## Caregiving in Philosophy, Biology & Political Economy

## Alison Gopnik

Caring for the young and the old, the fragile and the ill, is central to human thriving, and has played a fundamental role in human evolution. Yet care has been largely invisible in political economy and it does not fit the prevailing philosophical, political, and economic frameworks. Care typically emerges in the context of close personal relationships, and it is not well suited to either utilitarian or Kantian accounts of morality, or to "social contract" accounts of cooperation. Markets and states both have difficulty providing and supporting care, and as a result, care is overlooked and undervalued. I sketch alternative ways of thinking about the morality and politics of care and present alternative policies that could help support carers and those they care for.

ove and care go together: parents caring for children (and vice versa), husbands and wives, friends and neighbors looking after each other. In fact, in her commentary, political scientist Anne-Marie Slaughter argues persuasively that care itself should be understood as a relationship rather than an activity.<sup>1</sup> But caregiving doesn't show up in economic measures like GDP. Instead, it has been relegated to the world of the private and personal, and especially the world of women, who have historically been responsible for much of the work of care.

Caregiving has also been neglected because it does not fit well into the standard conceptual frameworks of philosophy, politics, and economics. Traditional philosophical approaches to morality, whether they invoke utilitarian or Kantian principles, are universalist – they are designed to apply equally to everybody. But this is in tension with the characteristically specific and local relationships between carers and the people they care for.<sup>2</sup> In many cases, like caring for a dying or severely disabled child, the cost to the carers might seem to outweigh the benefit to the cared for, contradicting the utilitarian principle of the greatest good for the greatest number. And yet we continue to feel that such caring is morally exemplary. You can see this tension vividly, for example, in philosopher Peter Singer's controversial though consistent utilitarian arguments for euthanasia.<sup>3</sup> Caregiving also does not fit the Kantian view of universally binding categorical moral imperatives, like "do not lie." You feel a moral imperative to care for the people close to you, even at considerable cost to yourself, yet you might not feel that same imperative toward a person who has identical needs but has a different relationship to you.

We might try to stretch utilitarian or Kantian arguments to apply to caregiving. Perhaps feeling specific obligations to a dying child somehow increases overall utilities. Or perhaps we could rephrase the moral imperative to care for those you are close to as a universal obligation. But surely there is a philosophical Cinderella principle that if you have to stretch an idea that much, maybe you should look for a better fit.

Caregiving is also problematic for the "social contract" – the core principle that underpins modern political economy. The idea is that individual agents try to achieve their goals and, as economists say, "maximize their utilities," but we can get better outcomes for everybody if people trade off their own interests and those of others. Philosophers, psychologists, political theorists, and even mathematicians and evolutionary biologists have explained human cooperation, altruism, and morality in this way.<sup>4</sup> There is good empirical evidence that this kind of reciprocal cooperation and negotiation is an important characteristic of human nature, in place even at a very early age.<sup>5</sup>

arket economics and political democracy were the great inventions of liberal political economy, and you can think of them as a kind of software for implementing the social contract beyond small groups. In small-scale societies, these kinds of contractual negotiation and reciprocity are relatively easy to conduct and enforce. But markets and democracies expand the logic of individual social contracts to the scale of a city, a nation, or even a planet, with important benefits for everyone.

However, the close attachments that underpin so much care have a very different structure than contractual relationships. They do not demand reciprocity, even implicitly. When we care for and about another person, we are no longer just one individual agent with one set of values and interests that we can trade off with those of others. Instead, a parent or a child or a partner, or even a good friend, is a person whose self has been expanded to prioritize the values and interests of another. And this is not simply a matter of adding the goals of another to your own utilities. Caring means that we recognize the difference, even the conflict, between our goals and those of the person we care for, and yet act to help them get the resources they need to achieve those goals. This expansion of the self leads to more collective good, like the social contract, but it uses very different mechanisms to do so.

