups in India (Mishra & Berry, 2017). In this study, we examined the cultural dimensions of *societal size* and *social conformity* in different subsistence-level groups, the development of cognitive style in relation to subsistence strategies of groups, and the relationship between the two cultural dimensions and cognition.

In the earlier conceptualization reviewed above, the cultural dimension involved four variables: degree of political stratification, degree of social stratification, type of family (nuclear or extended), and socialization emphases on assertion or compliance. This cultural index was combined with an ecological index to produce an ecocultural index (Berry, 1976), which was used as a unidimensional bipolar index of ecological and cultural adaptation. However, in recent work (Mishra & Berry, 2017), we proposed and operationalized societal size and social conformity as *two* cultural dimensions, which tend to vary as a function of subsistence strategies of groups. Societal size is considered to be a linear function of subsistence strategy, while social conformity is a curvilinear relationship (relatively low in gathering, hunting, and industrial societies, but higher in agricultural societies).

Results for the two cultural dimensions show relationships with the subsistence strategy as expected: there is a progressive increase from hunting-gathering to wage employment through the two agricultural samples on the measure of societal size; and the relationship of social conformity with subsistence strategies is curvilinear (low in hunting and wage employment, but high in the two agricultural groups). It is clear that a group's subsistence activities do relate in important ways to their cultural features and cognitive characteristics.

Social Behaviour Studies

While most use of the ecocultural framework has been in the study of perception and cognition, it has also been useful to explore aspects of social behaviour. The concept of *social* or *affective style* was introduced by Berry (1973), based on studies of social conformity (Berry, 1967, 1979) and self-disclosure. In the theory of psy-

chological differentiation (Witkin et al., 1962), the field-dependent style was associated with a number of social or affective behaviours such as conformity to social norms and susceptibility to social influence. In the review by Witkin and Berry (1975), studies showed that greater conformity to a suggested group norm is likely in cultures that are structurally tight (with high norm obligation).

Research by Georgas and colleagues (Georgas & Berry, 1995; Georgas, van de Vijver & Berry, 2004) further extends this interest in social aspects of behaviour within varying ecocultural contexts. The first study sought to discover ecological and social indicators that might allow societies to be clustered according to their similarities and differences on six dimensions: ecology, education, economy, mass communications, population, and religion. The second study further examined eco-social indicators across cultures and then sought evidence of their relationships with a number of psychological variables (such as values). Results showed that many of the indicators came together to form a single economic dimension (termed "Affluence"), and this was distinct from "Religion" in the pattern of relationships with the psychological variables. Specifically, across cultures, high Affluence (along with Protestant Religion) was associated with more emphasis on utilitarianism and personal well-being. In contrast, for other religions, together with low Affluence, there was an emphasis on power, loyalty, and hierarchy values.

The ecocultural framework has been used to guide an international study of the structure and function of families (Georgas et al., 2006). It sought to link ecological and sociopolitical contexts to family structure, family roles, and some related family and personal values. Guided by both the ecocultural framework (Berry, 1976) and by a model of family change (Kagitcibasi, 1996), this project sought to understand contemporary families in 30 countries, representing most cultural regions of the world. This study showed that when we examine the relationships between ecological and sociopolitical variables that were drawn from the ecocultural framework and cross-cultural features of family life, we find that there are predictable patterns, rather than random links.

In summary, it is apparent that these ecocultural studies established that this ecology-culture-behaviour sequence can predict a variety of cultural institutions and social practices, which in turn predict a variety of cognitive and social behavioural outcomes. This early and continuing research has been validated by more recent research by others (e.g. English et al., 2020; Nisbett, 2003; Talhelm et al., 2014; Uskul, Kitayama, & Nisbett, 2008).

Global Psychology

The ecocultural approach is rooted in the theoretical perspective known as *universalism* in cross-cultural psychology (Berry, Poortinga, Segall, & Dasen, 2002). The universalist perspective asserts that all human societies exhibit commonalities ("cultural universals") and that all individual human beings possess and share basic

psychological processes ("psychological universals"). Cultural universals are those characteristics of societies that are developed and practised in one way or another in all societies. Psychological universals are the processes and capacities that are shared, species-common characteristics of all human beings in every culture. Cultural experiences shape the expression of these underlying processes during the course of development and daily activity, resulting in infinite variations in behavioural expression. Cultural universals serve as the underlying and background basis for all human activity and are observable in the daily activities of groups and individuals. These universals are essentially macro-variables but can only be captured by attending to the micro-actions that we all exhibit in our daily behaviours.

