Power and Care

Toward Balance for Our Common Future—Science, Society, and Spirituality

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with contributions by His Holiness the Dalai Lama

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2 The Transformative Power of Nurturing

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Your Holiness, I would like to discuss the transformative power of nurturing and how it can help explain processes by which apes in the line leading to the genus *Homo*, our line, became even more empathetic and more interested in what others are thinking and feeling than the closely related apes that Frans De Waal just told you about. My question is “How can we use what evolutionary anthropologists are learning about human origins to encourage the powerful to be more caring?”

Care in Early Human Origins

The closest proxies we humans have to our last common ancestor with other apes are extant great apes such as chimpanzees. As with humans, in chimpanzees there is a close bond between mother and offspring, but with an important difference. After giving birth, the extraordinarily possessive chimpanzee mother will not allow her baby out of touch for a single moment, day or night, for months (see figure 2.1). In turn, her infant clings to her like his or her life depends on it, and it does. A chimpanzee continues to suckle her baby for half a decade, but once weaned, her baby is nutritionally self-sufficient. No one else helps to feed him or her.

By contrast, among hunter-gatherers—people still rearing their children much as our Pleistocene ancestors must have—mothers allow and even encourage others to hold their newborn (see figure 2.2). A child remains dependent on both his mother and on others for many years.¹

One reason for this striking difference is that a chimpanzee mother cannot trust the adults around her not to harm her infant while hunter-gatherer mothers usually can. Secondly, the hunter-gatherer mother is aware that help from others will be essential for her baby’s survival. Do not
mistake me, mothers are critically important. But as among African foraging people today, a baby born among our ancestors would have spent much of his or her first day of life being held by allomother—females or males other than the mother (see figure 2.3).

**Hunter-Gatherer Parenting: Help from Others Is Essential for Survival**

Allomother can be older siblings, grandmothers, fathers, aunts, cousins, and maybe even another woman. Should this other woman be lactating, she might briefly suckle the baby. Hunter-gatherer babies are weaned earlier than other apes, and as weaning approaches, allomother help with provisioning by delivering premasticated food and other treats. This is important because evidence from people still living by hunting and gathering when first studied by anthropologists indicates that infants with the most care-takers at age one were most likely to survive to age three. It is no wonder that infants with the most caregivers are most likely to survive. Almost
Important. But as among African foragers, our ancestors would have spent much of their time held by allomotheres—females or males (1).

From Others Is Essential for Survival

Grandmothers, fathers, aunts, cousins, and others altogether; this other woman be lactating, hunter-gatherer babies are weaned earlier than in industrialized settings. All kinds of others help with provisioning. Allomotheres help with providing good food and other treats. This is important in a society of women and men who live by hunting and gathering when quantities are small and a baby's needs are great. Infants with the most care are most likely to survive to age three. It is no wonder that infants with the most care are most likely to survive. Almost
likely to be pregnant with or already for an older child is independent. These are the environments than what a mother by herself could produce, and they doubled in size from 450 centimeters by two million years ago.

By the emergence of Homo sapiens, brains became cubic centimeters. Furthermore, metabolic demand for human brains does not increase much after birth, and would be after a hunter-gatherer child. To fuel these big brains had to come from other members, other than the mother, who were in the group.

The Importance of Shared Care and Allomaternal Assistance Helped Fuel Costly Brains

The challenges of sustaining dependent offspring are further magnified by Pleistocene Africa, which had unpredictable rainfall and recurrent droughts in the diet, hunting is a very unreliable food source. Although modern African hunter-gatherers remain economically successful, and overall, men bring in most of the food. The remaining 60% of calories come from foods gathered by women. A critical role is provided by grandmothers and other older women. (figure 2.4).

I agree with the anthropologist Karen Wynn, the most plausible explanation for why humans live for decades after they can no longer contribute directly to care for and especially provision the group. The survival was just one of the evolutionary forces that favored a history of shared care and provision. It was no way on Darwin’s Earth that humans had had a lot of help.
likely to be pregnant with or already nursing another baby long before her older child is independent.¹ These combined demands would be greater than what a mother by herself could meet.¹ Over the course of the Pleistocene, energetic demands from growing and maintaining increasingly costly sapient brains magnified the challenge of keeping slow-maturing offspring nourished. Brains are energetically expensive organs to grow and maintain, and they doubled in size from 450 cubic centimeters among our last common ancestors with other apes and australopithecines to over 900 cubic centimeters by two million years ago.

