



Socialization, Autonomy, and Cooperation: Insights from Task Assignment Among the Egalitarian BaYaka

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Abstract Across diverse societies, task assignment is a socialization practice that gradually builds children's instrumental skills and integrates them into the flow of daily activities in their community. However, psychosocial tensions can arise when cooperation is demanded from children. Through their compliance or noncompliance, they learn cultural norms and values related to autonomy and obligations to others. Here, we investigate task assignment among BaYaka foragers of the Republic of the Congo, among whom individual autonomy is a foundational cultural schema. Our analysis is based on systematic observations, participant observation, and informal interviews with adults about their perspectives on children's learning and noncompliance, as well as their own learning experiences growing up. We find that children are assigned fewer tasks as they age. However, children's rate of noncompliance remains steady across childhood, indicating an early internalization of a core value for autonomy. Despite demonstrating some frustration with children's noncompliance, adults endorse their autonomy and remember task assignment being critical to their own learning as children. We argue that cross-cultural variation in children's compliance with task assignments must be understood within a larger framework of socialization as constituted by many integrated and bidirectional processes embedded in a social, ecological, and cultural context.

Abstract (French) Dans les diverses sociétés, l'attribution de tâches est une pratique de socialisation précieuse, qui permet de développer progressivement les compétences instrumentales des enfants et les intégrer dans le flux des activités quotidiennes de leur communauté. Dans cet article, nous concentrons notre analyse sur les aspects psychologiques et sociaux de l'attribution de tâches en tant que moments de tension psychosociale où la coopération est demandée aux enfants. En se conformant, ou en ne se conformant pas à ces demandes, ils apprennent les normes et valeurs culturelles liées aux droits individuels à l'autonomie en tension avec la responsabilité d'obéir. Dans le cadre d'une étude de cas, nous étudions les tâches assignées aux enfants parmi les chasseurs-cueilleurs BaYaka de la République du Congo, parmi lesquels l'autonomie individuelle constitue un schéma culturel fondamental. Les observations comportementales quantitatives et systématiques des tâches assignées aux enfants BaYaka sont contextualisées à l'aide d'une recherche qualitative basée sur l'observation-participante et des entretiens informels. Des entretiens ont été menés avec des adultes sur leurs perspectives concernant l'apprentissage et le non-respect des tâches par les enfants, ainsi que sur leurs propres expériences d'apprentissage au cours de leur croissance. Nous avons constaté que les enfants se voient attribuer quantitativement moins de tâches au fur et à mesure qu'ils vieillissent. Cependant, le taux de non-conformité des enfants reste stable tout au long de l'enfance, ce qui indique une intériorisation précoce de la valeur culturelle fondamentale que constitue l'autonomie. Bien que les adultes BaYaka aient manifesté une certaine frustration face au non-respect des règles par les enfants, ils approuvent leur autonomie, se souvenant combien l'attribution des tâches a été critique dans leur propre apprentissage quand ils étaient enfants. En se fondant sur cette analyse, nous avançons l'hypothèse que les variations interculturelles quant au respect des tâches assignées aux

enfants doivent être comprises dans un cadre de socialisation élargi, constitué de nombreux processus intégrés et bidirectionnels ancrés dans un contexte social, écologique et culturel spécifique.

In their work on the “cultural self,” Quinn and Mathews (Quinn 2006; Quinn and Mathews 2016) propose that humans experience a universal psychic conflict between their dependency on others and the necessity of becoming an autonomous individual. Investigating socialization processes can shed light on the cultural solutions humans develop to mitigate this conflict, how these solutions become internalized during childhood, and, ultimately, how cultural selves are formed (Quinn 2005, 2006; Quinn and Mathews 2016). In this article, we examine how one universal socialization process—that of task assignment—helps BaYaka forager children from the Republic of Congo learn foundational cultural schemas unique to their cultural niche. Specifically, we show that task assignment provides children with opportunities to learn instrumental skills, as has been shown in other societies (Lancy 2012; Morelli, Rogoff, and Angelillo 2003; Ochs and Izquierdo 2009; Rogoff et al. 2003). Extending this research, however, we demonstrate that refusing to perform tasks, and the lack of consequences for doing so, is a central way BaYaka children develop and operationalize the cultural ethos forager researchers call “cooperative autonomy” (Boyette 2019; Endicott 2011; Hewlett et al. 2011).

