

## Special issue introduction

### Origins of intergroup bias: developmental and social cognitive research on intergroup attitudes (introduction to the special issue)

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#### Abstract

*Prejudice and stereotyping are central to research and theorizing in social psychology. Yet, all too often this work tacitly assumes that these phenomena spring into existence fully formed in adults. This special issue originates from the need to integrate adult social psychological approaches with developmental inquiry into the ontogenetic and phylogenetic origins of prejudice and stereotyping. The diverse set of nine papers in this special issue demonstrates the utility of this interdisciplinary approach. In this introduction, we make the case for giving developmental research a seat at the social psychological table, and briefly summarize the contributions contained in this special issue. Copyright © 2010 John Wiley & Sons, Ltd.*

#### INTRODUCTION

This special issue focuses on developmental approaches to understanding classic intergroup phenomena such as prejudice, stereotyping, and discrimination. Having brought this developmental focus to a social psychology journal, we begin with some general considerations regarding such interdisciplinary—or at least intersubdisciplinary—endeavors. Social and developmental psychology are surely close cousins, but their everyday practice is often quite independent, both because of substantive issues related to theoretical and methodological commitments, as well as more mundane divides created by different publishing venues and professional societies. We believe this separation to be unfortunate, and while we do not belabor the point here (see Dunham & Olson, 2008), we would like to discuss a very general difference that may be particularly relevant in the context of intergroup research.

Whether explicitly or implicitly, social psychologists often assume a general social learning perspective, in which the emergence and development of prejudice and stereotypes are a direct function of the social input. On this view, society provides and the individual acquires the locally important social categories, as well as the prevailing evaluations and stereotypical associations linked to those categories (e.g., Devine, 1989; Greenwald & Banaji, 1995). This process is, broadly speaking, one of passive internalization.

Developmentalists have challenged this assumption on at least two major fronts. First, they object to the implied notion of *tabula rasa*, of a blank slate upon which social information is inscribed. Rather, they point out that children are engaged in an *active* process of learning that often involves forming knowledge structures that are quite different than those held by adults, as a consequence of their attempt to restructure incoming information to make it fit within what they already know and think. Prominent examples include children's early intuitive theories of biological life, in which life seems to be defined in terms of causal efficacy (the sun is alive because it warms us; buttons are alive because they hold up our trousers;

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Carey, 1985; Piaget, 1927). Clearly these ideas do not come from the adults around them; what's more, holding such a view, children may interpret a novel fact such as that plants are also alive in a way that fits with their prior understanding, perhaps such that the life of plants is due to their role as human sustenance. In short, children are not passive internalizers of prevailing patterns of knowledge.

Second, the ways in which children restructure incoming knowledge often depends on the kind of knowledge in question, that is, on the knowledge domain (Hirschfeld & Gelman, 1994). It is now clear that children bring quite different assumptions to bear depending on what they are learning about. For example, when infants observe a *human hand* repeatedly reaching for the same object, they assume that the object is the hand's *goal*, and will expect the hand to continue to pursue it even if the hand has to manoeuvre in novel ways in order to reach it (e.g., to a new location or around a barrier). However, upon seeing a metallic claw continually "reach" for the same object, infants form no such expectation, and instead expect the claw to follow the same path of motion irrespective of changes in the location of the object (Woodward, 1998). Put simply, infants make different allowances for *agents* like hands than for *artifacts* like metal claws, suggesting that *what is learned* depends on the sorts of things being observed. In the present context, this could be taken to suggest that children may also have characteristic, domain-specific ways of reasoning about social entities such as social groups (a topic taken up by Kinzler, Shutts, & Correll, 2010; Platten, Hernik, Fonagy, & Fearon, 2010).

Certainly we believe that a deeper appreciation of social psychology can benefit developmental psychology as well as *vice versa*. However, our desire to place this special issue in a prominent social psychology venue was not haphazard; it is more common for developmental psychologists to read the social psychological literature than for social psychologists to read the developmental literature. There are legitimate reasons for this. If I, a developmental psychologist, study stereotyping, surely I would be ill-advised not to exploit the vast findings emerging from adult-focused social psychological research. Yet it might at first blush seem that for a social psychologist studying stereotyping, the converse need to explore what children are doing is less acute. After all, I might insist, I am interested in *adult* cognition and behavior; the developmental paths leading to this 'end state', while perhaps interesting, are not directly relevant to the adult endeavor. Perhaps. However, this assumption, when fully unpacked, often turns out to be more worrying than we might have thought.