The methodological advantage of the universalist perspective is that it allows for comparisons of customs and behaviours across cultures and individuals (based on the common underlying process) but makes comparison valuable (using the surface variation as basic evidence) as a way to discover possible linkages between context and outcomes.

There is evidence for the existence of cultural universals in our cognate disciplines of anthropology (e.g. Murdock, 1975), sociology (e.g. Aberle et al., 1950), and linguistics (e.g. Chomsky, 2000). In this work, there is substantial evidence that groups everywhere possess shared sociocultural attributes. For example, all peoples have tools (technology), social structures (e.g. norms, roles), social institutions (e.g. marriage, justice), and language. It is also evident, however, that such underlying commonalities vary across cultural groups in vastly different ways from one time and place to another. That is, these common processes become developed and expressed differentially across groups. This surface variation in customary practices is seen to be the result of differing adaptations to ecological contexts (as portrayed earlier in the discussion of ecological anthropology).

With respect to psychological universals, there is parallel evidence for both underlying similarity and surface variation (see Berry et al., 1997; Triandis et al., 1997, for overviews of this evidence). For example, individuals typically have the basic processes needed to develop, learn, and perform speech; use technology; role-play; and observe norms. In the field of cross-cultural psychology, there are no studies that reveal the absence of any basic psychological process in any cultural group. This point of view was early captured by Cole, Gay, Glick, and Sharp (1971, p. 233): "cultural differences in cognition reside more in the situations to which particular cognitive processes are applied than in the existence of a process in one cultural group and its absence in another". Even with the existence of these common processes, there are obviously vast group and individual differences in their development and in the way of expressing these shared underlying processes. These variations in developed competencies and expressed behaviours are interpreted as adaptations to the ecocultural contexts.

This combination of underlying similarity with surface expressive variation (i.e. universalism) has been distinguished by Berry and colleagues (1992, 2002, 2011) from two other theoretical views: *absolutism* denies that there are any important cultural influences on behavioural development and expression, while *relativism*

denies the existence of common underlying psychological processes, even suggesting that cultural experience can alter the basic processes, resulting in changing the very nature of the process. It may appear paradoxical that this search for our common humanity (our basic similarities) can only be pursued by observing our diversity (our differences). However, this dual task is the essence of cross-cultural psychology (Berry, 1969, 2000).

The universalist perspective may appear to be at odds with the realist approaches discussed by MacLachlan et al. (2019, p. 170):

> Realist approaches assume that nothing works everywhere for everyone and that context significantly shapes programme outcomes (Westhorp, 2014). This clearly challenges the idea of identifying universal laws within psychology because it sees behaviour as being dependent on particularities that vary. Research that obscures or controls for context – as much psychological research does – restricts our knowledge of how, when and for whom an intervention can be effective. (Wong, Westhorp, Pawson, & Greenhalgh, 2013)

However, the universalist perspective in cross-cultural psychology does not assume that all human behaviour is the *same* across cultures, nor that all applications of psychology will *work everywhere*, without taking cultural contexts into account. The universalist claim is that because cultural and intercultural experiences shape the behavioural development and action of individuals in specific cultural contexts, all examinations of these behaviours and applications need to take these contexts into account.

Conclusion

The purpose of this chapter has been to provide an overview of how the concept of culture has been taken into the discipline of psychology and has served as the basis for the development of the field of cross-cultural psychology. This enterprise takes a macro perspective, linking large-scale contexts (ecological and sociopolitical), through various forms of cultural and biological adaptation, to the development and display of individual behaviour. By studying human development in a broad range of contexts from around the world, it has established a conceptual, theoretical, methodological, and empirical base for the development of a global psychology. Armed with such a base, it is possible to work towards creating international policies and programmes that will improve human well-being. The presence of cultural and psychological universals, combined with an understanding of their local exemplars and expressions, allows for culturally sensitive policies and programmes to be developed that meet universal goals.

Acknowledgement This chapter was prepared within the framework of the Basic Research Program at the National Research University Higher School of Economics (HSE) and supported within the framework of a subsidy by the Russian Academic Excellence Project “5-100”.

References

Aberle, D. F., et al. (1950). Functional prerequisites of society. *Ethics, 60*, 100–111.

Barry, H., Child, I., & Bacon, M. (1959). Relations of child training to subsistence economy. *American Anthropologist, 61*, 51–63.

Berry, J. W. (1971). Ecological and cultural factors in spatial perceptual development. Canadian *Journal of Behavioural Science, 3*, 324–336.

Berry, J. W. (1975). An ecological approach to cross-cultural psychology. *Nederlands Tijdschrift voor de Psychologie, 30*, 51–84.

Berry, J. W. (1995). The descendants of a model. *Culture and Psychology, 1*, 373–380.

