

Cognitive Science

by Natalia Buitron and Harry Walker

Chapter 7 in Laidlaw, James (ed.). *Cambridge Handbook for the Anthropology of Ethics*, pp. 177-204. Published 2023.

Keywords: Amazonia, Cognition, Equality, Ethics, Fairness, Intention, Morality, Justice, Responsibility, Wrongdoing.

Introduction

Having enjoyed a rapid rise to prominence, the anthropology of ethics and morality remains diverse and vibrant. If still somewhat lacking in systematic intellectual organisation – as has been pointed out on more than one occasion (Faubion 2001:83; Laidlaw 2002:311; Robbins 2012a:1) – its very eclecticism can also be read as a sign of vitality. Yet if philosophers such as Aristotle, Nietzsche and Foucault have been warmly embraced by anthropologists the latter have also, with just a very few exceptions, largely given the cold shoulder to a vast range of powerful and relevant empirical findings in psychology, economics, and experimental philosophy. As such, anthropologists remain relatively disconnected from some lively cross-disciplinary discussions and debates. The anthropological literature is often ignored by these other disciplines, and its divergent methodologies and theoretical eclecticism can make the task of integration and comparison difficult.

This is not to say that anthropologists should adopt the methods, agendas or theoretical frameworks of the (other) cognitive sciences: far from it. One of our aims in this chapter is to show how anthropology might better strengthen and elucidate, as well as critique, key findings in the scientific study of morality and ethics, and how all sides might be enriched as a result of dialogue conducted on an equal footing. Psychologists might well always complain about the lack of rigour in anthropology's methods and the lack of transparency in its theoretical process (cf. e.g. Quinn and Strauss 2006: 273), while anthropologists will continue to object that the experiments of psychologists are artificial and disconnected from everyday life (Astuti 2007). Moral psychological and other experimental research characteristically relies on questionnaires, experiments or games, rather than ethnography, and these all carry with them their own advantages and disadvantages. While often yielding valuable data, the vast majority of such research has of course also been conducted in Western educational and post-industrial settings, limiting the applicability of conclusions that are sometimes assumed to be universally valid; and even where cross-cultural research has been carried out, interpretations of unusual findings are often limited by the relatively narrow quality of data obtainable through such approaches.

Various cases have already been made for deeper anthropological engagement with cognitive science generally, as have calls for caution and scepticism (see, *inter alia*, Bloch 2012; Astuti and Bloch 2012; Jenkins 2014; Laidlaw 2016b (2008); Schweder 2012). Wherever one stands on these debates, there are some good reasons why anthropologists and cognitive scientists with an interest in morality and ethics might collaborate in developing a shared research agenda. Whether focused on evolutionary origins, brain mechanisms or the cognitive processes informing moral judgements, emotions and actions, most cognitive scientists agree that our species' uniquely social and moral capacities have been selected far less by the physical environment than by the complex *social* environments humans have created over time: what Esther Goody (1995) referred to as 'social intelligence'. Morality and group living go hand in hand. While insisting that evolutionary processes place constraints on the kind

of morality individuals can entertain, most can agree that morality only develops in social context, and that we need to account for how children develop both ‘the morality that is particular to their culture and the morality that is particular to themselves’ (Haidt and Bjorklund 2008:206). The vast cognitive science agenda spans the evolution of the human species as well as the specific moral and ethical lives of individuals, leaving plenty of room for social and cultural considerations including, say, the role played by values or the human capacity to shape one’s own moral self, as well as that of others.

Intellectual overlap notwithstanding, the effective implementation of a programme of interdisciplinary research capable of integrating considerations of both cognition and culture has proven a very challenging undertaking. As Astuti and Bloch (2012:453) point out, cooperation and dialogue are possible, even necessary, but ‘must proceed from the recognition of anthropology’s unique epistemology and methodology’. In a recent attempt to integrate what he refers to as natural and social histories in the study of ethical life, Webb Keane (2016: 5) has also lamented that scholars in each field ‘rarely take advantage of what they could learn from one another’s research. Indeed, they often have principled criticisms of other styles of research, which can reinforce the idea that their findings contradict each other.’ Keane rightly emphasises that neither approach alone can provide a satisfactory account. His book is impressive in its scope and ambition, although the part of the book dedicated to psychological research comprises just one chapter and remains only loosely integrated with those that follow. In her commentary, Astuti (2016) observed that the very idea of ‘dialogue’ between two ‘histories’ raises certain problems of its own: ‘when all is said and done, natural and social histories continue to feature...as separate processes, which make contact with one another in various ways but which are not constitutive of each other.’ (*ibid.*: 450). Thus, the cognitive and emotional abilities of infants represent the natural history of ethical life, as natural capacities, but are not part of social history *per se*: ‘Making them so would mean acknowledging – and finding methodological and conceptual ways of analysing – the dynamic way in which human psychology *enables, constrains, and is transformed by* the historical process’ (*ibid.*: 451). In other words, our aim should be to reveal how human psychology and social history are not two parallel processes to be brought into dialogue, but two windows into one and the same process; the psychological foundations of ethical life are shaped by the historical process and are a constitutive part of it.

The challenges involved in achieving such a synthesis should not be underestimated. We reflect on some of the theoretical and methodological obstacles in what follows, as they arose in our own recent journey, as relative outsiders, into a few specific areas of the vast moral terrain mapped out by the various cognitive sciences. Needless to say, we do not attempt here anything like a comprehensive overview. Moreover, our explorations – partial as they are – have very much been shaped by the specific themes and concerns of an ongoing collaborative research project, about which we say more below, focusing on notions of justice and injustice with specific reference to the indigenous peoples of Western Amazonia¹. One goal of the project is to strengthen interdisciplinary collaboration between anthropology and neighbouring disciplines in seeking to understand better the social, cultural and cognitive bases of peoples’ judgements around what is right or just. We have been especially interested in how norms of fairness and equality are established, both socially and developmentally, and how judgements of responsibility and wrongdoing are shaped by cultural and institutional factors. As such, these are themes we have prioritised in this chapter. We hope to make clear that, despite the challenges and obstacles, there are myriad ways in which anthropology can profit from deeper engagement with the cognitive science of morality and ethics – and vice versa – on both conceptual and methodological levels. We draw this out firstly with reference to discussions around the evolution

¹ See www.lse.ac.uk/amazonia.

of cooperation and its relationship to fairness (see also Kajanus & Stafford, this volume), before proceeding to some important recent developments in the moral psychology of wrongdoing.