By the emergence of *Homo sapiens*, brains had evolved to some 1,350 cubic centimeters. Furthermore, scientists are just learning that the metabolic demand for human brains does not peak until 4 to 5 years of age, which would be after a hunter-gatherer child had been weaned.² Extra energy to fuel these big brains had to come from somewhere. This made group members, other than the mother, who were willing to share, essential.

### The Importance of Shared Care and Provisioning

The challenges of sustaining dependent children would have been further magnified by Pleistocene African climates, which were characterized by unpredictable rainfall and recurring droughts. Even with more meat in the diet, hunting is a very unreliable way to make a living. Studies of modern African hunter-gatherers reveal that hunters are only occasionally successful, and overall, men bring in only 40% of the calories required. The remaining 60% of calories come from more reliably obtained plant foods gathered by women. A critical portion of shared foods is obtained by grandmothers and other older women past child-rearing age (see figure 2.4).³

I agree with the anthropologist Kristen Hawkes and her colleagues that the most plausible explanation for why—unlike other apes—women go on living for decades after they can no longer reproduce had to do with the critical roles postmenopausal women played among our ancestors, by helping to care for and especially provision younger kin. Longer postmenopausal survival was just one of the evolutionary implications of humankind’s deep history of shared care and provisioning. But the message is clear: there is no way on Darwin’s Earth that humans could have emerged unless mothers had had a lot of help.
multiple attachment figures early on in life. Even before they can talk, little ones act out a piece of food to offer to someone they prefer, if they think that person's behavior makes them happy.

Multiple Caretakers Promote Intersubjectivity

Having multiple caretakers is also critical for social and emotional development and are better at taking into account what others are feeling and trying to communicate. Over the centuries, children, who are just a little better at relating to others and soliciting nurture, who have been fed. Over generations, and over evolution, it has been the youngsters most likely to survive and thrive.

Psychobiological Responses in Caretaking

As we look at a cute baby, our reward centers in the brain are stimulated. Whether women or men respond to babies. Profound psychobiological responses in fathers who are engaged in caregiving are seen in testosterone surges in oxytocin—a neuropeptide that loosens the let-down reflex during lactation. Their psychological responses include infantile cries or words, depending on how much prior caretaking relationship and how closely he is with the mother, as well as with the child. But the key factor is prolonged, ongoing brain rs show many of the same neurochemical changes as do those of either parent, and an adopted baby stimulates such surges in the adopted father. For these reasons, biological parents and parents alike undergo significant changes during pregnancy and early infancy.

Infants Are Conditioned to Attend to What Others Intend

I believe that this need for allomaternial assistance had profound implications for mothers who had to become increasingly sensitive to how much support they were likely to have. It also had implications for infants, who grew up dependent on others and needed to rely on them. Developmental psychologists have learned that both human babies and nonhuman ape infants reared in captivity spend more time looking into the faces of others and monitoring their eye gaze when they are held by someone else a short distance away from their mothers. By six months of age, ancestral human babies accustomed to being held by others began to spontaneously engage in attention-getting behaviors like babbling. Group members rewarded such engaging behaviors by paying attention, providing soft food treats, and generally conditioning babies to initiate more such contacts.

For years, psychologists have been aware that children with older siblings are better at mentalizing, what is called "Theory of Mind." Those with...
multiple attachment figures early on exhibit improved social skills later in life.\textsuperscript{10} Even before they can talk, little humans are interested in ingratiating themselves with others. Toddlers spontaneously share, and they even pick out a piece of food to offer to someone else that is different from their own preference, if they think that person will like it.\textsuperscript{11} Engaging in this kind of behavior makes them happy.\textsuperscript{12}

**Multiple Caretakers Promote Intersubjective Engagement**

Having multiple caretakers is also correlated with enhanced capacities to integrate multiple perspectives.\textsuperscript{13} Such children care what others are thinking and are better at taking into account what someone else knows when they try to communicate. Over the course of development, they grow up so as to feel pride when approved of, and shame when disapproved of. Those children, who are just a little better at learning to ingrati ate themselves with others and soliciting nurture, would be those best cared for and best fed. Over generations, and over evolutionary time, these would also have been the youngsters most likely to survive, favored by Darwinian natural selection.\textsuperscript{14} At the same time, their caretakers were also being transformed.

