



## Making kin with parasites

Kate Wright

In the first trimester of my first pregnancy I called my unborn son a “parasite.” The baby-in-becoming was wrapping me up in waves of nausea every day—my body felt as if it were under attack by some kind of intestinal worm. At the same time, I was wracked with first-time mother anxiety. I knew the statistics—the high rates of miscarriage, especially—and as much as I longed for a child, that longing terrified me.

An embryo that may or may not become my child was making me vulnerable to physical and psychological illness. The “parasite” name was an attempt to enact some ironic distance so as to insulate myself against any attachment I might be developing. This strategic motion of differentiation reassured me that I was self-contained and in control. Instead of being unsettled, perhaps undone, by the gestational futures I now harboured, a cynical nickname allowed me to pretend that I was a fixed- and stable-self that just happened to be momentarily invaded by a parasitic other.

Eventually I softened to the intense vulnerability created by my son-in-becoming, and, on feeling him kick for the first time (while listening to Pachelbel’s *Canon in D Major* driving to work and bursting into tears with joy and love) he was renamed “platypus”—the watery duck-billed, fur covered marsupial of my homeland, Australia—until he was born, and was assigned the name, “Rory”.

Jahnne Pasco-White’s *Kin* series of works has called me back into a contemplation of this initial encounter with my first child as a parasite, prompting me to think more deeply about the ways ‘pregnancy, childbirth and mothering forged new networks of kinship, and demanded that I took notice of others with whom I was already co-constituted’ (Pasco-White, 2019a). This short reflective essay places Pasco-White’s work in the context of deep multispecies history to view pregnancy, childbirth and the nurturing of human young through the lens of symbiotic coevolution.

In a neo-Darwinian rendering of biological life as individualistic competition, developing children can be understood as a parasitic drain on the mother’s resources (Dawkins, 2006; Dicke & Takken, 2006). Once a developing embryo implants into the mother’s uterine wall the mother is unable to control the nutrient supply she offers the foetus—thereby reducing the nutrient supply to her own tissues. The foetus also begins to release its own hormones into the mother’s bloodstream, sending signals to increase the mother’s blood sugar and blood pressure and thus its own resource supply. The foetus increases its production of a hormone that prompts the mother’s brain to release cortisol, the primary stress hormone. Cortisol suppresses the mother’s immune system, preventing it from attacking the foetus. It also increases her blood

pressure, so that more blood pumps past the placenta and consequently more nutrients are available to the foetus. The radical becoming-with (Pasco-White, 2019b) of gestation is often lethal. Approximately fifteen (15) per cent of women suffer life threatening complications during each pregnancy, including but not limited to placental abruption, hyperemesis gravidarum (extreme nausea and vomiting caused by hormonal changes), gestational diabetes, preeclampsia (caused by high blood pressure), cholestasis, and miscarriage. Pregnancy currently kills about 800 women every day worldwide (Sadedin, 2014). If the child were of a different species, this relationship would clearly meet the criteria of parasitism.

Over the past two decades studies in microbiology have redefined our understanding of what it means to be human (Hird, 2009; Huttenhower et al., 2012; McFall-Ngai et al., 2013; Peterson et al., 2009; Relman, 2012). All animals, including human beings, are now understood to be symbiotic complexes of many species living, developing and evolving together (Gilbert et al., 2012). The subversion of the notion of the ‘biological individual’ prompts us to redefine the coordinates of self and other, meaning that our children may be understood as parasites, while parasites may be conceptualised as kin.

Environmental historian Marcus Hall is developing a cultural and evolutionary history of the parasite to understand the way human histories have been mediated by parasitic relations. Taking a long-range view, Hall observes that while parasites are often deadly, they also confer unrecognised and crucial benefits to their human hosts. Hall’s study reveals that through the vast expanses of evolutionary time parasites appear to behave much more like symbionts, enmeshed in a mutualistic give-and-take relationship with human beings. Parasites, like children, are incorporated into our bodies, cultures, and histories (see Hall, forthcoming).

