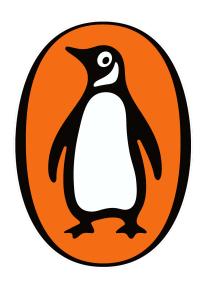
MATRESCENCE





About the Author

Lucy Jones is a writer and journalist based in Hampshire, England. She previously worked at *NME* and the *Daily Telegraph*, and her writing on culture, science and nature has been published in *GQ*, *BBC Wildlife*, *The Sunday Times*, the *Guardian* and the *New Statesman*. Her first book, *Foxes Unearthed*, was celebrated for its 'brave, bold and honest' (Chris Packham) account of our relationship with the fox, winning the Society of Authors' Roger Deakin Award 2015.

Lucy Jones

MATRESCENCE

On the Metamorphosis of Pregnancy, Childbirth and Motherhood



Contents

Prologue
Introduction

PART ONE

Tadpoles

1. All-day sickness

Imaginal discs

2. The emotional placenta

Eels

3. Zombie cells

PART TWO

Volcano

4. Birth

PART THREE

Colony

5. Feeding

Othermothers

6. The maternal brain

Aurora Borealis

7. Motherhood and sociality

Ecdysis

8. Sertraline and sleep deprivation

PART FOUR

Matriphagy

9. Maternal ambivalence

Parasitism

10. Intensive motherhood

PART FIVE

Mycelium

11. Recombobulation

Sea squirts

12. Care work and creativity in late-stage capitalism

Moon

13. Matroreform

Epilogue

Notes

Bibliography

Acknowledgements

Index

For Naomi E May C-B, Lottie A Chloe S-M With gratitude. $M^{\star}M^{\star}M^{\star}M$ $Z<^*O^*>ZZ$ <O> W*WqW*W qqq qqqqqq qqq qqqq qqqq qqq qqqq $q\,q\,q\,q\,q$ qqqqqq Qqqqqqqqqq qqqqqqqqqq q qqqqqq q q q q q q q qq q q

> q q

> q q q q

^{*}When a human egg melds with sperm enzyme, zinc fireworks spark.¹

Prologue

It's early autumn and the forest is a rainbow. The tops of the broad-leaved beech trees are copper, swelling to yellow. Green chlorophyll holds on underneath. Above, a great tit chitters. A dog barks nearby. Cars swoosh in the distance.

I'm here to find slime moulds.

I am looking for slime moulds for a few reasons. First, they are beautiful and peculiar. Second, though abundant, most of their forms require unearthing, and I am interested in hidden things. Third, I don't know very much about them — no one does — but I know that they undergo radical, irreversible metamorphosis, and I think that this is what has been happening to me.

Myxomycetes – the scientific name for slime moulds – are fungus-like organisms. For a long time, scientists thought they were fungi (hence *Myceto*) but now they are classified in the kingdom *Protista*, a rag-tag group of beings that aren't animals, plants or fungi. Part of their life cycle is spent as fruiting bodies that can look a little like minuscule mushrooms, and they live anywhere there is organic matter: decaying logs, sticks, leaf litter, dung. I search the bark and stumps around me for the tiny, bodacious flashes of colour I have seen online or in my field guide: iridescent ingots of petroleum, corndogs made of peach glass, balloons of lip gloss on black stilts, pink foam dissolving into sherbet, liquorice spogs with a hundred spider legs. I know what shapes to look out for with my hand lens: eggs, cones, nets, plumes, goblets; in clutches, or alone; no more than a millimetre or so high.

Although I have read that they are everywhere, I have never seen a slime mould at this fleeting stage of its life.

Myxomycetes actually spend most of their existence in a state more characteristic of an animal. This is the slime mould as plasmodium: a thin, slick mass. It moves around, scoffing fungal hyphae, algae, spores and other organic matter, squeezing through tiny holes and crevices in wood, advancing and growing. Commonly, it is bright yellow. In this state, it can

grow significantly, spreading over bark and mulch, in the shade where it is moist and dark. Occasionally there are sightings of plasmodium metres wide. Although they are single-celled, with no brain or nervous system, biologists have found they can solve problems, such as mazes, learn, anticipate and 'teach' younger slime moulds pieces of knowledge.², Astronomers have relied on their networking behaviour to help map the dark matter holding the universe together.⁴

I think I have seen a plasmodium here before. It was about the size of a child's hand and looked like an acid yellow gob vomited across a fallen log, dripping over the bark, but so vital it might have reared up, smeared its way towards us, and chased us through the forest.

Sometimes, a plasmodium will be enclosed by a slime sheath and leave behind a glossy trail as it wanders. Then, after a number of days or weeks, when it runs out of food – or for other reasons unknown – it moves into a drier, more exposed habitat and transforms into a colony of completely different beings, with a new existence and purpose: sessile and spore-releasing. It, you could say, becomes they. The woodlands of the world glisten and crawl with myxomycetes, invisible to the human eye unless you're looking.

I get down on my knees, combing old logs and sticks, stroking and parting filigrees of lichen and moss.

Over the past couple of years I have found myself increasingly drawn to the fluidity of the woods, and the abstruse fluidity of slime moulds – an organism with 720 sexes.⁵ To the complex relationships between lichen and moss and bacteria and spores and fungi and mycelium and trees and decaying matter and dead wood and frass. The complex life-processes and 'intelligence' of these organisms expand my perception of life and help me see our wider ecologies more clearly.