We begin by pointing out that adult knowledge does not spring into existence, fully formed, at age 18—the age at which most research samples in social psychology begin. Rather, adult knowledge is the result of protracted developmental processes beginning as early as infancy. Might this mundane fact imply constraints on how knowledge forms? The problem swims into sharpest relief when we consider the study of *acquisition*, e.g., in the study of stereotype and prejudice formation. Certainly much adult research has tackled this topic, yielding rich insight into how stereotypes and prejudice form. Yet can we assume that the learning mechanisms adults employ are the same ones that a 4-year-old employs when first realizing that, for example, there is something called "race" which adults use to organize social relationships? Surely it would be presumptuous to answer this question in the affirmative absent direct investigation! After all, preschool-aged children show pronounced differences in reasoning about intentions, traits, numbers, animals, societies, moral principles, and so on—why not social groups as well?

What makes this more than a curiosity is the possibility that adult knowledge is in part composed of information initially acquired by children using learning strategies that adults may no longer have or use. That is, knowledge acquired in childhood by child-specific means may persist in some form into adulthood (see Devine, 1989, for a related suggestion arising from within social psychology). If so, the nature of adult knowledge can only be correctly understood by considering its natural history, its unfolding over developmental time. If so, studies of acquisition focused solely on adults can tell us how an adult might reason about a social group they encounter for the first time in adulthood, but cannot be taken to straightforwardly imply that this is how social knowledge about race, gender, nationality, religion, and other prominent social categories are acquired at far earlier ages.

To sketch how a few general examples might play out, adult social cognition research has identified illusory correlations or pseudo-contingencies (Hamilton & Gifford, 1976; Meiser & Hewstone, 2006) as possible contributors to prejudice and stereotypes: When learning about novel groups, adults tend to establish a false correlation between the minority status of a group and rare negative behaviors, resulting in a negatively biased evaluation of that group. The occurrence of this bias, however, is based on specific cognitive abilities (categorization, encoding of frequency information, estimation of base-rates, perception and recall of covariations, etc.) that might not exist in the same form in children. For example, young children understand quantification differently before acquiring the same numbers and counting principles that adults use (e.g., LeCorre & Carey, 2007). While some patterns of illusory correlations have been

reported in school children (e.g., Johnston & Jacobs, 2003; Primi & Agnoli, 2002), further developmental research is needed to fully understand if and to what degree these cognitive biases play a role in real-life prejudice formation.

A similar claim can be made regarding the influential *social role theory* (Eagly & Steffen, 1984), which also locates the origins of stereotypes in cognitive biases in social information processing such as *spurious correlations* (Meiser & Hewstone, 2004). Social stereotypes (such as gender stereotypes) result from the perception of a relation between a social group membership (e.g., gender) and observed behaviors (e.g., communal vs. agentic behaviors). These behaviors are attributed to group-based characteristics while ignoring social roles (e.g., occupation) as the mediating variable of this relation. Although intuitively convincing, absent developmental research exploring age-related differences in the processes related to stereotype acquisition and the role of moderating factors such as observational learning vs. explicit parental teaching, we cannot estimate the impact of these specific learning processes on real-life stereotype formation.