Berry, J. W., Poortinga, Y. H. & Pandey, J. (Eds) (1997). *Handbook of cross-cultural psychology*. Boston: Allyn & Bacon.

Berry, J. W. (2000). Cross-cultural psychology: A symbiosis of cultural and comparative approaches. *Asian Journal of Social Psychology, 3*, 197–205.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (Eds.). (2006). *Immigrant youth in cultural transitions: Acculturation, identity, and adaptation across national contexts*. Mahwah NJ: Erlbaum.

Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (2002). *Cross-cultural psychology: Research and applications*. Cambridge: Cambridge University Press.

Brunswik, E. (1956). Perception and the representative design of psychological experiments. Berkeley: University of California Press.

Berry. (2013a). Cross-cultural psychology. In *Oxford bibliographies*. Oxford: Oxford University Press. https://doi.org/10.1093/OBO/9780199828340-0111

Berry. (2013b). Intercultural psychology. In *Oxford bibliographies*. Oxford: Oxford University Press. https://doi.org/10.1093/OBO/9780199828340-0042

Berry, J. W. (1966). Temne and Eskimo perceptual skills. *International Journal of Psychology, 1*, 207–229.

Berry, J. W. (1967). Independence and conformity in subsistence-level societies. *Journal of Personality and Social Psychology, 7*, 415–418.

Berry, J. W. (1969). On cross-cultural comparability. *International Journal of Psychology, 4*, 119–128.

Berry, J. W. (1973). Differentiation across cultures: Cognitive style and affective style. In J. Dawson & W. Lonner (Eds.), *Readings in cross-cultural psychology* (pp. 167–175). Hong Kong, China: University of Hong Kong Press.

Berry, J. W. (1974). Psychological aspects of cultural pluralism. *Topics in Culture Learning, 2*, 17–22.

Berry, J. W. (1976). *Human ecology and cognitive style: Comparative studies in cultural and psychological adaptation*. New York: Sage/Halsted.

Berry, J. W. (1979). A cultural ecology of social behaviour. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 12, pp. 177–206). New York: Academic Press.

Berry, J. W. (1980a). Social and cultural change. In H. C. Triandis & R. Brislin (Eds.), *Handbook of cross-cultural psychology* (*Social psychology*) (Vol. 5, pp. 211–279). Boston: Allyn and Bacon.

Berry, J. W. (1980b). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models and some new findings* (pp. 9–25). Boulder, CO: Westview.

Berry, J. W. (1980c). Ecological analyses for cross-cultural psychology. In N. Warren (Ed.), *Studies in cross-cultural psychology* (Vol. 2, pp. 157–189). London: Academic Press.

Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues, 57*, 615–631.

Berry, J. W. (2006). Stress perspectives on acculturation. In D. Sam & J. W. Berry (Eds.), *Cambridge handbook of acculturation psychology* (pp. 43–57). Cambridge: Cambridge University Press.

Berry, J. W. (2008). Globalisation and acculturation. *International Journal of Intercultural Relations, 32*, 328–336.