**Psychobiological Responses in Caretakers**

As we look at a cute baby, our reward centers in the orbital frontal cortex are stimulated.\textsuperscript{15} Whether women or men, parents or alloparents, people respond to babies.\textsuperscript{16} Profound psychophysiological changes can be documented in fathers who are engaged in caretaking. Prolactin levels rise above previous baselines while testosterone levels decline. There may also be surges in oxytocin—a neuropeptide typically associated with giving birth, the let-down reflex during lactation, or female orgasms. Elicitors of these responses include infantile cries or other signals of need and may vary depending on how much prior caretaking experience the man has had and his relationship with the mother, as well as his probable genetic relatedness. But the key factor is prolonged, intimate contact with babies. Fathers’ brains show many of the same neuroendocrine responses as mothers’. Even an adopted baby stimulates such surges in oxytocin, so long as the foster father is intimately involved in nurturing that baby.\textsuperscript{17} In other words, allop parents and parents alike undergo similar neuroendocrine responses.
When my first grandchild was born, I wondered how I would respond. Just before meeting him for the first time, I took a sample of my own saliva. Two hours later, I took another sample. There was a 63% surge in my oxytocin levels. When my husband arrived, even before I gave him a hug, I handed him a tube and said, “Spit here, dear.” After two hours of holding his grandson, his oxytocin level went up a little bit. By the second day, after another two hours, Grand-Dad’s oxytocin levels had surged to the same level as mine had (see figure 2.5).

So, if I am right, by two million years ago when *Homo erectus* was emerging, our ancestors were already beginning to share care and provisioning. This means that long before humans became the brainiest, the smartest, and the most encultured apes, and long before sophisticated human language, we were already the most caring and other-regarding apes.

**Can the Powerful Become More Caring?**

My question, Your Holiness, is “ Might we find ways to tap these ancient potentials for nurture so integral to the human species in order to motivate the powerful to be more caring?”

I am reminded of an intervention recently undertaken in Rio de Janeiro, Brazil. An order came to clear out the local favelas. In the process, some policemen were accused of shooting street urchins. In response, someone had the inspired idea to tap into the transformative power of nurture by sending the flak-jacket-wearing burly policemen into daycare centers, to spend time holding and caring for babies. Possibly, through this exposure, ancient emotional potentials could be reenlisted (see figure 2.6). I hope it worked. For text of The Dalai Lama’s response, see book

**The Dalai Lama:** On one occasion with scientists, I was told about a series of experiments which revealed that, basically, human nature is more compassionate and caring. A compassionate mind means to take care. This is logical because we are social animals. As mentioned, for at least a few years, our survival is entirely dependent on others’ care. So, that is nature: our nature.

At a meeting in Hawaii, one scientist shared this about turtles: The mother comes, lays her eggs, and leaves. When the young turtles hatch,
born, I wondered how I would respond. The first time, I took a sample of my own and another sample. There was a 63% surge in oxytocin upon the first sample, and I gave him a kiss. "Spit here, dear." After two hours of waiting, the level went up a little bit. By the second sample, Dad’s oxytocin levels had surged to 83% (Figure 2.5).

Ten years ago when Homo erectus was discovered, it was the beginning of care and provision. As more humans became the brainiest, the more complex and apes, and long before sophisticated technology and the most caring and other-regarding

Figure 2.5
Ephemeral surges in oxytocin levels similar to those reported for mothers, fathers, and adoptive parents also occur in grandparents following prolonged intimate contact with a new baby.

Photo: Katrinka Hrdy

Figure 2.6
Rio de Janeiro policemen sensitized to be more caring through intimate contact with babies.

Photo: Lalo de Almeida/The New York Times/Redux
they have to start off and fight on their own to survive. If an egg is marked, and the mother is kept nearby, when the turtle hatches, and the mother and the youngster are reunited, there will not be any sign of affection. That is nature: the turtle's survival is not dependent on its mother's care.