Donna Haraway implores humans to resist the violences of separation, disconnection and alienation by making kin, not babies, where ‘kin mean something other/more than entities tied by ancestry and genealogy’ (Haraway, 2016, 103). Yet pregnancy, childbirth and parenting have always taken place within a more-than-human ecology of kin-making. Recent research into the microbiome reveals that multispecies interactions are fundamental to evolution, and that microbial symbionts form a second type of genetic inheritance (Gilbert, 2011; Moran, 2007). Childbirth is now recognised as the first major microbial colonisation of the human body as mothers transfer microbes to newborns through the vaginal tract,

and microbial diversity is increasingly promoted in birthing practices (Dunn et al., 2017). In this context the radical becoming-with of pregnancy and childbirth cannot represent the solidification of anthropocentric myopic loyalties (“my human family first”), but rather signifies an intensification of symbiotic interdependence as environments and organisms combine in processes of reproduction and care. As Pasco-White observes ‘enabling a life that I can see, touch, smell and hear explicated the bare fact that I had *always* shared my body with countless messmates’ (2019a).

The nebulous, overlapping fabrics, textures and pigments of Pasco-White’s *messmates* mirror cellular and cosmogenic patterns of symbiogenesis. Perhaps this work captures what the relationship between a human mother and a human child would look like if we viewed it from the point of view of life itself—life understood as a relational process, rather than an individual possession.

Even the briefest contemplation of human mortality leaves the bittersweet awareness that life is not a property we can permanently acquire. Rather, life is an ongoing event in which we are embedded, in which we become, and in which we take place. Pasco-White’s art practice mirrors interspecies crossovers of life, death, decay and renewal. She explains that artworks created from reused and repurposed materials drawn from the environment are indebted to the past ‘for it is not in dismissal or an erasure of past lives that material becomes lively, it is with the acknowledgement and re-saturation of these elements that a kind of breakdown and renewal or re-direction can take place’ (Pasco-White, 2017, 8). In a similar vein, evolutionary biologists Lynn Margulis and Dorion Sagan observe that ‘death is part of life because even dying matter, once it reproduces, rescues complex chemical systems and budding dissipative structures from thermodynamic equilibrium’ (2000, 86). Processes of symbiogenesis reveal that on our entropic planet the continuation of life depends on intergenerational transfers of energy outside singular species. From the point of view of bacteria, for instance, the human body is a source of autopoietic maintenance against thermodynamic equilibrium (Margulis & Sagan, 2000, 91). In this sense the human body becomes part of the reproductive system of bacteria—the mother to bacterial progeny.

Charles Darwin wrote that ‘each living creature must be looked at as a microcosm—a little universe, formed of a host of self-propagating organisms, inconceivably minute and as numerous as the stars in heaven’ (1868, 404). Stars are a good way to think about the many messmates,

including our children, that feed on and with us because they remind us of the ongoing presence of the past. When we look up at the stars, we see other worlds at the same time as we see our own, and we see earth’s cosmogenic beginnings at the same time as we see the diamond studded sky. Like a clear, crisp night, the body is filled with the radiances of ancient mutualisms. Grounding commensurate thoughts among Earthlings, Margulis and Sagan (2000, 55) write that:

From an everyday uncontentious perspective, “you” began in your mother’s womb some nine months before whatever your age is. From a deeper, evolutionary perspective, “you” began with life’s daring genesis – its secession, more than 4000 million years ago, from the witches’ brew of early Earth’.

In this way, in our symbiotic world we emerge from a more-than-human womb, our bodies archives of planetary becomings that stretch to the coevolutionary beginnings of life on earth. My teacher, colleague and friend, the late Deborah Bird Rose, observed that every individual of every species ‘is both itself in the present, and the history of its forebears and mutualists’ (2012, 136). Because we are each an ‘embodied knot of multispecies time’ (Rose, 2012), the tiniest newborn face carries memories of the world before it has even seen the sun. Epigenetic and symbiotic histories can be read in the colour of our eyes, the mitochondria in our cells, the bacteria in our guts. We are legion and more-than-human all the way down.