The social contract picture also assumes that agents are independent, autonomous, reciprocal decision-makers exchanging goods. But relationships of care are intrinsically asymmetrical. Almost by definition, the carer has capacities or resources that the cared-for person does not. The morality of being a parent is about taking a creature who is not autonomous and cannot make their own decisions and turning them into one who can. The same is true, in a milder way, when we mentor a student or trainee. Tending the ill or the old also involves fundamental asymmetries between the carer and the person they care for. Think about a mother caring for a child with a severe disability, or a husband caring for his wife with Alzheimer's. Relationships like these are the most vivid examples of love, care, and commitment, precisely because they are so asymmetrical. And they also require a similarly delicate and difficult balance between taking responsibility for the welfare of another person and preserving their autonomy, a balance that is very different from the negotiations of the social contract. Someone who cares for a child or a patient or an aging parent has some responsibility for and authority over that person. But the carer also must respect the autonomy and independence of those they care for.

The contractual picture also assumes that goods are interchangeable. In fact, that exchangeability is one of the great secrets of the success of markets and democratic states: I can trade off what I want with what you want. But caring and commitment are intrinsically local. We cannot swap out one unit of care or commitment for another. We cannot outsource love or ship it across country.

And although care is local, it includes commitments that go far beyond biological kinship. We care for our friends, our students and patients, our colleagues and neighbors.

**E** ven when caregiving is professional rather than personal, it still maintains much of this character: a teacher or doctor or therapist is particularly responsible for the people they care for. During the early stages of the COVID-19 pandemic, the underpaid, overworked, eldercare workers in nursing homes often explained their heroism in terms of their relationship to specific people: *I couldn't abandon old Mr. Smith.* A home health care nurse I know describes shopping for food for particular patients and setting rattraps in their rooms – actions that were not reimbursed by health insurance but just struck her as the obvious and necessary thing to do.

Professional caregivers also negotiate the balance between care and autonomy. A farmer or a carpenter or a writer can simply offer goods to customers, and those customers can decide to purchase if those goods fulfill their desires. But part of the job of a teacher or therapist is precisely to help the student or patient to formulate autonomous desires that may be very different from their own.

The neglect of caregiving in political economy is particularly striking because, from a biological perspective, caregiving is one of the most important and characteristic human activities. Caring for children is one of the most foundational kinds of care, and human childhood is twice as long as that of our closest primate relatives. Chimpanzees produce as much food as they consume by the time they are seven years old. Even in forager cultures, humans are not self-sufficient until they are at least fifteen years old.<sup>6</sup> Humans also evolved to use a much wider array of caregivers than other great apes to look after these young: from early in human history, many people cared for each child. This group includes biological mothers, but also fathers, siblings, grandparents, and "alloparents," adults who care for children to whom they are not biologically related.<sup>7</sup> And humans have also extended this caring beyond children to mates, elders, and others.

The brain mechanisms that underpin this widespread human caregiving have roots in our earlier mammalian evolutionary history. Biologists have contrasted the "life histories" of different species.<sup>8</sup> Some animals, like fish and insects, produce many young, and put little effort into caring for them. Mammals and birds, in contrast, produce far fewer young, but invest considerable time and energy in keeping those young alive and allowing them a more extended time to grow to adulthood. This longer and slower life history is associated with longer life spans, larger brains, and more reliance on flexibility and learning in general.<sup>9</sup> Humans are an extreme example of this high-investment/slow-life-history strategy.<sup>10</sup>

However, animals with this kind of life history face a caregiving dilemma. Mammalian mothers are locked in a profound conflict of utilities with their young: calories that go into milk for the baby are lost to the mother. But ensuring the survival of the young is essential for the ultimate reproductive success of mammals. The evolutionary solution to this dilemma involves a complex set of genetic, neural, and hormonal mechanisms that lead mothers to prioritize their babies' needs over their own, and to extend their own interests to include another's.<sup>11</sup>

Once these mechanisms were in place, they could be extended beyond biological mothers and babies to underpin other kinds of caring relationships. Prairie voles, for example, famously have caregiving "socially monogamous" fathers who are attached both to their young and to their mates, and care for them accordingly. Elegant experiments show that the genes and chemicals, such as oxytocin and vasopressin, that underpin this mate-care are very similar to those that underpin maternal care.<sup>12</sup> And there is evidence that similar mechanisms are involved in cooperation, trust, love, and care among social animals like carnivores and primates, beyond just mothers and mates. There is also evidence that these mechanisms are important in humans, and philosopher Patricia Churchland has argued that they underpin human moral intuitions.<sup>13</sup>