Berry, J. W. (2011). The ecocultural framework: A stocktaking. In F. J. R. Van de Vijver, A. Chasiotis, & S. M. Breugelmans (Eds.), *Fundamental questions in cross-cultural psychology* (pp. 95–114). Cambridge: Cambridge University Press.
Berry, J. W. (2013). Achieving a global psychology. *Canadian Psychology, 54*, 55–61.
Berry, J. W. (Ed.). (2017). *Mutual intercultural relations*. Cambridge: Cambridge University Press.
Berry, J. W. (2019). *Acculturation: A personal journey across cultures*. Cambridge: Cambridge University Press.
Berry, J. W., Dasen, P. R., & Witkin, H. A. (1983). Developmental theories in cross-cultural perspective. In L. Alder (Ed.), *Cross-cultural research at issue* (pp. 13–21). New York: Academic Press.
Berry, J. W., Poortinga, H. H., Segall, M. H., & Dasen, P. R. (1992). *Cross-cultural psychology: Research and applications C*. New York: Cambridge University Press.
Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross-cultural psychology: Research and applications* (3rd ed.). Cambridge: Cambridge University Press.
Berry, J. W., & Triandis, H. C. (2006). Culture. In K. Pawlik & G. d'Ydewalle (Eds.), *Psychological concepts* (pp. 47–62). Hove, UK: Psychology Press.
Berry, J. W., van de Koppel, J. M. H., Sénéchal, C., Annis, R. C., Bahuchet, S., Cavalli-Sforza, L. L., et al. (1986). *On the edge of the forest: Cultural adaptation and cognitive development in Central Africa*. Lisse, The Netherlands: Swets and Zeitlinger.
Boulding, K. E. (1978). An incomplete paradigm. *Social Science Quarterly, 59*(2), 333–337.
Boyd, R., Richerson, P. J., & Henrich, J. (2011). The cultural niche: Why social learning is essential for human adaptation. *Proceedings of the National Academy of Sciences (USA), 108*(2), 10918–10925.
Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge: Harvard University Press.
Cole, M., Gay, J., Glick, J., & Sharp, D. (1971). *The cultural context of learning and thinking*. New York: Basic Books.
Chomsky, N. (2000). *New horizons in the study of language and mind*. New York: Cambridge University Press.
D'Andrade, R. (1984). A colloquy of culture theorists. In R. A. Shweder & R. Levine (Eds.), *Culture theory* (pp. 1–24). Cambridge: Cambridge University Press.
Darwin, C. (1859). *On the origin of species*. New York: Random House.
Dasen, P. R. (1984). The cross-cultural study of intelligence: Piaget and the Baoulé. *International Journal of Psychology, 19*, 407–434.
Dasen, P. R., & Mishra, R. C. (2011). *Development of geocentric spatial language and cognition*. Cambridge: Cambridge University Press.
De Young, R. (2013). Environmental psychology overview. In A. H. Huffman & S. Klein (Eds.), *Green organizations: Driving change with IO psychology* (pp. 17–33). New York: Routledge.
Ember, C., Ember, M., & Peregrine, P. (2018). *Cultural anthropology* (14th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
English, A et al. (2020). Crossing the rice wheat barrier: Not all intracultural adapptation is equal PLoS ONE,15 (8), e 0236326
Feldman. (1975). The history of the relationship between environment and culture in ethnological thought. *Journal of the History of the Behavioural Sciences, 110*, 67–81.
Forde, D. (1934). *Habitat, economy and society*. New York: Dutton.
Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
Georgas, J., & Berry, J. W. (1995). An ecocultural taxonomy for cross-cultural psychology. *Cross-Cultural Research, 29*, 121–157.
Georgas, J., Berry, J. W., van de Vijver, F. J. R., Kagitcibasi, C., & Poortinga, Y. H. (Eds.). (2006). *Family structure and function: A 30 nation psychological study*. Cambridge: Cambridge University Press.

Georgas, J., van de Vijver, F., & Berry, J. W. (2004). The ecocultural framework, ecosocial indices and psychological variables in cross-cultural research. *Journal of Cross-Cultural Psychology, 35*, 74–96.

Huntington, E. (1945). *Mainsprings of civilization*. New York: John Wiley.

Jahoda, G. (1995). The ancestry of a model. *Culture & Psychology, 1*, 11–24.

Jahoda, G., & Krewer, B. (1997). History of cross-cultural and cultural psychology. In J. W. Berry, Y. H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology* (Theory and method) (Vol. 1, 2nd ed., pp. 1–42). Boston: Allyn and Bacon.

Kardiner, A., & Linton, R. (1939). *The individual and his society*. New York: Colombia University Press.

Keller, H. (2002). Development as the interface between biology and culture. A conceptualization of early ontogenetic experiences. In H. Keller, Y. H. Poortinga, & A. Schoelmerich (Eds.), *Between culture and biology* (pp. 215–240). Cambridge, UK: Cambridge University Press.

Kagitcibasi, C. (1996). *Family and human development across cultures: A view from the other side*. Hillsdale, NJ: Erlbaum

Kroeber, A. L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions* (Vol. 47 (1)). Cambridge, MA: Peabody Museum.

MacLachlan, M., McVeigh, J., Huss, T., & Mannan, H. (2019). Macropsychology: Challenging and changing social structures and systems to promote social inclusion. In D. Hoggets & K. O'Doherty (Eds.), *Handbook of applied social psychology* (pp. 116–182). London: Sage.

Mishra, R. C., & Berry, J. W. (2017). *Ecology and human development: Lessons for Adivasi education*. New Delhi, India: Sage Publications.

Mishra, R. C., Sinha, D., & Berry, J. W. (1996). *Ecology, acculturation and psychological adaptation: A study of Adivasi in Bihar*. Delhi, India: Sage Publications.

Moran, E. (2006). *People and nature: An introduction to human ecological relations* (3rd ed.). Malden, MA: Blackwell Publishing.

Munroe, R. L., & Munroe, R. H. (1997). A comparative anthropological perspective. In J. W. Berry, Y. H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology* (Theory and method) (Vol. I, 2nd ed., pp. 171–213). Boston: Allyn and Bacon.