Calling my unborn child a “parasite” was initially a means of creating ironic distance, but reconsidered from the perspective of symbiotic coevolution over vast expanses of deep evolutionary time, this designation becomes an opening into understanding both children and parasites as profoundly intimate and vital gifts. Parasites can only be regarded as harmful intruders that selfishly extract what they need if we ground our understandings of life in biological individuals. Through neo-Darwinian deterministic models the parasite then becomes a freeloader that seeks to strategically extract energy from a system without offering any reciprocal benefits—a rendering of biological life that mirrors a capitalist exchange economy. But there are other ways of understanding energy exchange relations between living creatures.

Deborah Bird Rose, drawing on the work of Levinasian scholar James Hatley, developed a notion of multispecies, intergenerational gifts to make sense of the

complex entanglement of time, symbiosis, entropy and energy in living mortal systems. Rose writes:

The condition of being birthed is a gift, and every interface that nourishes and promotes life is another gift. It is also, of course, a condition of need, the need to be nurtured. At the same time the ethics of the gift is that one is always responsible to others. Thus, while the gift is not about repayment or return, the ethics of gift situates living beings as always entangled with and responsible to and for others – both nourishing and being nourished... The way of life, then, is to continue to “draw order out of disorder,” which is to say: to keep the gift moving (Rose 2012, 137).

In this way, interspecies and intergenerational gifts are the way life evades entropy. In place of evolutionary economies based on self-interest and instrumental calculative relations, there is an ‘inter-giftedness between everything that exists’ (Hage 2017, 121). Building on the influential work of sociologist Marcel Mauss, anthropologist Ghassan Hage argues that even in societies where logics of extractivism, domestication and exploitation dominate – such as the capitalist, colonial and neoliberal west – mutualism and reciprocity remain significant modes of being with and relating to one another. Pasco-White’s (2020) last instalments of her *Kin* series—the *inter-giftedness* exhibition—materialises these relations of inter-existence and nourishment that inevitably surround and sustain us through the use of pigments drawn from organic matter by the permeating, connective and life-creating element of water.

Like water, intergiftedness is a collective phenomenon that flows through and binds time through relationships. In an individual body, an individual life, children and parasites may prove deadly. But when we recognise that the unit of evolution is relationships, not individuals (Gilbert et al., 2012) it becomes clear that both are part of a system of gift exchange that supports the continuation of life. For example, Marcus Hall observes that ‘through complex and sometimes convoluted ways, successful parasites often work hard to ensure that their hosts will be successful’ (2018, 122) seeking to adapt to human systems so that they too can survive. He notes that the parasite that causes malaria in humans—*Plasmodium spp.* —‘may have little concern for an individual human life, but it is deeply concerned about the fate of the human species’ (2018, 126).

Of course, these symbiotic relations take place in wider social contexts, and existing social determinants of illness and health can and do make parasitic relations

more deadly for certain racially and socially differentiated bodies and communities. Structural geopolitical injustices expose swathes of people to more intense experiences of vulnerability and suffering through pregnancy, childbirth and parenting, and through parasitic invasion.

Making kin with parasites is not to belie or accept this suffering, rather, it is to challenge violent logics of disconnection that separate individuals from the relationships (and therefore the responsibilities) in which they are enmeshed. Haraway (2019, online) states ‘making kin seems to me the thing that we most need to be doing in the world that rips us apart from each other, in a world that has already more than seven and a half billion humans with very unequal and unjust patterns of suffering and wellbeing’. In seeking to defamiliarize our kin, Haraway works to create an ethics grounded in radical alterity. She writes that ‘all critters share a common “flesh”, laterally, semiotically, and genealogically. Ancestors turn out to be very interesting strangers; kin are unfamiliar (outside what we thought was family or genes)’ (2016, 103). It strikes me though, that the intimate and familial—our closest biological relatives, our own children—offer transformative paths into encounters with our radically different kin.

For me, parenting has been an incredibly intense experience of vulnerability through relationship. When I was pregnant, I was struck by the fact that I had two hearts beating inside my flesh. My son turns four next month and I still feel as if I have two hearts, only now one is wandering around outside my body, exposed to the vicious vicissitudes of our troubled world. This experience of profound vulnerability, while at times almost unbearable, can become an opening into an ethics of connection and care.