The Evolution of Morality

Contemporary psychological theories of human morality tend to fall into three broad overlapping groups: evolutionary ethics; gene-culture coevolution; and moral psychology (see Tomasello 2016:137-143). The first two broadly seek to explain how natural selection might have shaped human morality, focusing specifically on theoretical principles of cooperation as they might apply to the human case (for a useful review see James 2011). While a number of scholars work at the intersection of both groups, exponents of theories of gene-culture coevolution explicitly highlight the role of cultural selection in evolutionary contexts, proposing that natural selection operates, through culture, at the level of the group, as well as at the more conventional level of individual traits². Moral psychology, meanwhile, focuses less on evolutionary processes and more on proximate psychological mechanisms, even if these are still generally assumed (whether explicitly or implicitly) to have evolved as adaptations to ancestral selection pressures. The focus of this latter approach is often on people's judgements of harm, and a very typical methodology has been to pose explicit questions to participants: about runaway trolley cars, for instance; or incest scenarios (e.g. Cushman, Young and Hauser 2006; Graham et al. 2011). In recent years, one of the more vibrant topics of research within evolutionary ethics and gene-culture coevolution has been the evolution of fairness. Several theorists have proposed an understanding of human morality as a combination of something like 'sympathy' (or 'empathy') and 'reciprocity' (or 'fairness'). If the former is foundational when humans cooperate with kin and close friends, a different set of predispositions is typically deemed necessary to support more binding and extensive agreements between strangers. A shared sense of fairness (or justice), in particular, is seen as a prerequisite for large-scale cooperation with non-kin and the creation of reciprocal relations of mutual benefit beyond altruism or self-interest.

While the majority of proponents couch their models in terms of evolutionary processes, it is striking to us how often they draw inspiration, whether explicitly or implicitly, from the Western philosophical tradition. The spectre of the social contract lurks behind much work in the genre, as formulated by thinkers ranging from Hobbes and Rousseau through to Rawls. This tradition also reverberates, of course, through a century of anthropological thinking about sociality; it is well known, for instance, that evolutionary concerns underpinned Mauss's treatise on the gift, and that his preoccupation with the obligation to return reflects a similar concern with the origins of the modern contract, with its capacity to overcome mistrust and the Hobbesian 'Warre of all against all' (see Parry 1986: 457; Sanchez et al 2017).

Evolutionary psychologists commonly echo this Maussian emphasis on the obligation to return, but locate its origins in evolved adaptations to ancestral environments, rather than in social institutions. Baumard et al. (2013), for instance, reformulate the concept of reciprocity in terms of a 'mutualistic' theory that humans have evolved a moral disposition to value fairness in mutual relations. This would effectively offer the evolutionary 'building blocks' of John Rawls' theory of justice: a moral sense of fairness motivates people to act 'as if' they had agreed on a contract with others. These authors position themselves against the so-called 'costly punishment' approach, which suggests that it is instead a determination to punish uncooperative free-riders, even if it comes at a cost, that best explains the stability of cooperation (see e.g. Fehr and Gächter 2002; Boyd and Richerson 2005). This

² Anthropologists might be interested in Richerson and Boyd (2005); Henrich (2017); Boyd (2018). For useful reviews see Joe Henrich's [website](#) and Price (2012); see also West et al (2006:9-11) for a recent critique.

willingness to punish manifests itself not only when people are themselves subject to cheating or unfairness, but also as third parties in anonymous situations (Fehr and Fischbacher 2004)³. Yet according to Baumard et al. (2013), avoidance and social selection are more effective than punishment in sustaining cooperation. That is, co-operators simply desert cheaters and seek out more cooperative partners, and informal sanctions such as gossip and reputation select for a psychological disposition towards fairness⁴. Competition to be chosen as a cooperative partner over millennia made it essential to be seen as reliable and trustworthy, and as willing to share the benefits of joint activities in an impartial, mutually advantageous, or 'fair' way (Baumard & Sperber 2013:63, 68). Those who contribute more should receive more; when someone deserves punishment, this should be proportional to the crime, and so on. For this scenario to work out, individuals must be on the lookout for free-riders or inauthentic co-operators. The authors thus propose that the most cost-effective way to secure a good reputation is to behave as a 'genuinely moral person' (2013:65), though they essentially reduce this to mean someone who behaves fairly towards others. This is a debate where anthropologists could make important contributions, by fleshing out the culturally variant meanings of fairness (a project we return to briefly in the final section), or by expanding the possibilities of 'being moral' in ways that complement, contrast with or even exceed the idea that morality equals fairness.

Tomasello's (2016:139) alternative, mutualistic account of the evolution of morality (which combines elements from each of the three approaches mentioned above) argues that reciprocity simply cannot account for the manifold aspects of human moral psychology, from self-regulating feelings of responsibility, guilt and obligation to the making of promises and the enforcement of social norms. He emphasises the role of interdependency rather than reciprocity in mutualistic cooperation: a sense that 'I depend on others, just as they depend on me', which in evolutionary terms paves the way for a fundamental sense of group belonging or 'we-ness'. Caring about the welfare of others, or helping them, are natural parts of life and there is no need for actors to weigh up objective costs and benefits. His theory essentially seeks to account for the evolution of human morality in two key stages: in the first, ecological changes some 400,000 years ago forced humans to forage together with others to avoid starvation. This new form of interdependence meant that early humans had to extend their feelings of sympathy for kin and friends - something chimpanzees and bonobos also experience - to other, more distant collaborative partners. But this meant developing new cognitive skills for coordinating and communicating effectively in order to form a joint goal, or what Tomasello (drawing on philosophical accounts by Gilbert, Searle, Tuomela and others) terms 'joint intentionality'. Over time, partners in face-to-face joint projects develop shared normative standards and a concern with how they are evaluated by others. They begin to treat one another, not merely with sympathy, but with an emerging sense of fairness, motivated by the idea that while two or more parties are necessary for success, any partner could, in principle, play either role. In short, the social outcome of more collaborative foraging was a kind of 'second-personal morality' based on a genuine attempt to behave virtuously, in accordance with joint commitments, rather than simply on the strategic avoidance of punishment or reputational attacks (Tomasello 2016; 2018).

