The communicative nature of moral development:

A theoretical framework on the emergence of moral reasoning in social interactions

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Abstract

Moral reasoning is a central aspect of morality, and its acquisition is therefore a central aspect of moral development. Children acquire moral norms through social interactions with others. Yet, the moral reasoning process that subserves the appreciation of norms remains vastly understudied. In this article we present a theoretical framework on the nature of moral development that conceives human morality in terms of communication. Following this framework, we argue for a closer, systematic investigation of children's moral reasoning in social interactions that complements the predominant approach of adult-led interviews examining children's moral judgments To better understand the role of the reasoning process for moral development, we need to investigate how different reasoning partners and individual differences influence this process. Ultimately, giving moral reasoning the much-deserved attention has the potential to broaden our understanding of how children become moral beings and how human morality is constituted.

Keywords: moral reasoning; peer interactions; moral development

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Reasoning, that is, providing verbal arguments for judgments in discussions with others, is a central aspect of human social life (Habermas, 1984). It opens a shared space in which we can exchange different views and evaluate each other's claims (Toulmin, 1958). It constitutes therefore the foundation of complex forms of intersubjectivity (e.g., Brandom, 1994; Mercier & Sperber, 2011) and contributes to cultural and moral evolution (Habermas, 1984).

Normative reasoning, that is, discussing the right and wrong of social rules, conventions, or moral norms, is a central practice in children's developing appreciation of normativity. It emerges in social interactions in which we hold each other responsible for our statements (Brandom, 1994) and is thus of a primarily cooperative nature. Given its foundation in human interaction, it can be regarded as a form of action in which children gradually construct more complex forms of understanding (Allen & Bickhard, 2013). Through the rationales provided by others, children get access to the reasons that motivate the social norms of their community. Moreover, by defending their judgments to others, children receive feedback on which reasons are acceptable (Dunn & Munn, 1987; Pontecorvo & Fasulo, 1997), enabling them to become active participants in normative discourses. Consequently, influential theories have stressed the role of moral reasoning in moral development (e.g., Carpendale et al., 2009; Gibbs, 2019; Piaget, 1932; Turiel, 1983). Building on these theoretical viewpoints, this paper aims at theoretically delineating the role of collaborative reasoning for moral development and discussing novel avenues for empirical research.

Moral development and human communication: A theoretical framework

Normative development is characterised by children beginning to understand, follow, enforce, and negotiate the validity of various types of normative rules, ranging from moral norms to social conventions and the rules of a game. Within this broader class of normative

stances, moral development is a special area of normative development that is concerned with aspects of welfare, fairness, and justice (Turiel, 1983). In contrast to the rather arbitrary nature of social conventions, the reasons underlying moral norms, pertaining to issues of welfare and fairness, are central to motivating us to behave morally. Thus, an action is characterised as *moral* behaviour when it reflects an appreciation of the underlying moral reasons (Kant, 1788/2002). Understanding early moral ontogeny requires thus an understanding how children come to appreciate *moral reasons*. Based on the key tenet that reasoning emerges in social interactions, that is, by entering the social activity of justifying one's own and evaluating others' claims (Brandom, 1994) and engaging in argumentative exchanges (Mercier & Sperber, 2011), this paper highlights that moral development is essentially rooted in human communication. It converges with major constructivist theories (e.g., Piaget, 1932; Turiel, 1983) that, while differing in other aspects, all highlight the active role of children and their growing ability to construct moral judgments (e.g., Carpendale et al., 2013; Paulus, 2020b; Smetana, 2006). Based on these theories, we emphasize the unique role of joint reasoning for the development of moral stances.

Moral reasoning can broadly be described as the reflection about what one ought to do or not to do by considering issues of welfare, fairness, and justice (Dahl & Killen, 2018; Harman et al., 2010). Notably, moral reasoning thereby capitalises on the general ability to provide and evaluate reasons for a decision (Mercier, 2011). Investigations into children's general collaborative reasoning abilities can thus be informative for understanding moral development. As a communicative interaction, moral reasoning manifests itself in joint discussions with others where partners exchange and evaluate claims and reasons to coordinate their actions (Habermas, 1984). Thus, moral reasoning should first and foremost be considered as a social practice (cf. Mercier & Sperber, 2011), which can — in the subsequent ontogeny of internal reflection (Winsler et al., 2009) — also be exercised when deliberating by oneself (Carpendale et al., 2009). Its ontogenetic foundation in human communication

suggests that a full understanding of moral development requires a closer investigation of how moral reasoning emerges in social interactions.