To begin, we see socialization as “the means by which children acquire the beliefs, values, practices, skills, and motives of their culture” (Gauvain 2005, 131). Socialization includes formal institutions, such as schools or initiation ceremonies, but also informal practices and interactions that children regularly encounter during their daily life. Children are active participants in their socialization, as they are intrinsically motivated to learn the skills, knowledge, and cultural meanings of their society (Gauvain 2005). The processes of socialization are also augmented by “epistemic engineering”; that is, children’s social and physical environments are replete with material and symbolic culture, which contribute to forming children’s cultural schemas of the environment and of human action (P.M. Greenfield, Maynard, and Childs 2000; Hewlett et al. 2019; Sterelny 2004; Stotz 2010). By involving children in familiar tasks, caretakers help children to internalize as cultural schemas the goals, actions, meanings, and consequences of these tasks (Quinn, Naomi, Sirota, and Stromberg 2018; Shore 1996; C. Strauss and Quinn 1997).

How task assignment contributes to children’s socialization across cultures is noted extensively in the ethnographic record (Gaskins 2000; Lancy 2012, 2008; Morelli, Rogoff, and Angelillo 2003; Ochs and Izquierdo 2009). Examples of task assignment range from simple errands such as fetching a tool from a few meters away, to carrying out basic domestic chores, to delivering an important message to someone kilometers away. By progressively increasing task complexity, children’s social companions draw them into regular daily activities and help grow their competence (Paradise and Rogoff 2009) while directing attention to the cultural value of helping others (Siposova et al. 2021). As such, task assignment, a universal socialization process, channels children’s interests and skills into culturally desirable pathways.

In this article, we focus on task assignment not only as a socialization process for cultural knowledge and skill acquisition but also as moments of psychological tension within the broader scope of socialization of cooperation and as potent moments for shaping cultural selves. In particular, as task assignments are initiated by more knowledgeable and skilled, typically older, members of the community, children face a demand to cooperate. While children demonstrate early motivation to help others in experimental settings (Warneken and Tomasello 2006), such helping can conflict with children's own interests and sense of autonomy. If this were not the case, parents in many societies would not report to ethnographers that socializing obedience is a central parental goal (LeVine et al. 1994; Mageo 1991; Scheidecker 2020). Central to our analysis is the fact that forager societies such as the BaYaka emphasize individual autonomy and thus present an opportunity to investigate how cooperation is socialized when obedience is not.

Task Assignment in the Context of BaYaka Childhood

This article is concerned with understanding how task assignment contributes to BaYaka children's cultural learning. Self-identified BaYaka foragers inhabit the dense tropical rainforest of the Congo Basin. The term "BaYaka" refers more generally to many forager ethnic groups that inhabit the Congo Basin (Lewis 2002). The BaYaka people we worked with for this study live in the forests along the Motaba River, Likouala Province, Republic of the Congo. The BaYaka largely rely on forest resources for subsistence, including honey, fruit, tubers, fishing, and hunted and trapped meat. They also maintain small gardens, in which they grow manioc, maize, plantain, and taro. BaYaka oscillate between living in larger villages and in smaller forest camps. Like other groups (Grinker 1994; Joiris 2003; Rupp 2011), BaYaka maintain extensive trade and fictive kin relationships with farmers who live on the forest periphery (Boyette, Lew-Levy, and Gettler 2018; Komatsu 1998).

Unlike the individualistic/independent and collectivistic/interdependent classifications that some have used to categorize human social organization (Patricia M. Greenfield et al. 2003; Keller et al. 2005; Mead 1970; Triandis 1995), BaYaka, like other forest foragers, value *cooperative autonomy* (Endicott 2011).¹ Cooperative autonomy is "based on a combination of obligations to the group and protections for individuals against coercion by others" (Endicott 2011, 81). No single individual could survive without pooling resources such as food and labor with others in their group (Kramer 2018). At the same time, however, individuals may choose their activities at will. Though BaYaka communities have a spokesperson (*kombeti*) who can advise the camp through speeches and suggestions, she or he has no power to coerce others (Sonoda, Bombjaková, and Gallois 2018).

Autonomy is cultivated from early in a forager child's life (Lew-Levy et al. 2018). For example, BaYaka are heavily indulged through on-demand breastfeeding, frequent holding, and child-led weaning (Hewlett et al. 1998). Through these practices, parents follow children's lead, and in doing so, support the development of their autonomy (Hewlett 2014). Later, when children are old enough to sit up and explore the environment, they are taken on foraging

expeditions. Parents rarely interfere with their children's exploration, even when they play with or near dangerous objects, like machetes and fires (Boyette and Hewlett 2017; Hewlett and Roulette 2016; Lew-Levy, Crittenden, et al. 2019). These experiences with autonomous exploration lead fluidly into playgroup participation. These all-child groups are the center of children's socialization from toddlerhood through adolescence and may involve significant autonomous foraging in addition to play (Boyette 2016a, 2016b; Lew-Levy and Boyette 2018; Lew-Levy, Kissler, et al. 2020).