The second stage in the evolution of morality occurred some 150,000 years ago, according to Tomasello, when groups became larger and more complex and competition between them intensified. At this point, the challenge for modern humans was to scale up from a life of interdependent collaboration with well-known partners, to life in a larger cultural group with all kinds of interdependent groupmates (Tomasello 2016:85). At this point, sympathy towards known partners

³ See Henrich et al (2006) for a discussion of substantial cross-cultural variation in willingness to punish and Guala (2012) for ethnographic and 'in the wild' evidence that contradicts the costly punishment account.

expanded into a more general form of group loyalty. The cognitive skills that underpinned joint intentionality meanwhile transformed into ‘collective intentionality’, which enabled the creation of conventional cultural practices, roles, and norms, which are detached from individuals. Human morality shifts from being essentially local and face-to-face, to being group-minded and ‘objective’, in the sense of being oriented towards more general, normative ideals of right and wrong (ibid.:87).

While accounts such as these can be compelling on their own terms, we would like to draw attention to the strong teleological dimension: an abiding sense that morality has evolved in a clear and linear direction to take the form of ever more abstract, general and impartial moral norms. Also left largely un-interrogated, in what can sometimes take the form of ‘just-so’ scenarios, are assumptions that early human groupings were egalitarian and that social and moral complexity are functions of increased scale and hierarchy.⁵ The tendency to associate progressive ‘stages’ of morality with an increasing capacity for abstraction and impartiality is particularly evident in Tomasello’s narrative, according to which the evolution of fairness in the human species largely mirrors its ontogenetic development at the level of the individual. Thus, young children only begin to show ‘group-mindedness’ and ‘collective intentionality’, and the propensity to enforce social norms on others, after around 3 years of age, which is well after they become capable of forming simple joint goals with others (Tomasello et al. 2012: 685). Toddlers first display a tendency to collaborate and act pro-socially toward other specific individuals (‘second-personal morality’), and only gradually (especially during their school years) begin to develop a full-blown concept of fairness, or an impersonal, ‘norm-based’ morality (Tomasello and Vaish 2013). The latter transcends particulars, insofar as children’s judgements increasingly articulate objective standards of behaviour. What matters now is less the opinions of individuals and their specific relationships, but rather the opinion of the group, or some other, larger entity (such as the group’s gods). When children begin to understand that norms apply to everyone in the group, they enforce them from a third-party stance, even when they themselves are not directly involved or affected by the norm violation (see also Fehr et al. 2008; Robbins and Rochat 2017)

It is illuminating to consider these arguments in light of recent developments in the anthropology of ethics and morality. A key contribution of this literature has been to foreground questions of freedom and agency; it has been proposed that moral action can only take place when actors are free reflectively to adopt and cultivate a moral stance. It is precisely this self-reflective process of decision-making, whether in critical moments of everyday self-cultivation or situations where actors willingly reproduce conventional moral norms, which distinguishes the ethical domain from group morality (Laidlaw 2002, 2014). This has led to a re-evaluation of the significance of agentive moral reproduction, as well as moral doubt, moments of breakdown, and inconsistency in moral experience (Robbins 2007; Zigon 2007; Cassaniti and Hickman 2014). These developments pose some problems for the accounts of moral development discussed above, and their assumption of a species-specific shift towards ever more objectivity and impartiality. This is particularly the case insofar these accounts conflate the moral with the collective, thereby removing ethics from the picture. ‘Morality’ tends to figure primarily as an instrument of social control for encouraging cooperation and ensuring the group’s survival.

A closely related abiding assumption of much of the cognitive science literature is that social groups tend to be stable, homogenous and cohesive. And yet a very significant contribution of

⁵ For a critical perspective that brings together anthropological and archaeological findings to bear on this overriding narrative of social evolution, see Graeber and Wengrow (2021)

anthropologists over the past fifty years has been to move beyond this tendency to reify social groups, and the assumption that pre-modern, small-scale societies are collectivistic wholes (see for example, Collier & Rosaldo 1981; Strathern 1988; Rapport and Overing 2000:334; Stasch 2009). A charitable reading of Tomasello would see his theory as helping to explain precisely how such stable roles and collectives, or what Bloch (2013) calls 'essentialised groups', might come to be imagined; and yet, being able to imagine and even identify with the group need not entail group loyalty of the kind presupposed. Unfortunately, Tomasello's engagement with social anthropology is very limited: despite the recent flourishing of anthropological theorising, he resorts quite explicitly to Durkheim's views on morality and religion in order to explain how humans sacralise cultural institutions and values (see e.g. 2016:105, 131). Accordingly, his analysis of morality relies heavily on concepts of conformity, social control, and moral codes - all of which betray a certain reduction of human moral life to the study of moral rules.

A similar propensity may be discerned in other recent work. Curry et al (2019) present evidence that seven forms of cooperative behaviour – specifically, helping kin, helping your group, reciprocating, being brave, deferring to superiors, dividing disputed resources, and respecting prior possession – are seen as morally good virtually everywhere one might care to look. Yet these authors show little interest in moral phenomena that do not fulfil and may even clash with cooperative goals: values of autonomy or purity, say, or ideals of a worthwhile life that prescribe aesthetic practices, without fulfilling any apparent social function (Wong 2019; see also Gellner et al. 2020). On the other hand, to define the 'morally good', the authors sometimes appear to conflate the virtuous and the obligatory, or values and rules. As Faubion among others has pointed out, such an analytical strategy dissolves value into obligation and the desirable into the normative (2001:83-84). The danger here is that the rich stuff of ethics which Tomasello seeks to explain on an individual, psychological level – responsibility, virtuosity, and feelings of obligation, resentment and guilt and the like – is lost in the abstract language of imperatives: in a vision of human life lacking in ethical complexity, decision and doubt (see Laidlaw 2002: 315). That is to say, the reflexivity characteristic of ethics, along with fundamental questions about how one should live (rather than simply what one should do next) are collapsed into highly normative moral systems.