This piece aims at explicating the theoretical proposal that the emergence of moral reasoning should be conceived of in terms of human communication, that is, as a form of human interaction. This proposal also paves the way for opening an empirical research agenda. So far, moral reasoning has predominantly been explored through two different approaches, namely naturalistic observations of children's conflicts, and experimenter-led interviews. We will outline the advantages and limitations of these approaches before we argue for a more systematic investigation of children's moral reasoning in social interactions.

Investigating moral reasoning: Methodological considerations

Naturalistic observations reveal which types of moral conflicts children encounter and how they solve these conflicts in their everyday lives. Notably, they revealed that by about age 3, children spontaneously produce reasons in disputes with their mothers, siblings or friends (Dunn et al., 1995; Dunn & Munn, 1987; Slomkowski & Dunn, 1992). Here, reasons often function as a defence against other's interests (e.g., in ownership disputes with siblings, stating "But I need that!"; Dunn and Munn, 1987, p. 793). With age, children's arguments also support compromise, taking the partner's interest into account (e.g., "[…] we'll both be queens because we both want to", Dunn et al., 1995, p. 304), reflecting children's growing social understanding and perspective-taking abilities (Carpendale & Hammond, 2016). The role of reasoning grows steadily in early development. With age, children use reasoning more often than plain objections with peers and siblings (Pontecorvo & Fasulo, 1997). This demonstrates how children gradually join the activity that is constitutive for humanity: exchanging and evaluating reasons for our wishes and actions. In the course of early childhood, children learn to appreciate what constitutes as acceptable and inacceptable reasons (Kanngiesser et al., 2021; Mercier et al., 2014; Schmidt et al., 2016). For example, in an experimental study, Schmidt and colleagues (2016) found that while 5-year-olds accepted

any kind of reason (legitimate or egocentric) for an unequal distribution of resources, 8-year-olds only accepted legitimate reasons (referring to need, merit or rules), but not egocentric demands (e.g., "[...] I just want it like that!", p. 45). This growing understanding of the legitimacy of different reasons allows children to become more proficient in dealing with moral matters and more active members of their moral communities.

One key factor in the development of normative reasoning and the differentiation of different types of rules and domains of normative concern is the feedback children receive in social interactions (Smetana, 2006). Already in toddlerhood, parents respond differently depending on which type of transgression children commit (Dahl & Campos, 2013). Directly related to the development of reasoning, mothers express fewer commands and more requests for perspective-taking after moral than after conventional transgressions (Smetana, 1989). Moreover, analysing mother–child conversations about the child's past moral transgressions, Wainryb and Recchia (2017) found that mothers explicitly elicit moral stances from their children (e.g., by asking "Do you think that's okay?", p. 191) and inquire about the reasons for their behaviour to support the child's understanding of the moral implications of their actions. Thus, through the reaction of others, children have opportunities to learn about the severity and consequences of their transgressions. Most relevant, the caregivers' prompts to engage in discourse and to take another's perspective provide manifold opportunities for the emergence of children's reasoning abilities. Thereby, social interactions serve as the basis in which the necessity and the ability for moral reasoning develops.

One line of research has explored these interactions in natural contexts (as reviewed above) and has provided rich insights. Yet, from a methodological perspective, this approach also comes with some limitations. First, overall, conflicts only make a small part of children's everyday lives and are therefore difficult to sample. Second, topic and solution of the conflict depend on the accidental context of the interaction and may include different types of normative and moral reasoning. These factors can hardly be controlled by the researcher,

which makes the observed reasoning instances difficult to compare. Moreover, not all observations can inform us about moral development, but often also include other types of normative reasoning.

These considerations have led to experimental interview approaches in the study of children's moral reasoning (see e.g., Smetana, 2006 for a review). Here, the study design determines context and content of the interactions. Experimenters ask children to evaluate morally relevant topics that arise in everyday peer interactions such as physical aggression and fair sharing behaviour, or actions relating to conventional norms, such as the choice of clothes. Reasons for children's judgments are then often elicited by direct questions. Through the structure provided by the experimenter, the interview method is an excellent approach to reveal children's reasoning capabilities. This approach has been fruitful for studying moral development.