Significantly, although these mechanisms are evolutionarily rooted in biological kinship relationships, they are not restricted to those relationships. In humans as well as other animals, the very act of care itself engenders the relationships of attachment and love that underpin further care. In other animals, alloparents who take on care show the same physiological changes as biological mothers, and human fathers, grandparents, and alloparents show similar physiological changes when they actively care for babies.<sup>14</sup> Those changes seem to influence the choice to continue as a carer. We don't care for others because we love them: we love them because we care for them.

From an evolutionary perspective, elderhood is also a distinctively human developmental period, and care for elders may also serve important evolutionary functions. Humans, along with a few cetaceans like orcas, are the only animals that systematically outlive their fertility. Female chimps rarely live much past fifty. But even in forager cultures, postmenopausal grandmothers can consistently survive an additional twenty years or so into their seventies, and older men do as well. The usual measures of life expectancy reflect the fact that, in the past, many more children died young. But if you made it past thirty, you could easily live till your seventies or later.<sup>15</sup>

This elder phase of our life history may serve a distinctive evolutionary function: elders are less engaged in finding mates or resources for themselves, but they are more involved in caring for others. There is empirical evidence that we characteristically become more generous and altruistic as we get older, passing on resources to the succeeding generation.<sup>16</sup> Grandmothers in particular provide a crucial additional source of care for children that allows the extended human childhood.<sup>17</sup>

In addition, humans are a distinctively cultural species, passing on information, technologies, and traditions from one generation to the next. Elders appear to play a particularly important role in that cultural transmission; they teach as well as care. For example, among foragers, the older hunters, who are less physically able but have more experience, serve as teachers for young children and teenagers, even though that means they are less productive themselves. The stronger and more able thirty-year-olds go off on their own and maximize the yield.<sup>18</sup> Interestingly, the orcas, who are one of the rare animals with postmenopausal females, also have an exceptional amount of cultural transmission, often led by those older grandmothers.<sup>19</sup> But relying on cultural transmission involves a tradeoff. While living longer provides elders with more opportunities to accumulate wisdom that they can pass on to the next generation, it also means that they are more likely to require care themselves.

Of course, the fact that caregiving is biologically important does not guarantee that it should have a place in a moral political economy; aggression, hierarchy, and tribalism also have deep evolutionary roots. Thinking about morality in evolutionary terms inevitably raises a tension between causal and normative claims: explaining where moral intuitions come from is not the same as endorsing them. One way to approach this problem is through "reflective equilibrium."<sup>20</sup> We start with evolutionarily given moral intuitions. Those intuitions are themselves likely to be adaptive: they evolved to accomplish some functional goals. Both cooperation and caregiving, for example, appear to have evolved precisely because they genuinely help to solve coordination and collective action problems. But we can also use reflection to consider and revise those intuitions in the light of our changing knowledge and circumstances.

Surely, caring for others is morally admirable and valuable if anything is. But at the same time, reflection points to a problem. The intense devotion that fuels our care for our own loved ones may translate into indifference or even hostility to the needs of people beyond our circle of attachments. This kind of caregiving is difficult to scale up beyond the proverbial village that it takes to raise a child.

Religious traditions have had more to say about love and care than political and economic traditions. The close relationships of care have served as a model for religious ideals, but those ideals scale up and expand care to a wider circle. Thomas Hobbes, the father of the social contract, enjoins us to negotiate a truce in the war of all against all, but Christ brings "a new commandment: love one another as I have loved you."<sup>21</sup> The Madonna and child are a focus of meditation in Orthodox Christianity, and Islamic traditions emphasize the importance of filial piety. In Buddhist "metta" ("loving-kindness") meditation practice, you begin by imagining the way you feel toward someone you love and gradually extend that feeling to strangers and even enemies. A Christ or a bodhisattva is supposed to feel the same way about everyone that a parent feels about a child.