Instead of myopic loyalties that lead parents to protect their young at the expense of all others, a symbiotic view of pregnancy, childbirth and motherhood positions the nurturing of children within an ecology and economy of multispecies, intergenerational gifts. This also helps us to recognise the alterity of our most familiar and beloved, reminding us that we neither make nor own our children—our kin—because they are gifts from the world to the world. Reminiscing about my first encounter with my son—the parasite—while watching him grow from and beyond me, as his life extends outward toward new generations, I am reminded of Khalil Gibran’s (1923) powerful words: ‘Your children are not your children, they are the sons and daughters of life’s longing for itself’

### Acknowledgements

I would like to acknowledge the support of the Rachel Carson Center for Environment and Society (LMU, Munich) where this essay was developed. Thanks especially to Marcus (Bruce) Hall, Sevgi Sirakova Mutlu, and Anna Pilz for the many inspiring conversations and ideas that made their way into this short piece.

### References

Blaser, Martin J. 2006. ‘Who are we?: Indigenous Microbes and The Ecology of Human Diseases.’ *EMBO Reports* 7(10): 956–960.

Darwin, Charles. 1868. *The Variation of Animals and Plants under Domestication*. London: John Murray.

Dawkins, Richard. 2006. *The Selfish Gene*. Oxford: Oxford University Press.

Dicke, M., and W. Takken. 2006. Chemical Ecology: *From Gene to Ecosystem*. Vol. 16. Berlin: Springer.

Dunn, Alexis B., Sheila Jordan, Brenda J. Baker, Nicole S. Carlson. 2017. ‘The Maternal Infant Microbiome: Considerations for Labor and Birth,’ *MCN: The American Journal of Maternal/Child Nursing*, 42(6): 318–325.

Gibran, Khalil. 1923. ‘On Children.’ *The Prophet*. New York: Knopf.

Gilbert, Scott F. 2011. ‘Symbionts as Genetic Sources of Heritable Variation.’ *Transformations of Lamarckism: From Subtle Fluids to Molecular Biology*, S.B. Gissis and E. Jablonka (eds.). Cambridge: MIT Press.

Gilbert, Scott F., J. Sapp, and A.I. Tauber. 2012. ‘A Symbiotic View of Life: We Have Never Been Individuals’, *Quarterly Review of Biology*, 87(4): 325 – 341.

Hage, Ghassan. 2017. *Is Racism an Environmental Threat?* Polity: Cambridge.

Hall, Marcus. 2018. ‘Thinking Like a Parasite.’ *In Landscapes, Natures, Ecologies: Italy and the Environmental Humanities*, S. Iovino, E. Cesaretti, & E. Past. (eds.) University of Virginia Press: Charlottesville, Virginia.

———. (forthcoming) *Our Bodies*, Our Planet (Publisher not yet identified).

Haraway, Donna .2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham & London: Duke University Press.

Haraway, Donna and Steve Poulson. 2019. ‘Making Kin: An Interview with Donna Haraway.’ LA Review of Books, December 6.

Hird, Myra. 2009. *The Origins of Sociable Life: Evolution after Science Studies*. London: Palgrave MacMillan.

Huttenhower, Curtis, Dirk Gevers, Rob Knight, Sahar Abubucker, Jonathan H. Badger, Asif T. Chinwalla, Heather H. Creasy et al. 2012. ‘Structure, Function and Diversity of The Healthy Human Microbiome.’ *Nature* 486(7402): 207.

Margulis, Lynn and Dorion Sagan. 2000. *What is Life?* Berkeley and Los Angeles: University of California Press.

McFall-Ngai, Margaret, Michael G. Hadfield, Thomas C. G. Bosch, Hannah V. Carey, Tomislav Domazet- Lošo, Angela E. Douglas, Nicole Dubilier, Gerard Eberl, Tadashi Fukami, Scott F. Gilbert, Ute Hentschel, Nicole King, Staffan Kjelleberg, Andrew H. Knoll, Natacha Kremer, Sarkis K. Mazmanian, Jessica L. Metcalf, Kenneth Nealsen, Naomi E. Pierce, John F. Rawls, Ann Reid, Edward G. Ruby, Mary Rumpho, Jon G. Sanders, Diethard Tautz, and Jennifer J. Wernegreen. 2013. ‘Animals in a Bacterial World, a New Imperative for the Life Sciences.’ *Proceedings of the National Academy of Sciences of the United States of America*, 110(9): 3229–36.