Nonetheless, the experimenter-driven interviews assess reasons *after* the judgment. Thus, while we gain important insights about the results of reasoning processes - children's judgments - in an optimally structured setting, the dynamics of engaging in reasoning (for example, how reasoning unfolds over time) remains unexplored. Based on the idea that moral reasoning is (at least in its emergence) a communicative process, a closer examination would offer insight into how children come to the appreciation of particular normative stances and into the reasons underlying their judgments. Notably, while the co-construction of meaning and the active role of the child are key claims of constructivist theories, the respective processes have hardly been addressed empirically. Studying moral reasoning in social interactions, that is, collaborative moral reasoning, can thus provide unique empirical evidence that would further theorizing on moral development.

Another reason for investigating collaborative moral reasoning is that the reasons offered to explain a judgment can differ from those expressed during a joint discussion about the best outcome or judgment (Mercier et al., 2017). Explanations for this discrepancy vary. The

Social Intuitionist account of moral reasoning explains this discrepancy by claiming that post-hoc rationalisations of moral judgments often do not reflect the so-called moral intuitions on which the initial moral judgment was based (Haidt, 2001). The Argumentative Theory argues that when explaining one's judgment, there is a strategic advantage to only consider and express those reasons that support one's own stance (Mercier & Sperber, 2011). Relating to Piaget's (1932) theory and the Theory of Communicative Action (Habermas, 1984), joint discussions help to reveal limitations in one's own point of view and to develop a more reasonable solution. Interestingly, several approaches agree on the importance of reasoning in conversations: In a discussion between co-equal partners to reach a truly joint judgment, ideally, speakers point out flaws in the other's reasoning, hold each other accountable and those arguments that are deemed irrelevant or false are dismissed. In such open discussions, interlocutors can thus thoroughly evaluate the reasons provided by others, which consequently leads to a more comprehensive examination of the issue and often to a better conclusion than each individual could have reached alone (Mercier, 2011). It is debateable whether and to which extent experienced reasoners, such as adults, use heuristics when reaching a moral judgment (Dahl & Killen, 2018; Haidt, 2001) that is, how a moral judgment is built in a concrete situation (actualgeny). However, how moral reasoning emerges in the first place in the course of human development (ontogeny) is a different question. Here, collaborative moral reasoning fosters an individuals' ability to consider moral issues from different points of view, and thus to develop more complex forms of moral understanding (Piaget, 1932).

In an interview about children's reasons for a judgment, the experimenter can probe children's responses to gain deeper insight into children's norm understanding. However, the produced reasons are elicited by the experimenter's prompts. It is unclear whether the reasons offered were driving children's decisions or to which extent they are expressed because the experimenter asked children to consider them. In a Vygotskian sense, the experimenter's questions provide a scaffold, allowing children to perform at the upper border or even slightly

beyond their actual competence. Indeed, studies have shown that in peer discussions, especially younger preschoolers often produce a big share of insufficient or irrelevant reasons (Mammen et al., 2018, 2021). Investigating children's moral reasoning in discussions can thus explore which types of reasons children deem suitable for their different interaction partners, how they react to inadequate reasons, and how and at which age they make appropriate use of moral reasons in the dyadic reasoning process.

Children do not enter a moral discussion with a fixed and prepared set of moral reasons, but rather co-construct moral justifications during social interactions. Thus, analysing the dynamics of moral reasoning is key to fully understanding moral development. This focus offers a theoretical perspective on moral development that situates morality in the area of human interaction and communication (Carpendale et al., 2021). Historically, it relates to Hegel's criticism on Kant's theory of moral concerns. Kant (1788/2002) has stressed a time-transcending and universal criterion of true morality. In contrast, Hegel (1807/2019) fleshed out a model according to which moral standards emerge in the historic process of human communication in which we come to recognize each other's entitlements, mutually agree on normative views, and hold each other responsible. This approach generally opens a process-based perspective on how morality emerges in human interaction. It provides avenues for an empirical approach that furthers a constructivist understanding of moral development. Focusing on the interaction aligns with action-based approaches that help to transcend the nativist-empiricist debate (Allen & Bickhard, 2013). In what follows, we outline why more attention should be paid to this *process* of reasoning and suggest a complementary methodological approach to study processes of moral reasoning in experimental settings.