The problem, of course, is that simply getting everybody to love everybody else is not a very realistic prescription for designing a political economy. Interestingly, Asian traditions of political philosophy have paid more attention to this problem than Western ones. For Confucian philosophers like Mengzi, morality starts with our feeling for our parents, siblings, or children, rather than with the reciprocal social contract. The philosophical challenge articulated in these traditions is how to expand these local feelings to the scale of a polity or an empire in the way that markets and states expand the social contract. That remains the problem for a modern political economy.

How could we fulfill Mengzi's vision and expand the caring impulse to the large scale of a modern society? How could we integrate caregiving into a modern moral political economy without losing its distinctive character? Markets and states do not provide natural mechanisms for supporting care and encouraging love. In fact, we have a strong sense that it is morally wrong to treat close relationships like market commodities. But in a market-driven world, this means that instead, they are hidden away as part of a private, domestic sphere that is hard to measure or support. In a small-scale forager society, close personal ties helped ensure that resources would flow to caregivers. But in a big postindustrial society, getting resources becomes the business of each individual worker. Using those resources to support children, or elderly parents or a sick spouse or a friend, becomes simply one more kind of consumer spending. So, either parents and other carers must forgo work, which means forgoing exactly the resources that you need to care for others, or else somehow find enough money out of their own salary to pay other people to take care of their dependents. Either way, this inevitably means that that care is undervalued. The pandemic made this invisible crisis of care into a vivid disaster.

But if the market does not naturally support care, neither does the state. There are many valuable goods, from security to health and education, that we do not leave to markets. Instead, democratic states pay trained professionals – soldiers or doctors or teachers – to provide these services equally to all their citizens. But this picture also does not apply well to many of the most important kinds of care. If caring for children were just a job, another kind of work, we might feel that experts ought to do it, rather than parents themselves. But there is something special about the relationship between parents and children, carers and those they care for. Parents have a special authority over, interest in, and responsibility for what happens to their children, and grown children have a special responsibility for elderly parents. And the same is true for partners and friends.

Of course, markets and states can and should contribute to caregiving. The United States in particular relies on private for-profit nursing homes and childcare centers. Arguably, those functions would be better served by state institutions: there is a strong case to be made for state supported universal childcare and eldercare. Notably, however, even when state institutions support care, we pretend they do not. We treat social security as if it was an insurance program individuals invest in rather than a program intrinsically designed to care for elders. Often, we treat care as an extension of medicine or education. Medicare will only cover long-term care for the elderly if there is a specific medical justification for that care. It is easier to get support for publicly financed childcare if you call it preschool or early childhood education. This reflects a tension between the idea that care itself (as opposed to medicine or education) should be provided by the state, and a sense that large impersonal state institutions should not replace the more personal relationships of care, though they may certainly supplement them.

e can imagine an alternative policy agenda that would explicitly support, pay for, and encourage local caring relationships: an agenda to let love flourish. Caring for children is one area in which this agenda is currently being formulated and debated, often in ways that elide the usual left versus right distinctions.<sup>22</sup> One good way to help support care is to provide statesupported professionalized preschools or childcare centers. But another, and in some ways better, policy mechanism is to provide direct support to parents or other caregivers through family allowances or tax credits. These policies help children not only by providing more resources, but also by giving carers the option to cut down on paid work or forgo it altogether in favor of care. There is also considerable evidence that these programs have long-lasting and wide-ranging positive effects on adult development, although you might also argue that providing care for children is an intrinsic good independent of its later effects.<sup>23</sup>

Moreover, although publicly supported childcare is often justified as an educational project – the very words preschool and early childhood education suggest as much – its long-term positive effects may have more to do with care itself than education. Interventions that provide early care often seems to have "sleeper effects." Effects on purely educational outcomes like school test scores may fade after a few years, but there are longer lasting effects on such things as mental and physical health or incarceration. There is also considerable evidence that a lack of early care or nurturance has long-term negative effects on mental and physical health, and also that it alters life history, shortening the period of childhood.<sup>24</sup> Early care may provide a protected environment that allows a prolonged period of childhood learning and flexibility, rather than being a form of education that instills particular kinds of knowledge or skill.