We can put this in more general terms by noting that many adult models tacitly assume certain sources of input, certain learning histories. That is, theories imply developmental predictions, and in some cases different theories imply different developmental predictions. In these cases, development becomes less a *discipline* and more a *method*, a tool like any other for testing theory-driven hypotheses. We illustrate with one example from our own work, the development of automatic or implicit forms of social attitude. Many early views of implicit social cognition assumed that social attitudes are “slow-learned” maps of statistical regularities acquired *via* protracted experience (e.g., Devine, 1989; Fazio, Sanbonmatsu, Powell, & Kardes, 1986; Greenwald & Banaji, 1995; Rudman, 2004; Wilson, Lindsey, & Schooler, 2000). Others have instead emphasized the need to rapidly form evaluations of even novel stimuli, and so have insisted that at least in some cases automatic attitudes can be created online as a stimulus is encountered (e.g., De Houwer, Hermans, & Eelen, 1998; Duckworth, Bargh, Garcia, & Chaiken, 2002; Zajonc, 1980). These two views at least potentially make divergent developmental predictions, the former suggesting the gradual emergence of automatic attitudes driven by consistent experience, the latter suggesting that a very general factor like social difference might be sufficient to immediately induce automatic attitudes. Examining the developmental course of automatic attitudes thus becomes a way to weigh in on this debate. In some initial work in this area (e.g., Baron & Banaji, 2006; Dunham, Baron, & Banaji, 2006, 2007), we found that automatic race attitudes as measured by the Implicit Association Test appear at adult-like magnitudes as early as age 6 (and possibly as early as age 3–4; Dunham & Banaji, 2010), and are largely stable over developmental time. This is difficult to reconcile with slow-learning views, which would predict a gradual “tuning” of these attitudes as social information is internalized, and instead suggest that merely partitioning social targets into ingroup and outgroup may be sufficient to induce automatic preferences for the ingroup—and indeed, children as young as 5 show implicit ingroup preference following assignment to minimal social groups (Dunham, Baron, & Carey, in press). More recently, this perspective was further refined by research contrasting different measurements of automatic prejudice activation (Degner & Wentura, 2010; Degner, Wentura, Gniewosz, & Noack, 2007). These studies suggest two different yet complementary developmental components of automatic prejudice in childhood and adolescence, each following a distinct developmental course. *Category-based* prejudice automatization, as measured by methods such as the IAT which focus on entire social categories (e.g., Black vs. White) appears much earlier than *exemplar-based* prejudice automatization, as measured by methods such as evaluative priming which focus on individuals who so happen to belong to one or the other social category. Thus, exemplar-based evaluations may well follow a slow-learning model, while category-based evaluations appear not to.

Related questions are addressed by several papers in this special issue. For example, what role do category labels play in prejudice acquisition (Waxman, 2010)? Which intergroup experiences during childhood and adolescence influence attitude formation and change (McGlothlin & Killen, 2010)? What is the role of more general processes related to social reasoning (Fitzroy & Rutland, 2010) and cultural learning (Schiefer, Möllering, Daniel, Benish-Weisman, & Boehnke, 2010)? The take-away point here is that development can become a powerful way to “weigh in” on debates in the adult literature, especially when specific predictions can be derived from the adult theories.

Many who seek to bridge developmental and social areas start with feet firmly planted in one field, reach across disciplinary borders to borrow a method or an insight from their neighbor, and then retreat back to familiar territory. This approach can yield gains, first and foremost by extending methodological or theoretical commonality, and by making researchers in one area aware of a broader range of potentially relevant data. But in selecting articles for this special issue, we prioritized contributions that go beyond this more limited form of cross-disciplinary incursion and that thereby strike notes that would not have been possible from a grounding in just one discipline. There are many ways to do this, certainly more than are represented in this volume, but we hope that the papers we selected can serve as examples of how research

informed by both areas can offer unique insights into the social and cognitive processes underlying the complex intergroup phenomena that are our shared interest. With these considerations in mind, we now turn to a brief review of the papers included in this volume.

## CONTENTS OF THE SPECIAL ISSUE

The issue begins with two theoretical contributions focusing on the initial state or “building blocks” out of which mature social cognition forms. Platten and colleagues take a very general approach, reviewing both comparative research with primates and developmental research with infants to ask what universal learning tools or basic assumptions infants and young children start out with (Platten et al., 2010). This approach is a classic one in cognitive development, in which the overall project can be characterized as the need to describe the initial state, the nature of the input, and how mechanisms present in the initial state are used to build new knowledge and perhaps even new learning mechanisms on the road to the mature “end state”. Platten and colleagues focus on the challenge of coalitional affiliation in environments in which cues to coalition membership are subtle or absent. They suggest that infants are equipped with a powerful set of useful abilities, including identifying and tracking individuals, monitoring the reactions of close others (social referencing), and extracting valenced information (i.e., niceness or meanness) even from highly abstract visual displays composed of moving shapes. We take Platten and colleagues to be pointing out that the rich social competencies present in adults may be built of somewhat smaller pieces that we might first think. Kinzler and colleagues offer a review focused on social categories (Kinzler et al., 2010). They point out that social categories are a diverse and ill-formed lot, based on quite varied features, and ask whether any stand apart, as more important or as cognitively privileged during development. They range across social, developmental, and evolutionary psychological terrain to argue for the cognitive primacy of three social categories, age, gender, and most provocatively, language, while pointing out that race, perhaps the best-studied social category, is almost surely not on the list of privileged categories.