Children's moral reasoning in social interactions: Avenues for research

Children's interactions in early childhood have been distinguished into two broad categories (Piaget, 1932): interactions with (same-aged) peers and interactions with adults,

usually their caretakers. Both interaction types contribute to children's normative and moral development but provide different exercise areas for collaborative reasoning.

Interactions with caretakers are especially important for learning new skills and gaining knowledge to which children would not have access to on their own (Carpendale & Lewis, 2004). Parent–child interactions are hierarchically structured (Piaget, 1932). Due to the knowledge and power asymmetry, children regard their caregivers as epistemic authorities (Raviv et al., 1990), a role that has been shown to affect children's moral reasoning (Leman & Duveen, 1999). With parents, children construct understanding through the parents' encouragement to provide reasons and their feedback on children's reasoning process. Most importantly, when it comes to moral behaviour, parents can provide reasons for why a certain behaviour is (un)desirable (e.g., "Don't hit others because it hurts them."), to make the rationales behind moral norms–the moral reasons–accessible to the children (Laible & Thompson, 2002). With age, parents increasingly treat their children as more competent discourse partners in the social activity of providing reasons and thus support the emergence of moral reasoning (Mammen et al., 2019; Tesla & Dunn, 1992). Importantly, while parents structure moral development in line with their views, the interactive and bidirectional process of discussing moral topics, allows both, parents and children, to contribute to children's moral development (Wainryb & Recchia, 2014).

As highlighted by Piaget (1932), interactions with same-aged peers are less structured than those with parents. Here, in the exchange between co-equals, both partners have the chance to actively contribute to discussions, provide arguments and challenge their partner's view. However, social, physical, and intellectual dominance can sway the power balance in favour of one child over the other. Crucially, this asymmetry is not pre-determined but rather volatile and is established anew with each interaction partner. In fact, recent research demonstrates how children appreciate the normative force of jointly initiated rules in peer contexts (Zhao & Kushnir, 2018), in contrast to the limits set by adult authority (Hardecker et al., 2019).

The functional significance of these reasoning abilities is demonstrated by an analysis of peer conflicts of 2- to 4-year-old preschoolers (Chen et al., 2001). While younger children more often reacted to conflicts using physical force or insistence, older children negotiated using justifications, explanations, and compromising. The exchange of arguments and negotiation of different perspectives de-escalates and solves peer conflicts even without adult interference (Eisenberg & Garvey, 1981). Peer discussions about their own and others' transgressions urges children to provide reasons for their judgments, to learn about the acceptability of types of reasons, and thus to develop their moral reasoning abilities.

It should be noted that, as moral reasoning is by definition a type of social reasoning, all factors relating to social reasoning (e.g., individual differences such as language abilities) also relate to moral reasoning. Yet, moral reasoning has characteristics that pertain specifically to the moral domain. Most notably, whereas there is usually a correct solution for reasoning about instrumental concerns (e.g., how to operate a tool to achieve an effect), moral reasoning does not have an objective external criterion. Indeed, there are reasons to assume that it is exactly through moral conversations that we co-create the norms that we then conceive as binding for us (Habermas, 1984). Therefore, moral reasoning is arguably more challenging because it is based not only on factual statements whose truth-value can be tested in the concrete world (e.g., "He hit the ball"; "They hit them in the face"), but also on normative orientations (e.g., "Hitting someone is wrong") and social rules (Köymen & Tomasello, 2020).

In what follows we will give a short overview of some exemplary findings of how interactions shape moral development and highlight avenues for future research. We will first address the role of the reasoning partner, then the effect of individual differences. Subsequently, we approach the co-construction and rejection of moral viewpoints across generations. Finally, we discuss considerations on universality and culture-specificity of moral development.

The role of the reasoning partner

First studies systematically investigated children's moral reasoning in different social contexts. For example, Mammen and colleagues (2019) found that in discussions about moral dilemmas with peers, 4- and 6-year-olds produced more spontaneous justifications and statements that challenged their partners' ideas than in discussions with their mothers (see also Kruger & Tomasello, 1986). This offers first evidence that preschoolers show a higher degree of autonomy in their reasoning with peers than with their mothers.