We could support care for children both through state institutions and by directly supporting carers. But we could also extend the model of direct payments to other kinds of care. Caring for the ill or the elderly presents some of the same dilemmas as childcare but adds other complexities, particularly in contemporary societies. Elders have always both provided and required care. But the great improvements in health over the past few centuries mean that many more people survive into elderhood than in the past, and they may live into their nineties. For some elders, this is an extension of the care and teaching niche, but for others it becomes a time of increasing debility. Most people would prefer that elders could be looked after by family or friends at home rather than being placed in institutional care. This approach would also give elders a chance to provide care and teaching, as well as requiring care themselves. But, as in the case of childcare, potential carers must often choose between giving up paid work or somehow finding a way to pay others for care. We might extend family allowances and tax credits to other kinds of care, including care for elders, spouses, and even friends. These allowances would give carers the flexibility to cut down on work themselves or to put together combinations of private, public, and paid care.

Extending the institution of marriage is another possibility. Marriage is one of the few examples of a legal recognition of love and commitment, conferring both benefits and responsibilities and supporting care. Marriage is often justified by the way it supports commitments to children. It makes sense that children would do better with two committed caregivers than one, and the empirical literature suggests that children often do better with married parents. In the childcare debates, conservatives have regularly advocated encouraging marriage.<sup>25</sup>

But, in many ways, marriage is a strange way to ensure care for children. It is historically grounded in the sexual and romantic ties between men and women –

not exactly the most reliable or permanent form of commitment. The result is that severing those ties, in divorce, for example, makes caring for children problematic. Traditional marriage also assumes that biological mothers and fathers are the only people who are committed to caring for children. The success of gay marriages and families emphasizes the fact that commitments to children do not depend on biological conception. But, for humans, that has always been true – many adults, biologically related or not, help care for children.

The model of marriage could be extended to include both other carers and other kinds of care. Instead of assuming that commitments to a sexual partner will extend to a commitment to children, we could explicitly make the commitment to children the focus of a marriage-like institution. Committing yourself to a child could be both ritualized and legalized in a public ceremony, as marriage is. Such a commitment would continue until a child was independent, regardless of divorce or remarriage. It might be shared by future partners, or by other related or unrelated carers, as in the classic religious example of godparents.

Just as we might extend the model of marriage to other people who care for children, we might also extend it to other people who need care. Among siblings, one in particular often ends up taking responsibility for aging parents, and we could formally recognize and economically support that commitment. Or we could even just allow one friend to be officially committed to caring for another – an increasing number of people face illness or elderhood without family to help. In all these cases, the official caregiver commitment could come with both responsibilities and resources, and could be a kind of celebration too.

Finally, we could work to alter the physical environment to better support care. Close relationships of care are intrinsically local: they depend on being in the same place. But in contemporary life, people work in one place, children go to school in another, and elders are even further away, with long commutes in between. Once again, the pandemic exaggerated problems that were already there. But the pandemic also let us see that care and other kinds of work could happen in the same place, as they did for most of human history. If the industrial economy separated work and family, neighbors and friends, the postindustrial economy could allow us to bring them together again. Multigenerational housing is making a comeback, and it is no coincidence that the accessory dwelling units that are the focus of YIMBY housing reforms are more commonly known as granny flats.<sup>26</sup> Granny flats are an example of how we might design housing that both encourages close, local care and preserves autonomy. Innovative programs have also placed childcare and eldercare in close physical proximity, with benefits to both groups.<sup>27</sup>

In addition to these general principles, there are more specific examples of how we could encourage and support care. To take just one case, universal preschool programs require lots of caregivers. Some of those caregivers would be professionally trained teachers, but they could also include older people in the community. You might have a designated "grandparent" for each classroom, an older person who could receive the equivalent of a Walmart salary. The grand-parent would not be a teacher so much as a source of care and a keeper of cultural values and tradition, transmitting songs and stories. Putting together particular elders with a specific group of children would encourage the close local ties that underpin care in both directions.

Caregiving is complicated – philosophically, psychologically, and politically. But surely, care and commitment, love and loyalty are morally valuable if anything is. And they really do increase the collective good, even if they do it in a very different way than the social contract. Care has been overlooked and undervalued for far too long. It should instead be a centerpiece of a new moral political economy.