Evolutionary theories often appear to provide a rational ground for the progressive evolution of morality. People's interdependence on one another, for instance, makes it rational for individuals to be concerned about their groupmates' welfare (Tomasello 2018:662). Other psychologists even propose normative accounts which defend the pre-eminence of reason in human morality: Bloom, for example, argues that what makes us distinctively human is our capacity to strive beyond empathy, which can actually lead to bad decisions and outcomes, through the use of reason and cost-benefit analysis and by drawing instead on 'a more distanced compassion and kindness' (Bloom 2016:39, 239; see also Greene 2013). Of course, in this case, human reason works against the evolved dispositions, rather than being the foundation of morality. Yet in envisaging more advanced moral stages in terms of a shift towards more objectivity and reason, such theories do risk unwittingly importing what we might well describe as a rationalist (and probably also ethnocentric) bias (see also Laidlaw and McKearney, this volume).

In the context of developmental psychology, the assumption that impartiality reflects a more advanced form of moral reasoning was critiqued forcefully by Gilligan (1982), in her foundational work for what became known as the ethics of care. Gilligan was responding to Kohlberg's (1981) influential paradigm of moral development, which was principally concerned with the emergence of a sense of justice: in the first, 'pre-conventional' level, children are solely concerned with the self, as they have

not yet internalised social conventions; only by the third, 'post-conventional' level do ever more principled individuals gradually come to perceive themselves as separate entities from society. They are capable of exercising abstract reasoning in order to evaluate social rules and laws and may choose to diverge from the latter to follow their individual conscience, or respect universal principles such as liberty and justice. Gilligan observed that her female subjects in particular, however, were often more concerned with the maintenance of social relationships than with enforcing general moral principles. The elevation of the latter to a later stage of development, in her view, was the product of male bias, and highly problematic (see also Mattingly and McKearney, this volume).⁶

Some recent work in moral psychology does, to some extent, offer a corrective to the stage-like, rationalist emphasis of evolutionary accounts of morality. Jonathan Haidt, in particular, has developed a compelling case that intuitions come first and reasoning second: that an individual's moral judgements are best understood as deriving from the sudden insights or gut reactions they experience when confronted with moral dilemmas. The elaborate reasoning people might offer in response to questioning is ultimately a justification of their intuitions. Reasoning is not entirely discounted but has a distinctly social rather than individual character, playing a causal role 'only when it runs through other people' (Haidt and Bjorklund 2008:193), when a person engages in moral discourse in response to others. Even when people reflect privately, they benefit from imaginary role-taking, putting themselves in others' shoes to generate an emotional response.

That this proposal supports a kind of moral pluralism increases its appeal for anthropologists. People everywhere may recognise the pull of a plethora of moral truths, even though only some are fully activated or institutionalised locally. The value of justice, for instance, may be recognised in some form by everyone, even though some people may place greater importance on other values – care, say, or duty – which they can appeal to in sophisticated and original ways to resolve moral dilemmas (Shweder et al 1997; Shweder and Haidt 1999:363). This points to the relevance of studying the dynamics of everyday social interaction as well as the forms of ethical objectification, an area where anthropological research can make significant contributions (see Keane and Lempert, this volume; Keane 2016). This approach also resonates with a number of anthropological accounts of ethical life that study hierarchies of value, or differences between monist and pluralist societies (Sommerschuh and Robbins, this volume; Robbins 2012b), as well as those that connect moral variation to cross-culturally conflicting conceptions of personhood and the moralisation of emotion (Cassaniti and Hickman 2014).

Experiments in Fairness

The development of culturally or historically specific moral dispositions has been a focus of theories that emphasise the role of social institutions over evolved psychological dispositions. Proponents of gene-culture coevolution, concerned more with the selective pressures facing different social groups,

⁶ It is worth noting that Sarah Hrdy (2009) offers a female-centric riposte to (implicitly masculine) theories of cooperative hunting or foraging, privileging instead the pressures of alloparenting: the need to draw on the help of grandmothers, older siblings and others to raise offspring made humans better at monitoring the mental states of others and selected for greater cooperation and altruism. The broader question still remains, though, how cooperation and empathy were extended beyond the local (alloparenting) group.

have sought to uncover the particular institutions or cultural norms that give rise to a concern with fairness: participation in large communities but also world religions, penal institutions or market integration (e.g. Henrich et al. 2000). These approaches support the claim that the preoccupation with fairness and associated concepts based around rights, justice and the avoidance of harm all reflect a distinctly Western, liberal form of morality (see also Haidt 2012 and Shweder et al 1997). They also resonate closely with anthropological evidence that world religions such as Christianity help people to envisage and sustain large, anonymous communities (e.g. Whitehouse 1998).

In support of this theory, Henrich and his collaborators turn not to ethnography but to economic experiments, such as the Dictator and Ultimatum Games, which reveal how individuals behave when asked to distribute money with a partner following a given set of rules (for a critical overview of the field, see Guala 2012). One general finding of such experiments is that participants – in Euro-American contexts – are mostly surprisingly ‘cooperative’, willing to give resources to others even when the rules of a particular game allow them to be as selfish as they like; and often appear to value fairness for its own sake, to the extent that they would rather forgo monetary gain than be treated unfairly, or even see someone else treated unfairly. When Henrich et al (2010) carried out these experimental games among small-scale, forager-horticulturalist populations, however, they observed some quite different patterns: in contrast with the ‘fair-minded’ behaviour found among members of industrialised societies, for instance, many Amazonian players displayed little willingness to provide an equal share, a low expectation to be treated fairly, and almost no desire to punish unequal divisions (see also Gurven and Winking 2008:185-86). In short, they appeared to display a radically different sense of fairness to that found in the industrialised West, but one also - it should be pointed out - squarely at odds with the ‘ethic of sharing’ so often assumed to characterise such subsistence-oriented societies.