Other studies have evidenced the variety of young children's moral reasoning abilities. Mammen et al. (2018) presented 3- and 5-year-olds with a character committing either a conventional (e.g., storing toys incorrectly) or a moral transgression (e.g., stealing). For both transgressions, children *judged* that the transgressor should be punished. Crucially, the reasons children expressed spontaneously to their peers differed: when justifying the punishment of the conventional transgression, children included the underlying rule in their justifications. Whereas after a moral transgression, children only mentioned the transgressors actions (e.g., "She stole") and omitted the rule from their justifications, presumably because they expected this to be common knowledge. Overall, the findings demonstrate that investigating reasoning in the peer context highlights children's active construction of morality and the reasons they deem relevant. Moreover, they show that this is a feasible approach even in the preschool years.

So far, studies focused on the dichotomy between mother–child and peer interactions as these are the archetypes of children's early interactions (Piaget, 1932). Further explorations of the naturally occurring variations of the knowledge and power asymmetry, present, for example, with siblings or older and younger peers, would be interesting. For example, studies on theory of mind development have shown that the social environment (e.g., siblings) positively influences children's understanding of others' (false) beliefs (Perner et al., 1994). It would be interesting to explore to which extent children's moral reasoning is similarly

influenced: Are children with a greater number of (older) siblings more proficient in moral reasoning, for example by producing more suitable reasons?

Moreover, investigations of children's moral reasoning with different social partners can reveal which types of the reasoning partner's utterances prompt children to improve their argumentation, to arrive at novel justifications, and to change their evaluations. Thereby, both content-related aspects (e.g., does the utterance appeal to emotions or moral principles) as well as formal aspects (e.g., how is the turn-taking process structured) can be differentiated. Key to this line of research is a carefully designed coding of the recorded discussions that captures the content of the provided arguments and their conversational function (e.g., counter arguments, supporting arguments, iteration of facts, etc.). Then, this thorough investigation of children's engagement in discussions has the potential to reveal the normative competencies and active role of children in shaping their own moral development.

As we have outlined and was argued by Piaget (1932), the power distribution between the interaction partners determines what kind of reasoning opportunities children have. However, the influence of different power constellations on moral reasoning with adults has hardly been systematically explored. In many experimental studies, children interact with experimenters in varying degrees of intensity. In some studies, experimenters only provide instructions and then leave the room (e.g., Mammen et al., 2018). In others, they structure each step in the reasoning process (e.g., Dahl et al., 2020). Some experimenters aim to be on one level with the child, while others might reflect more authority to the children. Understanding moral reasoning as a social process allows us to conceive of the impact of power asymmetries not merely as a methodological issue, but as a key theoretical question in itself. Notably, also the peer context is not devoid of power asymmetries. Social exclusion and oppression are part of the peer reality (Killen & Rutland, 2011). As power asymmetries are central for our social life, we suggest a deeper examination of how they affect the process of moral reasoning and the construction of moral views.

Whereas young children mainly interact with highly familiar others, the scope of social interactions widens throughout childhood. For example, when entering novel social contexts, like new kindergartens or summer camps, children meet unfamiliar peers in unfamiliar settings. Potentially, they are even faced with novel moral problems. From an experimental perspective, this is analogue to studying moral reasoning with familiar peers in a familiar kindergarten compared to moral reasoning with non-familiar peers in the lab. These contexts provide different requirements and challenges and might foster different aspects of moral reasoning. Theoretically, it would be interesting to explore how children engage in moral reasoning with familiar others with whom a routine of engaging in reasoning about problems has been established compared to someone with whom this common ground is missing. Through this, we could investigate which normative stances children assume to be self-evident, shared with or imposed by whom, and thus how interactions with different partners shape children's norm understanding. Thus, the experimental context in which single factors can systematically be manipulated would be highly suitable for furthering research on the communicative aspects of moral development.