Despite the respect for autonomy that BaYaka children receive from infancy, parents seek to develop the sense of “obligations to the group” to which Endicott refers. In particular, sharing—of food, material culture (Boyette 2019), space (Hewlett et al. 2019), and joyful experiences (Lewis 2016)—is foundational to thought and daily life in many forager societies (Bird-David 1990; Lee and Daly 1999), including among the BaYaka (Hewlett et al. 2011). Cooperation in subsistence work is critical to survival, and children are highly motivated to imitate such work in play. In parallel, they increasingly participate in productive work in developmentally appropriate ways from early childhood (Boyette 2016b; Lew-Levy and Boyette 2018). However, this participation, as we will demonstrate, is always on the child's terms.

How then is the obligation to cooperate with others socialized in the face of culturally sanctioned resistance to coercion? What role do parents and others take in this developmental task? In what follows, we explore how task assignment contributes to developing cooperative autonomous behaviors through three sets of analyses. First, we test specific predictions around the developmental trajectory of receiving and complying with task assignments using behavioral observations and interviews from research in one BaYaka forest settlement (hereafter “camp”) of approximately fifty inhabitants conducted from August through September 2016. Subsequently, we contextualize parental views on children's learning and autonomy using ethnographic examples and interview data derived from experiences over twelve months of research among the BaYaka living in village and forest settings between 2016 and 2018.

Receiving and Complying with Task Assignment

In line with our prior research on childhood socialization (Boyette and Hewlett 2017; Lew-Levy, Kissler, et al. 2020) and on the internalization of social norms (Boyette 2019; Boyette and Lew-Levy 2019), we first examine how task assignment contributes to developing cooperative autonomous behaviors quantitatively. In designing our analysis, we rationalized that, if task assignment is an effective cultural learning process, children should independently cooperate with others as they age because it leads to more knowledge through increased opportunities to participate and less negative social feedback. Consequently, we expected the frequency of task assignments to be negatively associated with age. Additionally, we evaluated two possible patterns regarding compliance/noncompliance. First, if children begin to prioritize cooperation over exerting their own autonomy, then we should find compliance with task assignments to be positively associated with age. Such increases in cooperation

and compliance have been observed in other small-scale societies where cooperative labor is the basis of subsistence (Erchak 1980; Gaskins 2000; Whiting and Edwards 1988). But if task assignment also helps children internalize the foundational cultural schema of respect for autonomy, children's age should have no association with their compliance, and children should not receive repercussions for this noncompliance.

These questions were explored using focal follow data from 24 BaYaka children, representing all the available children in the camp. Participants were between the ages of three and 17 (Mean age = 10.18, $SD = 4.48$, 58% female). Because the BaYaka do not know their age in years, pictures of all the children in the camp were taken, and adults were asked to rank all the children from youngest to oldest. Based on these rankings, a BaYaka field assistant and the second author estimated the age of the children. Parental verbal consent and child assent were obtained before data collection began.

Observations were systematically recorded using focal follows. Borrowed from ethology, focal follow sampling involves recording the behaviors of a single individual over a predetermined period (Altmann 1974; Boyette 2016b). In the present study, children were randomly assigned two 2-hour sampling blocks between 8 a.m. and 5 p.m. over two months. We observed each child once in the morning, and once in the afternoon, usually on different days. If a child was not available for observation during a particular time slot, observations were rescheduled or omitted. We conducted focal follows alongside a BaYaka interpreter who translated all interactions between the focal child and other individuals within the camp. Behaviors were coded every minute, using a 30-second-observe/30-second-record procedure. A total of 5,162 observations were recorded ($M = 215.1$, $SD = 47.2$).

Task assignments were recorded alongside an array of other social-learning processes. Specifically, our focus was on those processes that fit a broad definition of teaching useful for observational studies (Caro and Hauser 1992; Thornton and Raihani 2008). The types of teaching we recorded were drawn from Hewlett and Roulette (2016) and Boyette and Hewlett (2017), who defined teaching as when “a teacher modif[ies] her or his behavior in the presence of a learner in order for the learner to acquire information more easily than they would without teaching, or access information otherwise inaccessible by learning individually via trial and error” (Boyette and Hewlett 2017, 292; see also Kline, 2015, 2016).² This definition of teaching is useful because, methodologically, it can be coded during behavioral observations based on a set of established criteria and, theoretically, because it distinguishes a specific class of social-learning processes which seem particularly important for learning culture (Fogarty, Strimling, and Laland 2011; S. Strauss and Ziv 2012, 201; Tomasello 2016).