Especially in the absence of more detailed ethnographic data, it can be difficult for anthropologists to know how to interpret these kinds of results. We can readily surmise that participants asked (and usually paid) to participate in such experiences may face decisions and scenarios, not to mention forms of social interaction, that are unfamiliar to them and which do not really replicate the options and strategies available in real-life cooperative dilemmas (see Baumard and Sperber 2010; Guala 2010). Different cultural conventions or ethical commitments around ownership, work and merit, for instance, could presumably influence people’s judgements during experimental trials, but their importance could only be drawn out if the interpretation of experimental results is accompanied by relevant ethnography.

One productive way forward might be to pay more careful attention to the different spheres of social life in which distribution actually takes place, and to use these kinds of experiments in a more naturalistic way, as a methodological tool that augments but does not replace ethnographic study⁷. Games might offer new insights into nongame behaviour, while existing ethnographic evidence should be used to probe psychological findings, and perhaps to refine and relativize the concepts of fairness deployed in experimental contexts. Consider by way of illustration the account of distributive justice that emerges in the following episode, as recounted by Crocker for the Brazilian Canela:

⁷ An interesting option, though one that could raise ethical questions, would be to conduct what Harrison and List (2004) call “natural field experiments”; in these researchers manipulate one variable of interest in an environment that is otherwise left intact so that participants remain unaware that they are participating in an experiment.

Another aspect of caring among the Canela is the leaders' concern that everybody receive a fair portion in any distribution. The apparent sense of fairness and justice is supported by feelings of concern for the person who does not obtain her or his portion or who does not receive anything at all. For example, it is easy to cut and apportion meat and to divide rice or manioc flour into as many piles as necessary for each individual or family to receive its due. However, some shared items are not so easily apportioned. When I was trading with iron implements, it was not possible to divide a machete or an axe among several people who might want it. There could not be an iron tool for everybody, only one or two for each family, as was agreed to in a tribal council meeting. However, I was considered unfeeling if I did not have items of this sort for certain individuals who felt they must have them, even if this exceeded their family's quota as I had set it. If Canela individuals presented themselves to me and wanted an item strongly enough, fairness was not of primary importance; concern and feeling for other people came first. Rules previously agreed-upon between the council of elders and myself had to be broken because iron items could not be supplied to everybody; the degree in intensity of the requester's feelings would require that he be given the axe he wanted (Crocker 1990:185).

In this particular ethnographic context, we might propose that although a morality of fairness does appear to exist, it is counterbalanced (or perhaps even encompassed) by something like a morality of sympathy, or an ethics of care. Latent here too is a respect for other principles of distribution beyond fairness or merit, such as need. To the extent that considerations of fairness underlie distributive decisions, they may still be based on radically different value systems. Rather than striving towards impartiality or a concern with merit on objective grounds, fairness in Amazonia might operate as one component of peoples' concern for others: one can be fair, we might say, only by keeping sympathy close to heart.

Wrongdoing: Intentionality and Responsibility

Shifting gear now to moral psychology, the relationship between moral evaluations and ascriptions of intentionality is one important field of enquiry in which extrapolation from studies carried out in Western cultural settings has proven challenging, but also laced with some intriguing possibilities for dialogue with ethnography. How intentionality is ascribed in a given cultural context, as Keane (2016: 117) points out, tends to affect whether an action is considered morally significant, who bears responsibility, and to whom it is relevant. Psychological research has shown that, generally speaking, intentional harms – those done on purpose – are judged more harshly than unintentional harms and as more deserving of punishment (e.g. Cushman 2008; Young et al. 2006). Rather counterintuitively, however, it has also been shown that the line of influence also runs in the other direction: it is not simply the case that people attribute moral responsibility for an act and its consequences - and thus whether (or the extent to which) it is deserving of blame or praise - based on a prior assessment of intentions. Research on the so-called 'Knobe effect' (described further below) has shown that bad outcomes are more likely than good outcomes to be judged as brought about intentionally (e.g. Knobe

2003). The very concept of intentional action that ordinary people hold is not neutral, as philosophers have long held, but fundamentally moral in nature.

Findings such as these are sometimes linked to ideas of a universal and biologically based human morality, or ‘universal moral grammar’ (e.g. Mikhail 2007). Unsurprisingly, however, most research has been carried out among those peoples memorably if contentiously characterised as ‘WEIRD’ (Western, Educated, Industrialized, Rich, and Democratic, cf. Henrich et al. 2010), leaving open questions about the extent to which such findings will hold across a more diverse range of cultural settings. Western philosophical reflection on the nature of meaning and action has tended to place great emphasis on intentionality while assuming this to be a property of the individual actor, to be found within the self; anthropologists, by contrast, have been more sceptical of the idea that individual intentionality plays the same role everywhere, if indeed it plays any role at all (Keane 2016: 118; see also Duranti 2015; Trundle, this volume). This has been a theme in recent anthropological discussions of the tendency prevalent in many Oceanic societies, but also elsewhere, to downplay knowledge of the mental states of others: what has been referred to as the ‘doctrine of the opacity of other minds’ (e.g. Rumsey and Robbins 2008). There are suggestions that this too may connect with considerations of morality and ethics: Stasch (2008), for instance, has argued that West Papuan Korowai people’s public disavowal of knowledge of what others might be thinking stems from a moral and political concern not to impinge on their personal autonomy.

Studies in experimental psychology have begun to explore more systematically the role of intentions in moral evaluations. One recent cross-cultural study found that while intentions appear to play a significant role in people’s moral judgements in some places, they appear to play little or no role elsewhere (Barrett et al. 2016). While the perceived intentions or motivations of agents did affect peoples’ moral judgements in all 10 societies studied, the degree to which such factors were viewed as excusing varied significantly, as did the types of norm violation for which these were relevant (Barrett et al. 2016: 4692). These authors suggest that while theory of mind is universally available as a resource for moral judgements, it is not always used in the same way, if it is used at all, in each population or even in each domain of action within a given social setting. They have little to say, however, about possible reasons for the societal-level variation they observed, hoping simply that ‘future research might reveal a relationship between the scale and structure of human societies and their norms of moral judgement’ (ibid.: 4693). Of potential relevance, they speculated, might be such factors as whether disputes are adjudicated by third parties on the basis of explicit standards of evidence – which might lead to an elaboration of norms involving reasons for action; the presence or absence of witchcraft (where ‘the overactive attribution of malevolent feeling...can lead to cycles of violence and revenge’), or notions of corporate responsibility in which members of a group – say a kin group – are held responsible for wrongdoings of individual members⁸.