Moran, N.A. 2007. ‘Symbiosis as an Adaptive Process and Source of Phenotypic Complexity.’ *Proceedings of the National Academy of Sciences of the United States of America*, 104: 8627–633.

Pasco-White, Jahnne. 2017. ‘To Accrete a Surface’, *Unlikely: Journal of Creative Arts*, 3.

———. 2019a. *messmates*, artist statement. [Reprinted in this volume]

———. 2019b. *becoming-with*, artist statement. [Reprinted in this volume]

———. 2020. *inter-giftedness*, artist statement. [Reprinted in this volume]

Peterson, Jane, Susan Garges, Maria Giovanni, Pamela McInnes, Lu Wang, Jeffery A. Schloss, Vivien Bonazzi et al. 2009. ‘The NIH Human Microbiome Project.’ *Genome Research*, 19(12): 2317–2323.

Relman, David A. 2012. ‘Microbiology: Learning about who we are.’ *Nature*, 486(7402): 194.

Rose, Deborah Bird. 2012. ‘Multispecies Knots of Ethical Time.’ *Environmental Philosophy*, 9(1): 127–40.

Sadedin, Suzanne. 2014. ‘War in the Womb,’ *Aeon*.



**Jahnne Pasco-White: Kin**

Published by Art Ink and Unlikely  
Publishing, in Melbourne, Australia  
artink.com.au  
unlikely.net.au

Unlikely Publishing is supported by The Centre of Visual Art  
(CoVA) at The University of Melbourne



All images © 2020 Jahnne Pasco-White  
Text © 2020 N.A.J. Taylor and the authors where stated  
This edition © 2020 Art Ink

Editor: N.A.J. Taylor  
Design: Hayman Design  
Copyeditor: J.M.L. Taylor

Jahnne Pasco-White is represented by STATION, Australia

Jahnne Pasco-White acknowledges the following organisations for sponsoring the project at various junctures: Australian Council for the Arts, Marten Bequest for Painting, Gertrude Contemporary, Art Gallery of New South Wales' Mora Dyring Memorial Studio Fellowship, Bendigo Art Gallery's Arthur Guy Memorial Painting Prize, Yarra City Council, Moreland City Council, Regional Arts Victoria, Monash University and the Australian Federal Government's Department of Education, Skills and Employment. Several individuals, identified by the tremendously supportive staff at my gallery STATION, acquired works that enabled printing the book in hardcopy. Jahnne is especially grateful to her partner Nico for his unwavering commitment to her practice and to this book, and their daughter, Oslo, whose entry into their lives gave rise to this body of work in the first place. The project's ultimate shape and form benefited from being intimately nurtured by family, peers and friends, as well as intellectually nourished by the dozen authors who dedicated time and energy to write such thoughtful chapters.

N.A.J. Taylor is greatly indebted to each of the contributors to this volume—and the peer reviewers—for meeting every editorial demand made of them during an extraordinarily difficult 18-month period, both individually and collectively. One of the joys of editing this book has been to document the grace and grit of his partner Jahnne as an artist, whilst observing these same qualities being developed in her mothering of Oslo. His own mother, Jan, deserves special praise for her editorial assistance. He would also like to acknowledge Simon Hayman and Samantha Lynch at Hayman Design and the team at Art Ink, as well as Norie Neumark and Jan Hendrik Brüggemeier at *Unlikely: Journal for Creative Arts*, for agreeing to co-publish this volume.

No part of this book may be reproduced in any form without prior written permission from the publishers and copyright holders.

Distribution: Art Ink, Australia  
First Edition of 750  
ISBN: 978-0-6450166-0-4  
Printed by Gunn & Taylor, Australia  
Paper: Ecostar+ 100% Recycled Uncoated, 120gsm, 250gsm  
Stephen Clay, 120gsm, 250 gsm

**art  
ink**