During focal follows, we recorded focal children receiving seven types of teaching, including task assignment (Table 1). A maximum of one teaching type was recorded per 30-second observation. Task assignments were identified following Boyette and Hewlett (2017) and involved the “use of directive language to encourage a specific behavior to be performed” (303). Examples include utterances like “go get fire” or “hold [the water cup].” We then recorded whether the task was executed within a few minutes of receiving the assignment and if there

Table 1. Proportion of Total Teaching Received by Focal Children by Teaching Type

Teaching Type	% Teaching
Assistance	0.97
Task assignment	56.56
Demonstration	21.04
Explanation	17.37
Moves body	0.19
Negative feedback	3.67
Positive feedback	0.19

were coercive repercussions for not executing a task. We defined coercive repercussions as anger or yelling, withholding food or other forms of care (Boyette 2019), direct intervention from others (e.g., forcing a child to share after refusal), or physical punishment. We did not include attempts at persuasion (e.g., repeated requests, speaking negatively about the child in the child's presence) as coercive repercussions unless accompanied by other coercive techniques (e.g., aggressively repeating requests).

To determine the relationships between task assignment received, tasks executed, and age, we fit two quasi-Poisson models in R (R Core Team 2020). We chose quasi-Poisson instead of Poisson models because the data were overdispersed. In Model 1, counts of total tasks received per child was the dependent variable. The natural log of the total number of observations for each child was included in the model as an offset variable to account for variation in total intervals of observation per child (Long and Freese 2006). In Model 2, counts of executed tasks per child was the dependent variable. The natural log of the total tasks received by each child was included in the model as an offset variable. Because one child (female, 17 years old) received no tasks during the follow, she is excluded in Model 2. In 11% of cases, whether children complied was not known; these data were considered “missing at random” and removed from the analysis. Research indicates that girls participate in economic activities more than boys at all ages and increase their participation at a rate greater than boys (see reviews in Lew-Levy et al., 2018; Montgomery 2010). This has also been shown among other BaYaka groups (Boyette 2016b; Lew-Levy and Boyette 2018; Salali et al. 2019). Thus, we also include gender as a covariate and the interaction between gender and age.

In this analysis, we found that children received 3.31 task assignments an hour on average. Task assignment was the most frequent type of teaching children received (Table 1). Tasks were primarily received in the domain of subsistence (e.g., hunting, trapping, cooking), followed by hygiene (e.g., hand washing, hair braiding) and then cultural norms (e.g., sharing) (Table 2). Seventy-nine percent of tasks received from known individuals were from individuals older than the focal child, with the remainder coming from same-aged or younger children. Results of our regression modeling indicate that age was a significant negative predictor for being assigned a task ($B = -0.12, p < 0.001$). Though children complied with slightly more assigned tasks as they aged, these results were not significant. Boys were assigned slightly more tasks than girls (3.66 an hour vs. 3.07 an hour), but they were less likely

Table 2. Proportion of Tasks Received by Focal Children by Knowledge Domain

Domain	% Task Assignment
Subsistence	37.54
Hygiene	9.22
Cultural norms	8.19
Child cultures	5.46
Ecological knowledge	1.71
Social information	1.02
Religious practices	0.68
Tool manufacture	0.34
Unknown/Ambiguous	35.84

Table 3. Quasi-Poisson Regression Model Results

Independent Variable	Dependent Variable	B (SE)	<i>p</i>
Task assignment	Intercept	-1.75 (0.26)	<0.001
	Age	-0.12 (0.03)	<0.001
	Gender	-0.53 (0.38)	0.19
	Age × Gender	0.06 (0.04)	0.17
Compliance with task assignment	Intercept	-0.55 (0.17)	0.005
	Age	0.02 (0.02)	0.32
	Gender	0.11 (0.26)	0.68
	Age × Gender	-0.01 (0.03)	0.66

to comply with task assignment than girls (69.06% vs. 76.50%). However, sex differences in the frequency of receiving task assignments and executing tasks were not statistically significant. Full model results can be seen in Table 3. Punishment for noncompliance was never observed during focal follows and thus could not be examined statistically.

Task Assignment and Avoidance Among the BaYaka

Our analysis of these quantitative data demonstrates developmental patterns in children's cooperation and the role of others in orienting children's cooperation through task assignment. We found that children's rate of noncompliance was relatively constant throughout development. However, these data do not adequately capture the tension between adults and children during moments of noncompliance and the resonate push and pull between learning and the value placed on cooperating in work (i.e., sharing labor) and respect for autonomy socialized through task assignment. We now turn to a qualitative analysis of such moments.

The second author conducted unstructured interviews with all adult camp members to understand how they learned to participate in subsistence activities (Lew-Levy, Crittenden,

et al. 2019). These interviews explored how adults had learned to perform the subsistence skills in their cultural repertoire (e.g., how did you learn to trap?). In addition, we report ethnographic vignettes from the second author's participant observation with children and adults. Participant observation included playing with children, helping adults with chores (e.g., cooking and babysitting), and performing chores for adults, sometimes alongside children. Such experiences allowed us to observe how parents interacted with their children and especially the tension between parents who needed help from their children (e.g., in water fetching or cooking) and the cultural value of autonomy.