Conversely, in humans, even during the time in utero, a mother's affectionate mind is a very crucial and positive factor in the health of an unborn child while a mother's fear and anger can have a very bad effect. Scientists have told me that even after birth, a mother's physical touch is critical for the proper enlargement of the baby's brain. These are the biological factors of human nature.

Basic human nature is compassionate. If you are caring, and if you make an effort, there is real hope. If basic human nature is aggressive and angry, then there is no hope. Then, I think we should pray for the elimination of humanity on this planet. (Laughter.)

Children at a young age are naturally compassionate; their human nature is more alive. They live together, play together, and do not care about difference of color, religion, or nationality. Gradually, though, as we grow up and enter into the educational system, problems come. This is because we do not receive sufficient information about the importance of compassion. This creates power in a negative sense—physical power, economic power, political power—which leads us to start to make divisions and distinctions on the basis of color, religion, and nationality. Eventually, we start to make distinctions within the same nationality, and even within the same faith: rich or poor, influential or unimportant. We also learn to calculate: "This person is someone influential" or "If I make a friendship with him or her, I will gain more."

This problem exists because our existing educational system does not pay attention to our deeper inner values. Usually, we say, "A healthy mind, a healthy body," and while there is a close connection, most of us only focus on having a healthy body. We do not pay enough attention to having a healthier mind. Through an approach to education, which is not based on religious belief, but simply on scientific finding, common experience, and common sense, we will find that a more compassionate mind is of immense help to maintaining a more balanced physical body. It is also necessary, in order for us to get along and to stop killing one another.

In today's reality, the well-being of all species is interconnected. When I first came to the United States, we had a million human beings on the planet. Since then, the population may be more than double, and the gap still remains between rich and poor. The time has come to harmoniously work together and solve the problem. This is what we need for our country.

If people consider power to be money, then people will continue to kill other human beings. One feels that the present situation is not right and may continue to kill, thinking in the present situation is not right and may continue to kill, thinking... People must die and hunger, and a few thousand there is acceptable... billion people all... I have to... The present situation is not right and may continue to kill, thinking... People must die... billion people all... I have to...
The Transformative Power of Nurturing

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In today's reality, the well-being of over 7.5 billion human beings is very interconnected. When I first came to India as a refugee, there were six billion human beings on the planet. Some experts say that, by end of this century, the human population may reach ten billion. On top of this, a huge gap still remains between rich and poor, and global warming is becoming very crucial. The time has come not to have a sense of competition, but to harmoniously work together and share with each other—to have compassion. This is what we need for our own survival.

If people consider power to be more important than care, then human beings will continue to kill other human beings, which is untenable. If anyone feels that the present world situation, where killing a few hundred here and a few thousand there is acceptable, then the 21st century will be a miserable century with a lot of killing, suffering, and disaster. If you feel that the present situation is not right and make an effort to change it, then you are acting with compassion. Each of us has the ability to contribute to a better world. Our goal should be to create a more compassionate 21st century through education.

One day, maybe an expert will use technology to make the human brain more compassionate. Perhaps then, people will say, "Anger and attachment will always arise, so maybe it would be worthwhile to simply remove the portion of the brain connected to them." Then, there will be human beings without any feelings—that does not do a lot of good. It would be much better for us to use our sophisticated brains, to investigate, use reason, and to learn that too much anger will destroy our inner peace. To explain this, I often tell this story: "A lady with a beautiful face may be very beautiful, but when her face becomes angry, her beauty diminishes. On the other hand, if a lady who does not necessarily have a beautiful face is smiling and showing affection, she is really beautiful, isn't she?" It is helpful to see that a compassionate mind brings inner peace, and an affectionate face brings trust: and conviction and forms the basis for friendship.

Notes

and Implications (Albuquerque: School of Advanced Research and University of New Mexico Press, 2016).


10. Attachment figure is a notion formulated by British psychiatrist and psychoanalyst John Bowlby. It refers to the person towards whom an infant is directing his/her attachment behaviors. Besides the mother who is the primary figure, there can be many other attachment figures from within or outside the family (aunt, uncle, siblings, grandmother, and close friends).


14. Hrdy, Mothers and Others.


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