## ABOUT THE AUTHOR

Alison Gopnik, a Fellow of the American Academy since 2013, is Professor of Psychology at the University of California, Berkeley. She is the author of *The Gardener* and the Carpenter: What the New Science of Child Development Tells Us about the Relationship between Parents and Children (2016), The Philosophical Baby: What Children's Minds Tell Us about Truth, Love, and the Meaning of Life (2009), and The Scientist in the Crib: What Early Learning Tells Us about the Mind (with Andrew N. Meltzoff and Patricia K. Kuhl, 1999).

## **ENDNOTES**

- <sup>1</sup> Anne-Marie Slaughter, "Reimagining Care," Project Syndicate, November 29, 2021, https:// www.project-syndicate.org/commentary/care-relationships-new-economic-age-by -anne-marie-slaughter-2021-11.
- <sup>2</sup> Americans use *caregiver* where the British use *carer* to describe the person doing the care. Both use caregiving for the process, since *caring* can have many other meanings. I like the British term, which seems more elegant and to the point.
- <sup>3</sup> Peter Singer, *Peter Singer Under Fire: The Moral Iconoclast Faces His Critics* (Chicago: Open Court Publishing, 2009), 3.
- <sup>4</sup> Robert Axelrod and William D. Hamilton, "The Evolution of Cooperation," *Science* 211 (4489) (1981): 1390–1396, https://doi.org/10.1126/science.7466396; and Brian Skyrms, *Evolution of the Social Contract* (Cambridge: Cambridge University Press, 2014).
- <sup>5</sup> Michael Tomasello with Carol Dweck, Joan Silk, Brian Skyrms, and Elizabeth Spelke, *Why We Cooperate* (Cambridge, Mass.: The MIT Press, 2009).
- <sup>6</sup> Kim Hill and Hillard Kaplan, "Life History Traits in Humans: Theory and Empirical Studies," *Annual Review of Anthropology* 28 (1) (1999): 397–430, https://doi.org/10.1146/ annurev.anthro.28.1.397.