While our interviews on learning did not explicitly focus on task assignment, most adults reported that it played a role in their knowledge acquisition alongside other teaching such as demonstration and instruction. As exemplified in vignette 1, caregivers gauge children's skill level and assign tasks at the edge of their competence. Early in knowledge acquisition, task assignment usually facilitated children's participation in activities alongside adults, while also fostering the knowledge necessary to perform these tasks independently in the future.

Vignette 1

In relation to learning to collect honey, Tamundo³ explained:

When I woke up in the morning, my father told me to come with him to find honey. I saw how to collect honey by being close to him. He told me to cut and tie the rope [for the *pendi* basket (used to collect honey)]. I was still small so I couldn't tie it. My father tied the knot and showed me. My father told me how to look for honey in the tree. I found honey in the tree, but didn't know how to cut [the comb], so my father sent me down to make a fire. My father climbed the tree to show me how to collect honey.

Vignette 2

Baokwa explained how she learned to collect *mela* tubers: "My mother told me to follow the *mela* vine. Then she told me to dig and to put the *mela* in the basket."

Thus, our informants reported that tasks were used to assess and facilitate learning. However, when task assignments conflict with children's interests, they can lead to tension as children assert their autonomy.

Vignette 3

Lundi, seven years old, was singing and looking through one of the second author's field guides in her hut while her parents were out hunting and gathering. Mokama, Lundi's 2.5-year-old sister was running around outside naked. Next door to Lundi's family's house lived her uncle Samboko, who was sick and could no longer walk, and thus rarely left the camp. When Samboko saw that Mokama was naked, he called to Lundi: "Lundi! Lundi! Come put clothes on your sister!" Lundi stopped singing and stopped turning the pages of the field guide. Samboko called for her again and again. She ignored him, again pretending not to be

there, though everyone knew she was. Eventually, Samboko stopped calling out for her, and Lundi went back to singing and flipping through the field guide, while Mokama continued to run around naked.

Vignette 4

On a rainy day, nearly all the men and teenage boys were huddled over Lew-Levy's fire smoking cigarettes. Conspicuously absent was Baloki, the spokesperson for the camp, who had gone to harvest palm wine some 5km away. While he was out, some others arrived to share sad news from the village: an important elderly man, who had been sick for months, had died. The men sat and deliberated. On the one hand, most of the inhabitants of the camp were related to the deceased and were eager to return to the village to pay their respects. On the other hand, the men did not want to leave without telling Baloki the reason for their departure. The men decided that Baloki's oldest son, Boyeye, 16, should head to the forest to find his father and inform him of the recent death. He was asked repeatedly by his older cousin, Mbangana, a strong hunter with much influence over the camp. He was asked by his brother-in-law, Mama, and by an older man, Tamundo, both of whom were considered intelligent as they had spent many years in school. He refused all three by shaking his head and staring into the fire. A few minutes after this exchange, Mbangana asked Boyeye once more to go into the forest, this time to harvest palm nuts for making palm oil. Once more, Boyeye refused. After the men had given up trying to persuade Boyeye and left to check their traps, Boyeye turned to Motelli, another teenage boy a few years his senior, and said, regarding the events described above: "You just can't make people do something they don't want to do."

Vignette 5

Ditaku, six, was playing with his friends. His grandmother, Sitako, decided that she would head into the forest to harvest wild yams and that Ditaku should accompany her. She put on her basket and prepared to leave camp. "Come on," she said to Ditaku, who ignored her. She feigned leaving the camp, walking further and further away from him, while periodically turning, and, increasingly angrily, begging him to come along with her. He kept ignoring her, and eventually, she left without him.

In vignettes 3 and 4, adults repeatedly asked children to perform a task. Most commonly, adults did not raise their voices, nor did they react or force children to comply when they were ignored. Instead, they made their requests calmly and repeatedly. In vignette 4, we see how different adults may make the same request to children as a way to make the importance of the task more salient. Though occasionally, as in vignette 5, adults do raise their voice, such negative responses are rarely perceived by children as coercive, as evidenced by Ditaku's calm resistance to his grandmother's requests. As Boyeye summarizes at the end of vignette 4, these anecdotes demonstrate that no person can coerce another to participate, even when asked repeatedly to comply. Children clearly understand from at least as young as six years old that

they will not be punished because of their noncompliance. By adolescence they can clearly state the normativity—and ultimate moral necessity—of respecting another's autonomy.

Though not observed during the focal follows, and rare overall, sometimes parents do get frustrated when repeated requests are not complied with and may come to hit their children, even if only half-heartedly. Interestingly, when parents do this, other adults may interfere to protect the child's autonomy.