Waxman’s contribution offers an illustrative example of classic developmental methodology, namely that of an inductive inference task (Waxman, 2010). Indeed, cognitive developmental researchers tend to think of stereotyping in terms of induction, of generalization from an exemplar to other exemplars thought to belong to the same category. Waxman teaches a novel property of an individual, and then observes whom children extend the same property to, focusing particularly on race and gender. She finds that young children have a general tendency to extend categories very broadly, from an individual to any other *person*. However, if the individual is identified as belonging to a novel social category, children’s behavior changes dramatically, such that they now restrict generalization to someone of the same gender or race. The implications are profound: Children are taking an important cue from adult labeling practices, as if guided by the assumption that adult labels are indicating that like-labeled entities share many other properties as well.

Drawing most directly from adult social psychology, Svirydzenka and colleagues engage with the topic of entitativity: The extent to which a social collective is thought of as a unified and integrated group as opposed to just a loose collection of individuals (Svirydzenka, Sani, & Bennett, 2010). They find that the properties of groups known to predict entitativity in adults (e.g., amount of intragroup interaction, common goals, etc; Lickel et al., 2000) are also predictive in 10-year-olds, but that some additional differences emerge. For example, children seem to emphasize more perceptually salient properties of groups, such as the degree of interaction among group members, and are correspondingly less influenced by more abstract and non-perceptible properties such as importance of the group to the members. Thus, children may actually see groups in somewhat different ways, ways that could relate to stereotyping, prejudice, and related phenomenon. It would be fascinating to see if even greater differences, including potentially even greater reliance on observable properties, were present in still younger children.

Two papers focus on, broadly speaking, the cultural environment. McGlothlin and Killen (2010,) look at how experiences in diverse versus non-diverse schools impacts subtle forms of race bias, in this case interpretations of ambiguous intergroup interactions and expectations of cross-race friendship potential. They find evidence that diversity provides a protective factor: Whereas European–American children from homogeneous, predominantly European–American schools show race-related biases in these tasks, both African–American and European–American children in diverse schools did not. One can read this as both a testament to the power of experience as well as a reminder that widespread reports of race bias in young children need to be confirmed in more diverse settings. Schiefer and colleagues

(Schiefer et al., 2010) look at culture writ large: How do broad cultural values that might be thought to relate to tolerance affect the development of prejudice? Interestingly, they find evidence of cultural effects on outgroup derogation only in older adolescents, suggesting that cultural effects of this broad sort may emerge surprisingly late (and perhaps indirectly suggesting that younger children, irrespective of cultural differences, develop intergroup attitudes in quite similar ways).

Patterson, Bigler, and Swann, Jr. (2010) ask about a relatively neglected question in both social as well as developmental psychology: What happens when social identities and individual identities clash? For example, what happens if I think of myself as academically strong, but my group is not thought of in those terms? Using a novel groups paradigm grounded in the real ecology of a summer-school program, they assign children to groups based on t-shirt colors, measure individual identity related to academic and athletic pursuits, and then present children with group-relevant information in the form of posters demonstrating that one group is highly successful academically and the other athletically. They find that, at least in the studied age range (5–11), children are not particularly influenced by the group messages, and rather tend to project their own individual properties to groups in a form of self-anchoring (for related adult work, Cadinu & Rothbart, 1996; Otten & Wentura, 2001).

Files and colleagues (Files, Casey, & Oleson, 2010) employ a novel groups procedure based on Bigler and colleagues' work (e.g., Bigler, Jones, & Lobliner, 1997), asking about the time course of these relatively minimal group preference effects. They find that ingroup preference appears immediately following group assignment and remains equivalent in strength several weeks later, despite increased opportunities for within group interaction. The longitudinal design employed here is welcome and surprisingly rare in developmental intergroup research.

The richness of factors influencing the expression of intergroup attitudes is made evident in Fitzroy and Rutland's (2010) contribution, in which factors known to reduce the expression of bias such as public accountability and strong norms against bias are shown to depend on a specific form of perspective taking; that is, only older children who recognize that others might see and judge their responses were affected by public accountability and group norms. This suggests that social influence itself depends on the child's ability to successfully reason about the mental states of others and groups of others, an idea ripe for expansion future work.

Thus, the papers in this volume represent a range of approaches spanning across cognitive, social, and developmental psychology. The samples discussed range from non-human primates through infants and up to adolescents. Theoretical perspectives have their origin in developmental and social psychology alike, with additional influences from cultural and evolutionary approaches. Certainly this diversity is a strength; however, we would note that truly interdisciplinary research is still somewhat rare, perhaps for the reasons we outline in our introductory comments. We hope that volumes like this will increase interest and excitement for work at the boundaries of social and developmental psychology, and will encourage new entrants into this exciting research arena.

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