An interesting issue concerns similarities and differences in children's acquisition of moral norms and rather arbitrary cultural conventions. Whereas some have highlighted clear differences between these types (Turiel, 1983), one could also argue for a continuous transition between these prototypes of social reasoning. This would suggest that the same processes and thoughts are applicable also to conventional norms. Indeed, some conventional norms (e.g., wearing black at funerals) can also be justified by pertaining to others' welfare and dignity (e.g., explaining that black signifies sorrow and that others will feel sad or hurt if one does not express adequate condolence). Interestingly, Dahl and Waltzer (2020) proposed that conventions are alterable insofar as the altered norms do not negatively impact agents or others. Thus, it would be interesting to explore in greater detail the nature of arguments when parents reason with their children about different types of norms.

The effect of individual differences

Besides differences in knowledge and power asymmetry, developmental theories have highlighted several individual factors that influence social interactions. Given our claim that moral development is deeply rooted in social interactions, these individual factors should also affect children's moral reasoning. Because of the communicative nature of moral reasoning, on the child's side, these are verbal and cognitive skills as well as perspective-taking abilities; on the parent's side, these are parenting styles, sensitivity and mentalizing abilities. Although generally well investigated, there is surprisingly little systematic research on how they affect the acquisition of moral reasoning (but see Wainryb & Recchia, 2014).We will highlight some exemplary issues.

To produce reasons in a discussion, children need a range of cognitive and linguistic abilities. Following our framework's focus on the emergence of moral reasoning in social interactions, linguistic abilities are key. How well children can form coherent sentences, take their turn, and process utterances can influence how they engage in moral discussions (cf. Casillas, 2014; Kuhn & Pearsall, 2000; Ninio, 2018). It would be interesting to explore whether moral reasoning about specific topics depends on particular linguistic abilities. For example, one could hypothesize that reasoning about hurt feelings is more difficult than reasoning about possession rights because the respective verbal concept is more difficult to handle.

Next to linguistic abilities, perspective-taking skills play an important role in meaningful discussions as they advance the complexity of individuals' reasoning. For example, interlocutors who know which pieces of information are known by their partner and which are new can adapt the informativeness of their arguments accordingly (Clark, 1996). Moreover, the development of theory of mind skills allows children to understand their partners' arguments even if they entail desires or beliefs that are different from their own and thus allows for a more sophisticated examination and production of arguments. However, the

reverse is also true: being exposed to different perspectives in exchanges with others advances children's theory of mind skills. In fact, a training study has shown that engaging 3-year-olds in perspective-shifting discourse improved their perspective taking skills (Lohmann & Tomasello, 2003). Overall, this underscores the interplay of linguistic exchanges and cognitive development.

First studies have investigated young children's pragmatic skills necessary for effective reasoning, namely their ability to produce informative arguments and to evaluate the arguments presented by others. They have shown that already at age 2, children can evaluate the quality of arguments (Castelain et al., 2016, 2018; see also Domberg et al., 2019) and that at age 3, but more so at age 5, they tailor their arguments to the common ground they share with a peer (Köymen et al., 2016; Mammen et al., 2018). Moreover, training studies have shown that at age 3, short discourse training sessions can improve children's evaluation of arguments (Köymen et al., 2019) and that at age 4-5, being asked to justify a resource allocation subsequently led to more sophisticated and flexible reasoning about moral issues (Li & Tomasello, 2022). These studies investigated the development of children's reasoning abilities on a group level, neglecting individual differences. However, in most studies a fairly big proportion of children did not display the pragmatic skill under investigation (i.e., they did not differentiate between weak and strong arguments or did not provide arguments that were informative enough for a naïve peer). Therefore, it remains to be investigated on an individual level which (cognitive) prerequisites lead to successful engagement in discussions.

Especially in peer interactions, social dominance can influence the power hierarchy between the peers which then affects how the interaction is structured (Hawley, 2002). A study investigating preschool peer dyads in a resource distribution conflict indicates that dominant children get more rewards when the dyads dismiss collaborative solutions (Grueneisen & Tomasello, 2017). Moreover, already at 3 years, children attribute higher dominance to individuals who impose their opinion on others while at the same time

expecting more dominant individuals to be more competent than subordinate ones (Charafeddine et al., 2015). Given these findings, one could speculate that more competent and more dominant children might enforce their opinion on their peer in a moral discussion. On the other hand, more competent children might also be able to include their peer more easily in the reasoning process by encouraging them to participate and by incorporating their partner's views in their judgment. As with children's resource control strategies (Hawley, 2002), dominance in moral reasoning could be expressed both ways: through coercion and prosociality. However, the true nature of the effect of individual differences on children's peer discussions remains thus far unclear.