Vignette 6

Ditaku's mother, Tengbe, who had been out at a hunting camp with her husband, returned with meat. She stopped briefly in camp to fetch a sturdier basket after which she had planned to continue to the village to exchange the meat for goods with a local farmer. When Ditaku saw his mother leaving the camp, he followed her. At the trail leading from the camp, Tengbe turned and asked Ditaku to stay behind. He refused. She then began yelling at him and begged him to stay. She hit him half-heartedly with a T-shirt. Ditaku began to cry and chased after his mother when she tried to leave. Eventually, Baloki and Samboko, Ditaku's great-uncles who had been napping in their respective homes, hollered at Tengbe to let her child go along to the village with her. Tengbe and Ditaku left for the village together shortly thereafter.

Vignette 7

Samedi was sweeping outside the second author's home in the village while her child, Gemu, 3, played in her rubbish pile. She asked him to move once or twice, at which point she got frustrated and hit him. Gemu ran crying to his home next door. Soon after, Samedi's mother-in-law and sister-in-law tackled Samedi and began to hit her for hitting her child. Though they did so playfully, they told Samedi they were hitting her for hitting Gemu and that a mother should not hit her child.

Throughout our fieldwork, we rarely observed adults criticizing another's parenting. Indeed, even when children injured themselves, such as when a two-year-old fell into a fire and burnt his hand, others discussed the mother's carelessness only in the mother's absence. However, in the few instances where adults attempted to coerce their children, other adults were quick to advise them to leave their children alone. In light of the last two examples, it's worth noting that noncompliance at times brings real costs in this context, as the following vignette exemplifies.

Vignette 8

Koma, a 13-year-old girl particularly active in foraging and helping her aunts with childcare, had refused to go digging for tubers with her mother, Toku. Toku asked Koma over and over to go to the forest with her, but Koma turned her back and refused to reply. Eventually, an older teenage girl, Yemou, turned to Toku and said: "Leave her here! Go dig alone!" Toku

sharply responded to Yemou by saying: “Who will feed her? You?” Koma’s father eventually chimed in, telling his daughter she had to follow her mother and go foraging. Eventually, after her parents had already departed, Koma solemnly grabbed her machete and followed her mother into the forest.

Cooperation is necessary to sustain a foraging livelihood. As vignette 8 suggests, parents at times perceive real costs to their family’s well-being when children refuse to comply. Nonetheless, through childhood and into adolescence, task assignments result in children asserting—and adults respecting—their autonomy.

Why Do Adults Protect Children’s Autonomy?

To better understand adults’ perspectives on the value of children’s autonomy, we conducted semistructured interviews with all available adults inhabiting the same camp in which we completed the behavioral observations. Participants included 21 adults (52% female). We went through several iterations of our question before we found the most appropriate one. Originally, we asked the question: “I’ve noticed that when children refuse to do something, you don’t force them. Why?” Unfortunately, some of our participants understood the question as criticism and responded by “agreeing” that they should discipline their children more often. Thus, we reformulated the question as follows: “I’ve noticed that when children refuse to do something, you respect their ideas. Why is that important?” More often than not, this left people with blank expressions. Though we made attempts to ask specifically about everyday task assignments (i.e., “bring me a knife”; “cut firewood”), these were too embedded in the habitus of everyday life to yield a meaningful answer (Holland 1992; Shore 1996). Earlier on, we had noticed that adults often went into the forest without children. When we asked why, multiple people said that they had invited the children, but that the children had refused. Based on this observation, we qualified the previous question with: “For example, if a child refuses to go into the forest with you, and wants to go into the forest with their friends, you let them. Why is it important for children to follow their own ideas?” This question yielded the most informative responses, so we used it throughout the remainder of the interviews.

Based on these interviews, the most salient reason why adults did not coerce their children to follow them into the forest was autonomy in learning. Indeed, 14 individuals (67%) explained that children had their own learning agendas, with which adults should not interfere:

Children have their own ideas. If they refuse you, it might be because they have their own stories to make in the forest. If you make them come with you, they miss out on those stories.

If the child plays or runs in the forest, he will learn on his own. It’s not up to you to teach them.

While children may learn in the company of their friends, adults are also confident that children will contribute to the camp subsistence while they do so. Indeed, nine participants

(43%) mentioned that they did not force children to go into the forest with them because they knew their children would work while they were out:

“It’s not a problem for children to refuse. They can do their own work and so do we. It makes me happy when children do their own work.”

This willingness to cooperate may be a metric by which parents measure their child’s development:

“When the child cooperates, it means he’s intelligent [*mayele*]. A child who doesn’t do it isn’t intelligent yet.”