Another recent study (Robbins et al. 2017) sought to test the cross-cultural purchase of the Knobe effect, described above: the finding that people are more likely to construe the foreseen side-effect of an action as having been brought about intentionally when that side-effect is morally bad, rather than good⁹. In Knobe’s original studies, participants were presented with one of two almost identical scenarios, each involving a board chairman who makes a decision to press ahead with a project that will increase company profits, while emphatically claiming to have no interest in its entirely predictable and foreseen consequences: ‘harming’ the environment, in the first scenario; or ‘helping’ it in the other. Knobe found that a sizeable majority of participants, when presented with the ‘harm’

⁸ See Laidlaw (2014: 179-212) for discussion of very similar themes.

⁹ For an overview of the considerable literature on the Knobe effect, and the various competing explanations, see Cova 2016

scenario, felt that the chairman caused that harm intentionally, while only a small minority, when presented with the ‘help’ scenario, felt he had helped it intentionally. Adapting and translating these scenarios into a range of different cultural and linguistic settings, Robbins et al. (*ibid.*) found that this intriguing finding of asymmetry in intentional action attributions was in fact supported in most of the eight populations they studied. However, it appeared inverted in Samoa (and, to a lesser extent, in Vanuatu), where participants were asked to judge the actions of a village High Chief, who decides to plant a new crop that will make money but have either a positive or negative effect on the environment. Here, the chief’s actions were more often seen as intentional when they helped, rather than harmed, the environment. The authors of the study took this to imply that participants in the South Pacific tend to ascribe intentionality in very different ways to those in other parts of the world.

In seeking to interpret their findings, the authors noted that the meanings of high-ranking status may be quite different in this cultural context, as would be the consequences of blaming a high-status individual¹⁰. In particular, it may not be the prerogative of a commoner to accuse a high-ranking chief of wrongdoing. The example clearly shows how ethnography is really needed to support the interpretation of such experimental findings. Work by Duranti (2015), for instance, on how intentionality attributions vary with factors such as the discursive context and social status would appear very helpful, not just in order to develop a fuller explanation of these findings, but also to probe the areas where further, more targeted research would be most promising and interesting.

Studies such as these also bring to light an important methodological question, concerning the extent to which participants – in particular, those in relatively ‘exotic’ locations, where such experiments are highly unusual – can be relied upon to interpret the questions as intended by the experimenter, and to offer answers guided purely by their moral intuitions. This is an issue taken up by Astuti (forthcoming) in a recent reflection on the prospects for combining the research methods of anthropology and psychology. When she tried to determine whether Vevo (Madagascar) adults would display the Knobe effect, using suitably modified stories, she found that people reasoned on the basis of their prior experiences and what they considered pragmatically appropriate in the circumstances, rather than on the more purely logical basis intended by the questioner. Much like the Samoans discussed above, Vevo people were reluctant to punish a wrongdoing farmer in one vignette, not because he was undeserving of punishment *per se* but because they knew that attempting to punish such a rich and powerful person would only get them into trouble. On the other hand, they attributed intentionality to an agent in the help condition - in this case, a trader who, in pursuit of his profits, improved the fish stock as a side effect, even though in the story he claimed not to care about improving the fish stock¹¹. Vevo people reasoned that, regardless of what the story explicitly told them, such a trader would make more money by having more fish around to trade, and so would certainly want to cause the stock to increase.

Astuti suggests that this kind of effect – which she refers to as the ‘incursion of the social’ into the experimental setting – is ultimately inevitable and that researchers should embrace it rather than attempting to eradicate it. Many of the claims made by psychological cross-cultural research must be treated with caution, insofar as it is not always clear precisely what question is being answered in a given experimental setting. For instance, the intuitions of Samoans as to whether an agent acted intentionally may not differ much, in the end, from those of people elsewhere, though it may certainly

¹⁰ James Laidlaw (personal communication) has suggested too that villagers might well see High Chiefs in a different ethical light to the way board chairmen are seen among US undergraduates; and it would be interesting to re-run the experiment in the US with the chairman replaced by a ‘community organizer’.

¹¹ In Knobe’s original example, when the environment is helped only as a foreseen side-effect of the actions of a chairman pursuing profits, study participants tended not to see that helping as intentional.

be the case that concepts of intentionality are less salient generally, or less likely to figure in everyday discourse. The professed disinclination to mind-read apparently common in the region only highlights the need for further ethnographic research on how people learn to construe the nature of the mind in culturally specific ways. Conversely, experimental research can help to reveal how understandings of mind or intention also interplay with social considerations such as authority and status.

This all points to an interesting nexus of collaboration with recent anthropological theorisations of intentionality and responsibility. Luhrmann (2020) has proposed that one important dimension along which cultural models or ‘theories’ of the mind vary is the extent to which they are regarded as ‘bounded’ or ‘porous’. For instance, it appears that while in places like Amazonia and Melanesia, the minds of others are often considered ultimately unknowable, they are also thought of as porous, and as susceptible to external attack or capture. These premises sit in interesting tension with one another, as they give shape to a strong form of individualism that is at the same time hyper-relational, and which likely inflects how personal responsibility is understood in each region. While autonomy and freedom in action are highly valued, attributions of responsibility frequently draw attention to a chain of intentional agents that extend, blur or distribute the locus of agency and authority beyond or within the individual (cf. e.g. Laidlaw 2014: Ch.5).