Another question relates to parental individual differences. From a theoretical perspective, parents with more egalitarian child-rearing approaches might offer more reasons for their evaluations and encourage their children more often to challenge their views than parents with more authoritarian parenting styles (Grusec & Goodnow, 1994; Smetana, 1994). Previous studies have shown that parents' interaction styles with their children in general influence their children's moral development (Dahl & Campos, 2013; Malti et al., 2013). It would be interesting to explore in detail to which extent collaborative parent–child moral reasoning differs, and how individual differences are then reflected in children's moral understanding (Essler & Paulus, 2022). How and how often parents are able to provide the opportunity for open moral discussions will be a key factor in moral development. While a few studies have focused on how parental levels of reasoning affect children's reasoning abilities (Walker & Hennig, 1999; Walker & Taylor, 1991), they left open how exactly parents address normative issues and which types of reasons they use and accept. One could hypothesize that parents with high mentalizing abilities, that is, abilities to recognize their children's emotions and beliefs (e.g., mind-mindedness, reflective functioning; see Sharp & Fonagy, 2008), are better at adapting their level of reasoning to that of their child. Indirect evidence comes from studies

reporting relations between caregiver support and children's moral reasoning (Essler & Paulus, 2022; Malti et al., 2013).

In sum, while there are good theoretical grounds and first empirical findings pointing to the impact of individual differences, they have hardly been systematically investigated. As for some factors intervention programs have been developed (e.g., to improve parental mentalizing; Camoirano, 2017), this might provide novel opportunities to indirectly promote early moral development.

Co-construction and rejection of moral views in social interactions

Human morality is based on the transgenerational transmission and rejection of moral views. This is most evident when considering both stability and change in moral views across generations. After all, societal functioning rests on moral change (Killen & Dahl, 2021) as well as on some stability of moral stances and behavioural rules (e.g., Parsons, 1964). Empirical research on the transmission of normative attitudes has found relations between the parents' and their child's political convictions (e.g., Cowell & Decety, 2015; Döring et al., 2017; Jennings et al., 2009), and correlations between parents' worldviews (e.g., conservatism vs. liberalism) and their children's views and behaviour (Carlson & Knoester, 2011; Murray & Mulvaney, 2012; Reifen Tagar et al., 2017). However, these studies looked at parents and children separately, leaving out the psychological processes that subserve these relations. A closer investigation of parent–child discourse about social and moral norms could clarify the dynamics of this transmission. This would provide an important empirical touchstone for influential theories on moral development. For example, some proposed that moral development consists of children internalizing parental norms (Kochanska et al., 2002), while constructivist accounts stress that children actively construct their moral views in exchange with others. The theories would make different predictions about the dynamics of parent–child moral reasoning. Thus, by systematically investigating how parents and children talk about societal norms, which reasons they produce, accept or challenge, we could gain new

insights into the processes through which children arrive at similar evaluations. In a similar vein, we would also learn about the processes that underly the (gradual) rejection and abolition of norms that are perceived as unfair in a society (cf. Turiel, 2002) and that promote social change (Killen & Dahl, 2021).

Notably, norms are also transmitted and negotiated within one generation. It is therefore surprising that how peers create, maintain, and transmit rules and norms has only recently been systematically examined. Göckeritz, Schmidt, and Tomasello (2014) showed that triads of 5-year-old children collaboratively negotiated about novel rules for a novel game. Interestingly, in a subsequent phase they transmitted these rules to naïve peers by using normative language, showing little flexibility on how these rules should be applied. Likewise, children in 3- and 5-year-old peer dyads have been found to teach their naïve peers the new rule of a game using normative language (Köymen et al., 2015). Older preschoolers were better at negotiating which of two conflicting rules (e.g., sorting by colour or by shape) applied. Whereas 3-year-olds often repeated their standpoint, 5-year-olds were able to adjust to their partner's rules, thus ending the conflict more quickly (Köymen et al., 2014). These studies show that with peers, children can actively teach, create, and discard rules and norms without the limiting adult oversight (Hardecker et al., 2019), often by using normative language. They offer insights into processes through which children actively construct and deconstruct rules and norms in their moral reasoning. Although being concerned with arbitrary game rules rather than moral norms, these studies nevertheless provide evidence of how young preschoolers engage in the "normative language game" of relying on reasons to support normative viewpoints—a key aspect of moral development (Paulus, 2020a).