In line with this claim, throughout our fieldwork, we saw many instances in which parents congratulated children for cooperating, such as when Gemu, three years old, was handed a cigarette by his mother to gift to his father. When Gemu successfully completed the task, his father clapped his hands and said “*Mayele!*”—smart!

Autonomy, Cooperation, and the Contexts of Socialization

In this article, we have explored how task assignment contributes to the socialization of cooperative autonomy among Congolese BaYaka foragers. We found that children tend to receive fewer task assignments with age. However, we also found that children refused to comply with assignments an equivalent proportion of the time no matter their age. Situated within the context of our prior research in BaYaka communities, we argue that these patterns indicate children are learning how to do essential cooperative tasks while having the opportunity to practice asserting their autonomy. Despite the frustration this can bring adults, we further report that parents strongly endorse noncompliance.

These findings have implications for research on forager cultures specifically and child development more broadly. First, our findings that task assignments were regularly directed toward BaYaka children and that older children received fewer task assignments are consistent with the prior observations of Boyette and Hewlett (2017), who studied social learning in another BaYaka community in the Central African Republic. However, our use of moment-by-moment translation demonstrated that task assignment was even more frequent than Boyette and Hewlett had reported. Indeed, they found children to receive an average of about 0.86 assignments per hour. While capable, neither of us were at the time of our observations fluent BaYaka speakers. In the present study, Lew-Levy was aided by a fluent BaYaka speaker during quantitative data collection, and we report a rate of 2.5 more assignments per hour on average. This is likely due to the subtlety of the specific tasks sometimes received by children. For example, during a focal follow, Lew-Levy observed an adolescent girl running up and down a small hill with a baby on her back. She stopped suddenly and grabbed a knife which she used to dig out a small sapling stump which was poking through the dirt on the hill and which could have injured her had she stepped on it. At the same time, Lew-Levy’s translator noted that a man a few feet away from the teenager, looking away from her, had told the girl to clear the stump. Had an interpreter not been present, she would have missed

this interaction entirely. Thus, from a methodological standpoint, our study highlights the importance of language and cultural fluency in observational studies of teaching.

Furthermore, the negative association between children's ages and the frequency with which they received task assignments suggests that children are increasing in competence and internalizing a motivation to perform cooperative work as they age (Boyette and Hewlett 2017; Lew-Levy, Kissler, et al. 2020). This interpretation is supported by research demonstrating that children in small-scale societies in general (Bock 2002; Boyette 2016b; Froehle et al. 2019; Lancy 2012; Morelli, Rogoff, and Angelillo 2003), and among BaYaka foragers specifically (Boyette 2016b; Lew-Levy and Boyette 2018; Lew-Levy, Crittenden, et al. 2019), engage in more economically productive work as they grow older. Furthermore, our results indicate sensitivity on the part of other members of the community to children's developmental level in terms of specific tasks. Specifically, the evidence points to an intentional distribution of task assignments towards younger children, who are less likely to know how to accomplish or to have internalized an awareness of their possible role in the ongoing coordination of daily community labor. The culturally constructed niche in which BaYaka children are raised enhances their sensitivity. Specifically, BaYaka communities are small, their spaces are intimate, nearly all activities are done in public, and children have freedom to choose where they go and what they do (Hewlett et al. 2019). Consequently, children trust those from whom they learn, and caretakers are familiar with children's personalities and abilities. This learning context is highly commensurable with self-motivated learning, but the socialization challenge—and the psychosocial conflicts that can emerge—arises when children's interests do not align with those of their caretakers and teachers.

The second quantitative result from our analysis indicates that, while older children are assigned fewer tasks, they are no more or less compliant than younger children. Indeed, children refused to perform the task 25%–30% of the time at all ages. This runs counter to the alternative prediction that children become more compliant across development. If that were the case, we should see that they refuse to comply proportionally less often with age, indicating that they have internalized a cultural model in which cooperation—and compliance—is the highest priority. In subsistence settings where conformity is highly prized, children learn to place others' needs and desires, especially those of adults, above their own (Gaskins 2000; Kagitcibasi 2005; Keller 2012; Whiting and Edwards 1988). For example, data from 12 hierarchical societies demonstrated that children readily complied with their mothers' commands and did so more frequently with age (Whiting and Edwards 1988). In contrast, our results indicate children persistently exercise autonomy, despite parents' and others' occasional insistence and even attempts to force compliance. We contend this noncompliance stems from internalizing early on a cultural model that cooperation must be voluntary, that individual autonomy is paramount, and coercion is unacceptable.