Pathways to Dialogue

In this final section, we illustrate some of the preceding ideas with a brief reflection on some of the challenges we have faced in our own ongoing research into concepts of morality and justice in Amazonia. Over the past few decades, the native peoples of western Amazonia have experienced an extraordinary and rapid transition from a highly mobile lifestyle based in small, fluid, politically autonomous family groups to a relatively sedentary life in large, nucleated communities, whose members are no longer primarily related through kinship. This shift has occurred primarily in response to state intervention and expansion, and it has led to radical changes in redistribution and exchange practices, mechanisms for dealing with and resolving disputes and disagreements, ideas of responsibility and accountability, and a range of other facets of moral and political life. In requiring people to cooperate with non-kin in ever larger communities, we felt that in some ways these transformations appeared to restage hypothetical scenarios for the evolution of fairness as a function of increasing scales of cooperation, providing an exceptional opportunity for the empirical study of how morality and ethics are shaped by wider social conditions and constraints. Thus, we were interested in exploring how people’s moral judgements were affected by their degree of integration into markets and the state, and the logic of the ‘community’: how such integration might be prompting forms of moral reasoning based less on the logic of interpersonal relationships, for instance, and more on abstract principles such as fairness.

In one recent study, designed and implemented in collaboration with Rita Astuti and Grégory Deshoulliere, native Shuar and Urarina participants (based in the Ecuadorian and Peruvian Amazon respectively) were presented with three short vignettes, each describing a particular moral dilemma involving a basic conflict of interest or tension between the potentially conflicting values of ‘kinship’, on the one hand, and ‘community’ on the other, which is to say the formal, legally recognised group which effectively stood in for formal rules, roles, and the logic of the state. The vignettes were structured around the themes of ‘shaming’, ‘helping’, and ‘cooperating’ respectively, and we assessed each participant’s degree of integration using a separate survey comprising a series of questions and

a short life history. Rather than present results here, we wish to draw attention to some methodological considerations.

Firstly, the design of the vignettes themselves. This proved a key challenge, but also central to what we saw as the need for ethnography in experimental design. We were dissatisfied with the way many cross-cultural studies have employed vignettes with little seeming relevance to, or grounding in, the cultural context. As already noted, a key issue for much cross-cultural experimental research, especially when assessed from the standpoint of anthropology, is its external validity. Rather than inventing artificial scenarios, then, we drew on our own extensive fieldwork experience to come up with vignettes based on actual moral dilemmas that we knew one or more of our interlocutors had had to negotiate. Because the vignettes were being presented in two different populations – among the Ecuadorian Shuar and the Peruvian Urarina – we had to ensure that they were intelligible in each context. This was harder than we initially expected: we found that what was eminently plausible in one context no longer made for a compelling narrative in the other. This certainly made us wonder about the studies in which a single vignette was told in societies from very different parts of the world. To ensure comparability across the field sites, then, we had to compromise a little on the ‘catchiness’ of the dilemma in each of the contexts, as we note below.

Ensuring a reliable translation was also an interesting challenge, but quite revealing in its own right. We realised how many slight changes of meaning were virtually inevitable when translating to a language so different from English. For example, the question, ‘what should Juan do?’, when put in Urarina, could also be interpreted as ‘what could Juan do?’, or ‘what might Juan do?’. Expressing explicitly and concisely the quality of obligation inherent in the English ‘should’ did not seem possible in the Urarina language, which relies on the irrealis mood to express conditional possibilities. Incidentally, a similar kind of challenge confronted our earlier attempt to reproduce the Knobe effect, discussed earlier, insofar as there seemed to be no term or concept for ‘deliberately’ or ‘intentionally’ in Urarina, and no way to express concisely the idea of a difference between intended and foreseen harm. Despite these and other difficulties, however, the Knobe effect was, in the end, discernible in the results: somewhat to our surprise, Urarina did appear more predisposed to ascribe intentionality to acts they considered blameworthy than to those they considered praiseworthy. That said, the difference between intentional and accidental harm seemed overall less relevant to participants than whether a given action or norm violation could and should have been avoided.

Further difficulties confronted our translations of other core concepts of the study, such as ‘the community’, or ‘the will of community members’: both entered the political vocabulary of the area only after the creation of state-recognised legal communities in the 1960s and 1980s. While commonly used today when people speak in Spanish, these terms do not have precise equivalents in the indigenous languages. The Shuar word to denote community, *irutkamu*, nominalises the verbal root *irur-*, which expresses the action of gathering and reuniting; it does not specify the number of people gathered, which can range from a small family group to a whole village. This small detail highlights the risk of reifying group life or generalising the justifications people provided about meeting social expectations to the whole community as an objective entity.

Another acute challenge surrounded the recruitment of participants. While the sample sizes required for statistically significant results can be obtained relatively straightforwardly when one is based in a city, or where people can easily drop in and out of a lab, this is far from the case in a remote Amazonian village, where the population density is very low, and people are generally eager to get on with tasks that typically take them far from the village. Recruiting just 24 participants to sit and listen patiently

to vignettes proved a logistical challenge for a lone fieldworker in a remote location, as well as a drain on our social capital; and yet this is considered an extremely small sample size by the standards of mainstream psychological research. It also means trends in people's responses must be very pronounced if any statistically relevant effects are to be claimed. Moreover, taking part in the study itself – though only requiring around thirty minutes of people's time – seemed to be quite onerous, even intimidating for some, especially those who had not attended school, and who found responding to questions one after another to be an extremely unusual and potentially threatening format of interaction. Add to this the difficulty of finding ways to work in isolation with just one person at a time, in order to avoid the 'contamination' of results. On occasion we had to devise ingenious ploys to distract curious husbands and wives from overhearing (and potentially intervening in) the discussions. We came close to exhausting our reservoirs of goodwill, and were it not for the fact that we had already established good rapport with all participants during prior fieldwork, we doubt we would have persuaded people to engage seriously and constructively with the task.