Murdock, G. P. (1975). *Outline of cultural materials*. New Haven, CT: Human Relations Area Files.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98*, 244–253.

Mishra, R. C., Dasen, P. R., Niraula, S. (2003). Ecology, language, and performance. *International Journal of Psychology, 38*, 366–383.

Nisbett, R. E. (2003). *The geography of thought: How Asians and Westerners think differently … and why*. New York: The Free Press.

Nsamenang, B. (1992). *Human development in cultural context*. Newbury Park, CA: Sage.

Pelto, P. (1968). The difference between "tight" and "loose" societies. *Transactions, 5*, 37–40.

Sam, D. L., & Berry, J. W. (Eds.). (2016). *Cambridge handbook of acculturation psychology* (2nd ed.). Cambridge: Cambridge University Press.

Sam, D. L. & Berry, J. W. (Eds). (2017). *Cross-cultural psychology (Vol. 4)*. In Routledge Series "Critical Concepts in Psychology" . London: Routledge.

Sam, D. L., & Berry, J. W. (Eds.). (2018). *Cross-cultural psychology* (Vol. 4). London: Routledge.

Schönpflug, U. (Ed.). (2009). *Cultural transmission: Developmental, psychological, social and methodological perspectives*. Cambridge: Cambridge University Press.

Schönpflug, U. (Ed.) (2009). Cultural transmission: Developmental, psychological, social and methodological perspectives. Cambridge: Cambridge University Press.

Segall, M. H., Dasen, P. R., Berry, J. W., & Poortinga, Y. H. (1999). *Human behavior in global perspective: An introduction to cross-cultural psychology* (rev. 2nd ed.). Boston, MA: Allyn and Bacon

Super, C. M., & Harkness, S. (1997). The cultural structuring of child development. In J. W. Berry, P. R. Dasen, & T. S. Saraswathi (Eds.), *Handbook of cross-cultural psychology* (Vol. 2, pp. 1–39). Basic processes and human development. Boston: Allyn and Bacon.

Shweder, R. A. (1990). Cultural psychology – What is it? In J. W. Stigler, R. A. Shweder, & G. Herdt (Eds.), *Cultural psychology: Essays on comparative human development* (pp. 1–43). Cambridge, UK: Cambridge University Press.

Super, C., & Harkness, S. (1986). The developmental niche: A conceptualisation at the interface of childhood and culture. *International Journal of Behavioural Development, 9*, 545–569.

Talhelm, T., Zhang, X., Oishi, S., Shimin, C., Duan, D., Lan, X., et al. (2014). Large-scale psychological differences within China explained by rice versus wheat agriculture. *Science, 344*(6184), 603–608.

Triandis, H. et.sl. (1997) (Eds) *Handbook of cross-cultural psychology* (Vol. 6). Boston: Allyn & Bacon.

Tylor, E. B. (1871). *Primitive culture* (Vol. 2). London: Murray.

UNESCO. (2017). *Culture" at the heart of SDGs*. UNESCO Courier, April.

Uskul, A., Kitayama, S., & Nisbett, R. (2008). Ecocultural basis of cognition: Farmers and fishermen are more holistic than herders. *Proceedings of the National Academy of Sciences, 105*, 8552–8556.

Weisner, T. (1984). A cross-cultural perspective: Ecocultural niches in middle childhood. In A. Collins (Ed.), *The elementary school years* (pp. 335–369). Washington, D.C.: Academic Press.

Westhorp, G. (2014). *Realist impact evaluation: An introduction*. London: Overseas Development Institute. Retrieved from https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9138.pdf

Whiting, J. W. (1977). A model for psychocultural research. In H. Lieiderman, S. Tulkin, & Rosenfeld (Eds.), *Culture and infancy: Variations in the human experience* (pp. 29–48). New York: Academic Press.

Witkin, H., & Berry, J. W. (1975). Psychological differentiation in cross-cultural perspective. *Journal of Cross-Cultural Psychology, 6*, 4–87.

Whiting, B. B., & Whiting, J. W. M. (1975). *Children of six cultures: A psychocultural analysis*. Cambridge, MA: Harvard University Press.

Witkin, H. A., Dyk, R. B., Paterson, H. F., Goodenough, D. R., & Karp, S. (1962). *Psychological differentiation*. New York: Wiley.

Witkin, H. A., Goodenough, D. R., & Oltman, P. (1979). Psychological differentiation: Current status. *Journal of Personality and Social Psychology, 37*, 1127–114

Wong, G., Westhorp, G., Pawson, R., & Greenhalgh, T. (2013). *Realist synthesis: RAMESES training materials.* Retrieved from http://www.ramesesproject.org/media/Realist_reviews_training_materials.pdf