While the psychic conflict between cooperation and autonomy is universal, cultural mechanisms for resolving this tension vary (Quinn 2006; Quinn and Mathews 2016). In small-scale, face-to-face societies, task assignment helps children identify the techniques and goals of common actions children see others do (Morelli, Rogoff, and Angelillo 2003; Paradise and

Rogoff 2009). Further, caregivers demonstrate a high degree of consistency in the sorts of tasks they ask children to perform (Ochs and Izquierdo 2009). In contrast, in postindustrial middle-class cultural contexts, work and home life are separated as are child and adult spaces, so related opportunities to learn culturally meaningful and valued tasks at home may be absent. This may explain why children in these contexts often refuse to perform tasks when asked (Morelli, Rogoff, and Angelillo 2003; Ochs and Izquierdo 2009).

Moreover, our analysis of children's noncompliance with demands to cooperate suggests that, while task assignment is a universal form of socialization, culture shapes caretaker reactions to noncompliance. Indeed, while BaYaka adults became frustrated when children refused to perform tasks, they clearly also endorsed children's autonomy. Similar psychosocial dynamics arise in other egalitarian subsistence societies. For example, Johnson (2003) writes of the Matsigenka of the Peruvian Amazon:

Mothers make many requests of their young children... They ask them to do small useful tasks like picking up a spoon or chasing a chicken from the house. But children, especially toddlers, do not readily comply. At first it seemed as though mothers were barking out commands to recalcitrant children, using a stern high-speed delivery. But it became clear that mothers were not angry, just persistent. They repeat orders as often and in as peremptory a tone as needed to get compliance from children who they know are too young for ready obedience. The children, whose slowness to respond is tolerated by their parents, do not show resentment and eventually comply. (106)

This permissive yet persistent form of task assignment contrasts sharply with accounts from socialization studies among hierarchical farmers. For example, according to LeVine and colleagues, "Gusii parents define economic competence in terms of their children's manifest obedience and responsibility, which they see as essential to their future economic careers as well as their present tasks" (1994, 13). Similarly, Erchak (1980) writes of demands for compliance among the Kpelle of Liberia,

obedient children become adults obedient to traditional ways of doing things, including farming, thus minimizing systemic risk and helping to insure social survival. ... However, while Kpelle parents are unanimous in emphasizing obedience as a primary goal of child rearing, [de]mands that convey the need for compliance or obedience decline somewhat (not significantly) with age, at least in the early years. I can only offer two possible explanations. One is the suggestion that four- to six-year-olds are more obedient than one- to three-year-olds; perhaps obedience is learned at an early age and by age four or five the child is more disposed to be obedient. The second is that virtually *all* [de]mands carry the implicit message, 'Obey!' (Erchak 1980, 46, emphasis in the original)

We found BaYaka parents also associate cooperation with competence (see also Nsamenang and Lamb 1995; Serpell 2011), such as when our interlocutor remarked on his child's intelligence when he brought the cigarette his father requested. But the distinction is the emphasis on "obedience" to authority as vested in hierarchical relationships rather than autonomous cooperation. As in our observation of a mother playfully punished by her peers for attempting to enforce her child's compliance, BaYaka more readily socialize noncompliance than obedience. Similarly, in the postindustrial middle and upper class, the relative status

of parents and children are made unclear by the parent's diffuse authority, much of which is shared with or transferred to the child (Kusserow 2004; Lancy 2008; Ochs and Schiefelin 1994). While we believe that the association between subsistence and socialization is complex and other cultural factors are important, we see task assignment as an important window into the specific psychological, social, and cultural processes that may explain such an association.

In conclusion, socialization reproduces culture across generations. Task assignment, as a socialization process, guides children towards culturally relevant knowledge, skills, and, in the context of compliance/noncompliance, values regarding the relative power of children and caretakers. Culture is also contested. In this case, the autonomy afforded to BaYaka children can frustrate parents when their and their children's interests do not align. Yet, as we have demonstrated here, autonomy is socially and culturally prioritized, despite the psychic (and sometimes overt interpersonal) conflict that results. Nonetheless, the types of lessons children learn through task assignment have important implications for children's success as well. In the BaYaka cultural context, supporting children's autonomy may encourage the development of innovative capacities, highly advantageous in a subsistence strategy based on flexibly extracting resources from the natural environment (Lew-Levy et al. 2020), as well as within a sociocultural context that values innovative, communal ritual experiences (Lewis 2015). While the psychosocial dynamics of socializing cooperation through task assignments will vary with norms of parenting, subsistence strategies, and cultural models of autonomy and hierarchy, we have demonstrated how a focus on these interactions can shed light on how cultural selves are formed at the nexus of cooperation and autonomy.

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Notes

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1. For an expansion of the approach contrasting individualist/independent and collectivist/interdependent socialization goals, see Kagitcibasi (2005).
2. Boyette and Hewlett (2017) refer to task assignments as “commands.” While the social-learning process to which we referred is the same, we use “task assignment” here to be consistent with Hewlett and Roulette (2016) and Lew-Levy et al. (2019).
3. All names are pseudonyms.

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