Universality and culture-specificity in moral development

Hitherto, most empirical studies on children's reasoning with adults focused on a very narrow population, namely children and their mothers in Western countries. On the one hand, findings from this population cannot be assumed to be universal across cultures (Henrich et

al., 2010). Notably, cross-cultural differences in parenting styles (Lansford, 2022) and socialisation goals (Keller et al., 2006) have been reported. Based on these findings and the fact that the power asymmetry influences how children engage in moral reasoning, it is reasonable to assume that structure and content of children's discussions with adults vary greatly. On the other hand, assuming that in all human cultures, children are confronted with reasons and need to engage in communicative exchanges with others, the basic structure of moral reasoning (that is, the communicative exchange of reasons) should be similar across cultures. Interestingly, empirical research supports the universal aspect of reasoning. In one study, 4- to 6-year-old children from a culture in which imposing power rather than relying on reasons is a prominent parental strategy were investigated (Castelain et al., 2016). Children rather endorsed the testimony of a subordinate other who had a strong argument than the testimony of a dominant other with a weak or no argument. Thus, despite being raised in a culture in which parental imposition of power is dominant, children prioritized good reasons.

This brings us to one of the key questions of moral development. Why is there considerably similarity despite differences in cultural orientations (Turiel, 2002)? For example, a large study including more than 2000 children across thirteen diverse countries reported a universal developmental trend from considering equality to considering equity in resource distribution contexts (Huppert et al., 2019). Given the universality of humans' concern for fairness, some scholars have proposed universal biological adaptations (Brosnan, 2019) and an innate moral core (Hamlin, 2013). Here, we propose a different perspective. It is the structure of human communication that lies at the basis for the emergence of fairness and that could explain similarities across different cultures. In their first communicative acts, children express their egocentric wishes, for example to obtain an object. Initially, this happens by non-verbal gestures such as pointing, but soon the non-verbal request is replaced by verbal utterances (e.g., "The ball is mine."). This gives the social environment, for example another child, the possibility to react with another utterances ("No, I want to have

it.”). To the extent that the other child responds with a reason, a moral discourse on the distribution of scarce resources has evolved. Exchanging reasons builds on the turn-taking structure of communication (first person A, then person B, then A, then B). This structure provides a template on which a solution to the distribution problem can evolve (first A plays with the ball, then B plays with the ball). The principle of equality is born. To the extent that conversation and its turn-taking structure are universal characteristics of humankind, it is not surprising that the principle of equality is prominent in largely all human cultures. It does not need to be prespecified or prewired. The human way of living and humans’ dependence on organizing their life with others—a universal feature of human social life—provides a basis on which the idea of equality can evolve anew in each context.

Once an understanding of equality is established, fairness considerations can become more complex by considering additional factors, for example, pre-existing inequalities. Again, it is the joint reasoning process that might play a pivotal role. In line with the argumentative theory (Mercier & Sperber, 2011), one can assume that one partner will reason by pointing to pre-existing inequalities (“But you played with the ball already yesterday.”) to strengthen their position. If the other partner wants to keep the social relationship and considers the reason, it becomes likely that children agree on an equitable solution. With repeated experiences, an understanding of equity emerges and might become more prominent in children’s reasoning and behaviour (Rizzo & Killen, 2016; Wörle & Paulus, 2018). Our communicative account predicts that the likelihood and developmental pace of this acquisition will depend on the presence of these reasons in children’s communication with others, opening the possibility for cultural variations. Overall, this approach highlights the role of communication—on both a structural level and a semantic level—for moral development.

Conclusion

With this article we argue for a theoretical approach that aims at exploring how moral reasoning emerges in dynamic social interactions. We call for a systemic investigation of the

social process of normative and moral reasoning and its dependence on different interaction partners. This can broaden our understanding of how children become moral beings and how normativity and morality is constituted in human development.

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