- <sup>7</sup> Sarah Blaffer Hrdy, *Mothers and Others: The Evolutionary Origins of Mutual Understanding* (Cambridge, Mass.: Harvard University Press, 2009).
- <sup>8</sup> Hillard Kaplan, Kim Hill, Jane Lancaster, and A. Magdalena Hurtado, "A Theory of Human Life History Evolution: Diet, Intelligence, and Longevity," *Evolutionary Anthropology: Issues, News, and Reviews* 9 (4) (2000): 156–185, https://doi.org/10.1002/1520-6505(2000) 9:4<156::AID-EVAN5>3.0.CO;2-7; and Alison Gopnik, Willem E. Frankenhuis, and Michael Tomasello, eds., "Life History and Learning," special issue of *Philosophical Transactions of the Royal Society B: Biological Sciences* 375 (1803) (2020).
- <sup>9</sup> Peter M. Bennett and Paul H. Harvey, "Brain Size, Development and Metabolism in Birds and Mammals," *Journal of Zoology* 207 (4) (1985): 491–509, https://doi.org/10.1111/j.1469 -7998.1985.tb04946.x.
- <sup>10</sup> Hill and Kaplan, "Life History Traits in Humans," 28.
- <sup>11</sup> Thomas R. Insel and Larry J. Young, "The Neurobiology of Attachment," *Nature Reviews Neuroscience* 2 (2) (2001): 129–136, https://doi.org/10.1038/35053579; and Patricia Churchland, *Conscience: The Origins of Moral Intuition* (New York: W. W. Norton & Company, 2019).
- <sup>12</sup> Larry J. Young and Zuoxin Wang, "The Neurobiology of Pair Bonding," *Nature Neuroscience* 7 (10) (2004): 1048–1054, https://doi.org/10.1038/nn1327.
- <sup>13</sup> Zoe R. Donaldson and Larry J. Young, "Oxytocin, Vasopressin, and the Neurogenetics of Sociality," *Science* 322 (5903) (2008): 900–904, https://doi.org/10.1126/science .1158668; Sue Carter, "Oxytocin Pathways and the Evolution of Human Behavior," *Annual Review of Psychology* 65 (1) (2014): 17–39, https://doi.org/10.1146/annurev-psych-010213 -115110; and Churchland, *Conscience*.
- <sup>14</sup> Stacey Rosenbaum and Lee T. Gettler, eds., "Evolutionary Perspectives on Non-Maternal Care in Mammals: Physiology, Behavior, and Developmental Effects," special issue, *Physiology and Behavior* 193 (Part A) (2018).
- <sup>15</sup> Kristen Hawkes, "The Grandmother Effect," *Nature* 428 (6979) (2004): 128–129, https://doi.org/10.1038/428128a; and Michael Gurven and Hillard Kaplan, "Longevity Among Hunter-Gatherers: A Cross-Cultural Examination," *Population and Development Review* 33 (2) (2007): 321–365, https://doi.org/10.1111/j.1728-4457.2007.00171.x.
- <sup>16</sup> Jo Cutler, Jonas P. Nitschke, Claus Lamm, and Patricia L. Lockwood, "Older Adults across the Globe Exhibit Increased Prosocial Behavior but also Greater In-Group Preferences," *Nature Aging* 1 (2021): 880–888, https://doi.org/10.1038/s43587-021-00118-3.
- <sup>17</sup> Hawkes, "The Grandmother Effect."
- <sup>18</sup> Michael D. Gurven, Raziel J. Davison, and Thomas S. Kraft, "The Optimal Timing of Teaching and Learning Across the Life Course," *Philosophical Transactions of the Royal Society B: Biological Sciences* 375 (1803) (2020): 1–13, https://doi.org/10.1098/rstb.2019.0500.
- <sup>19</sup> Luke Rendell and Hal Whitehead, "Culture in Whales and Dolphins," *Behavioral and Brain Sciences* 24 (2) (2001): 309–324, https://doi.org/10.1017/S0140525X0100396X.
- <sup>20</sup> Edmond Awad, Sidney Levine, Michael Anderson, et al., "Computational Ethics," *Trends in Cognitive Sciences* 26 (5) (2022): 388–405, https://doi.org/10.1016/j.tics.2022.02.009.
- <sup>21</sup> John 13:34–35, NIV.
- <sup>22</sup> Michael R. Strain, Diane Whitmore Schanzenbach, Ryan Streeter, and W. Bradford Wilcox, *Rebalancing: Children First*, ed. Richard V. Reeves, Diane Whitmore Schanzenbach,

and Michael R. Strain, with contributions from the AEI-Brookings Working Group on Childhood in the United States (Washington, D.C.: American Enterprise Institute, 2022), https://www.aei.org/research-products/report/rebalancing-children-first.

- <sup>23</sup> Committee on Building an Agenda to Reduce the Number of Children in Poverty by Half in 10 Years, National Academies of Sciences, Engineering, and Medicine, *A Roadmap to Reducing Child Poverty*, ed. Greg Duncan and Suzanne Le Menestrel (Washington, D.C.: National Academies Press, 2019), https://doi.org/10.17226/25246; and Pia R. Britto, Stephen J. Lye, Kerrie Proulx, et al., "Nurturing Care: Promoting Early Childhood Development," *The Lancet* 389 (10064) (2017): 91–102, https://doi.org/10.1016/ S0140-6736(16)31390-3.
- <sup>24</sup> Ursula A. Tooley, Danielle S. Bassett, and Allyson P. Mackey, "Environmental Influences on the Pace of Brain Development," *Nature Reviews Neuroscience* 22 (6) (2021): 372–384, https://doi.org/10.1038/s41583-021-00457-5.
- <sup>25</sup> Strain, Schanzenbach, Streeter, and Wilcox, *Rebalancing*.
- <sup>26</sup> YIMBY (Yes, In My Back Yard) is a response to NIMBY (Not In My Back Yard), two oppositional approaches to housing policy. Alana Semuels, "From 'Not in My Backyard' to 'Yes in My Backyard," *The Atlantic*, July 5 2017, https://www.theatlantic.com/business/archive/2017/07/yimby-groups-pro-development/532437.
- <sup>27</sup> Marc Freedman, *How to Live Forever: The Enduring Power of Connecting the Generations* (New York: PublicAffairs, 2018).