The responses people gave to the vignettes turned out to be somewhat more homogenous than we had initially expected. We found during piloting that some moral dilemmas were consistently answered in a particular way – that they were perhaps not really 'dilemmas' as we had imagined, insofar as the answers seemed to be relatively obvious to a majority of respondents. This emphasised to us the need for a very lengthy piloting phase, as even with our considerable knowledge of the cultural context, getting the stories 'just right' so as to probe moral intuitions required extensive tweaking and refining. That said, however, even where people gave very similar responses to the main questions, their justifications varied much more widely. In a sense, at least for some parts of the study, people's justifications - solicited outside the main experimental framework - turned out to be more interesting than the official experimental results themselves, for they revealed people's thoughts about how various kinds of problems could or should be solved. In the 'helping' dilemma, for example, we asked people whether the treasurer of the village should steal community money designed to celebrate the anniversary of the community, in order to take his father to hospital after the latter was bitten by a snake. Most respondents said the treasurer should indeed take the money, because saving his father's life was a matter of emergency. However, justifications differed widely, and often in accordance with state and market integration. For instance, when asked how villagers would respond once they found out that the treasurer had stolen the money, one elderly unschooled Shuar woman, who had scored low on our scale of state/market integration, replied that 'villagers won't say anything, they will understand because they help one another when illness strikes, and because they love each other.' By contrast, a middle-aged male Shuar schoolteacher who had scored highly on integration replied that 'villagers will be upset and demand that the treasurer repays the money', emphasising that the protagonist should first try every avenue to seek approval from the president of the community. When asked what to do if the treasurer did not have the money to repay his debt, he continued: 'To avoid problems and live well, then he must work for the community to pay off his debt'.

On the face of it, this kind of difference between the older woman's appeal to love and understanding, and the younger man's appeal to a principle of fair exchange, would seem to bear out Henrich et al's hypothesis that higher participation in market and state institutions increases a concern with fairness. Upon closer inspection, however, respondents in both cases emphasised emotional states (love, upset) and a concern with maintaining social relationships (helping one another, living well). In fact, a common trend in this study was that compliance with general standards or rules was typically justified in terms of sustaining relations and avoiding disharmony. This returns us to our suggestion above that fairness in an Amazonian context might operate as one component of a more overarching ethics of care, or an ethics of keeping the peace, rather than as a more 'advanced' achievement of human

morality. We return again to the need for studying moral dispositions like compassion and fairness ethnographically, alongside any formal experiments that might take place. We have not yet found evidence to support a stage-like, unilinear shift to communal 'objective' morality, as some theories would have predicted; what has emerged instead is evidence that people can and do move back and forth between different (and potentially competing) ethical frameworks and standards of moral judgement, as they do between kinship-based and 'community-based' forms of social living (Buitron 2016). Whether the older lady and the younger schoolteacher do in fact operate with different concepts of fairness is a question that experimental methods – such as economic games – might be strongly placed to shed light on¹². At the same time, precisely what kinds of behaviour or moral reasoning such labels as 'care' or 'fairness' refer to is above all a matter of ethnographic investigation.

Conclusion

The trails we have traced here through the vast terrain inhabited by the cognitive science of morality and ethics hopefully illustrate the need for greater dialogue and collaboration. It is often easier for scholars to talk past one another than to engage critically and constructively with different ways of carrying out research. Anthropologists are often guilty here too of not making their ethnographic findings more accessible to non-specialists. As it stands, most theories developed in cognitive science not only ignore recent trends in anthropology, but actively reproduce ideas or approaches that have already been subject to extensive critique. Psychologists do sometimes look to anthropologists to help them design more effective and appropriate protocols for cross-cultural research. Yet we cannot emphasise enough that creating a meaningful interdisciplinary agenda should involve using ethnography, not merely to better interpret or inform psychological hypotheses and experiments, but to critique and redefine the concepts themselves and for the generation of theory.

Conversely, anthropologists could take stock of psychological theories to learn something new about their field sites. The use of experimental vignettes directed our attention to novel dimensions of everyday forms of justice, even though (and in some cases precisely because) we did not always obtain the expected results. Rather than taking psychological hypotheses and experiments as conceptual or methodological straightjackets, anthropologists might set about using them creatively, to interrogate their own ethnographic theories and to develop comparative perspectives that in turn facilitate their engagement with wider interdisciplinary debates. In some cases, the toolkits of cognitive scientists could help to shed light on individual and cultural difference and diversity, as opposed to just similarity or moral universals, and further refine ethnographic theories that help to explain such difference. At times, this could mean working to ensure that ethnographic arguments remain plausible in light of the comparative empirical work produced by psychologists or experimental philosophers and others; at other times, it could mean working to problematize these theories and the assumptions on which they rest. This is essential if we are to avoid partially replicating a certain version of humanity – and human morality – everywhere we look.

¹² Indeed, variation between individuals within the same group is an important yet understudied area in such studies (see Lamba and Mace 2013).

Acknowledgements

Our research has been made possible thanks to the willingness of our Urarina and Shuar friends and interlocutors to host us over many visits to their homes and to engage patiently and constructively with our work. Rita Astuti and Grégory Deshoullière played key roles in the design and implementation of the study we describe. In Urarina territory, we are grateful to Juana Lucía Cabrera Prieto for her help in carrying out the study, and to the staff of Clínica Tucunaré and Colegio CRFA for logistical support. In Shuar territory, we are especially grateful to Manuel Maiche Tzapacu, Sunur Maiche Manchu, and the community of *socios* of Kuamar.

We are thankful to James Laidlaw, Rita Astuti, Charles Stafford, Iza Kavedžija, and two anonymous reviewers for their careful reading of earlier drafts and useful suggestions for improvement. This research has received funding from the European Research Council under the European Union's Horizon 2020 research and innovation programme (grant agreement No 715725).

Author Bios

Harry Walker is an Associate Professor in the Department of Anthropology at the London School of Economics and Political Science. He is currently working on a collaborative research project exploring the social, cultural and cognitive dimensions of justice, morality and moral learning in Amazonia, and the ways in which these may be undergoing change. His monograph on the Urarina, *Under a Watchful Eye: Self, Power, and Intimacy in Amazonia*, is published by University of California Press.

Natalia Buitron is Jessica Sainsbury Assistant Professor in the Anthropology of Amazonia at the University of Cambridge and a Fellow of Jesus College. She is currently working on a research project exploring the plurality of indigenous sovereignties emerging from Amazonia.

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