Half an hour or so passes, and I don't find what I'm looking for, exactly. A harvestman walks past, ghostly gentleman sprite. Spindly mushrooms stand on stalks. Purple gills, white gills. The mossy knolls are filled with tardigrades and rotifers and springtails. Dead man's fingers leer erect. Epiphytes and moss nestle. Puffballs puff. Worms metabolize compounds. Underneath me, the mycorrhizal network resides: pulsing, combining, attending, underpinning the whole forest.

The forest will turn from autumn bright to brittle snooze, from germination to new growth, from life to death to life, and I will keep searching for rafts to climb on to, powered by the urge to comprehend what the world is like, and what my little ecosystem could be.

Introduction

Women and love are underpinnings. Examine them and you threaten the very structure of culture.

Shulamith Firestone, The Dialectic of Sex: The Case for Feminist Revolution

Sorry this Write up sucks I'm still mentally totally a wreck after baby for some reason. Like my iq is down about 50 points and words seem weirdly difficult lol.

Grimes, Instagram, 2020

When a human animal grew inside my body, I started to realize that some hoodwinking had been going on. When she left my body, I noticed more.

Pregnancy, then birth, and then – big time – early motherhood simply did not match up with the cultural, social and philosophical narratives I had grown up with. What I felt and saw did not accord with what I had been taught about women and men, fathers and mothers; I could not connect my present experience with what I had so far absorbed about the body, the mind, the individual and relational self, and our collective structures of living.

At first, I thought that I must be going mad. I searched desperately for ways of understanding what was happening to me. I started to realize that my mind had been colonized by inadequate ideas about womanhood, about motherhood, about value, even love: there was canker in the roots of my habitat.

A sense that I had been fundamentally misinformed about the female body and maternal experience set in fast. The first day that I felt nauseous, five weeks or so pregnant, I was excited. 'Morning sickness' was a sign of a healthy pregnancy, I had read, and it confirmed to me what had seemed so mysterious and diffuse: that inside me was the child I had always dreamed of, finally. When it came, the nausea was immediately severe, but I figured, Well, let's see, the morning is around four hours of the day — not even a quarter of my waking hours — I can deal with that. I nibbled ginger biscuits and took sips of water.

Then noon came around. Severe nausea persisted.

3pm. Still there.

6pm. What?

8pm. How?

10pm. It remained.

Then, like this, the next day, and the next and the next and the next. All day, every day. For five months.

Meanwhile, a parallel, more disquieting change seemed to be happening in my mind. I was overjoyed to be pregnant, attached to the growing creature within, but I found myself becoming subdued, more introverted, increasingly disrupted as the weeks passed. I had no language with which to understand or describe this change, but my consciousness felt different: restructured or rewired. This freaked me out. It was as if someone else had moved in, making a home in both my uterus *and* my brain. I thought I must be imagining it; I had understood pregnancy to be a relatively straightforward physical process with a few 'hormonal' days here and there. I thought the baby would grow inside my body, as in a flowerpot, that I would still be the same person. But that didn't seem to be the case.

As I came close to term I realized that something else had been accreting within me, too: a strange admixture of unexamined moral assumptions about motherhood.

At the time, I couldn't fathom exactly where I'd picked up these ideas, but it became clear, once the baby was born, that I felt that self-sacrifice was an essential component of being a good mother. My past independence had to end, and I would now need to live to serve others in an intensive and ultimately self-sacrificing way.

Really, I knew next to nothing about the maternal experience or the work of raising and caring for other human beings. I had never seen a painting of a woman giving birth. I had never heard a song about pregnancy. I had never read a book about the loss of self in early motherhood. I had never watched a play about maternal mental illness. I had never changed a nappy or spent

time with young children. And still, I had a curiously adamantine conception of what it required.

As the baby grew, I found that if I tried to do anything for myself, I would be agonized by guilt and a diffuse sense of discomfort. I became increasingly driven to try and untangle these punishing feelings – to separate them from my desire to protect, love and care for my baby. I needed to locate the origins of this dissonance, so as to work out how to nurture her, while living some kind of life of my own. I began to look everywhere for clues.

O

Eventually, I encountered the concept of the 'institution of motherhood', developed by the feminist poet and essayist Adrienne Rich in her book *Of Woman Born*.¹ Writing in 1976, she showed how wider societal conditions – in a word, patriarchy – had turned motherhood into a 'modern institution', with its own rules, strictures and social expectations, all of which were designed to control women's behaviour and thought. Rich made clear that it was the socio-cultural *institution* of motherhood, not the children themselves, that oppressed women and could even mutilate the relationship between mother and child. The institution fostered the idea that women are born with a 'natural' maternal 'instinct' rather than needing to develop knowledge and skills as caregivers. The uneven power relations between mother and child were, she argued, a reflection of power dynamics in society. It was a set-up, in which mothers were destined to fail. The institution found 'all mothers more or less guilty for having failed their children'.² Perhaps I wasn't going mad.

I was amazed by how relevant *Of Woman Born* was, forty-something years after it was first published. Rich's was the first voice that described the dilemma that had engulfed me. She had her children in the 1950s. Almost seventy years later, the taboos she described were still strong. It shocked me to realize that the leading assumption I held about motherhood was identical to Rich's:

That a 'natural' mother is a person without further identity, one who can find her chief gratification in being all day with small children, living at a pace tuned to theirs; that the isolation of mothers and children together in the home must be taken for granted; that maternal love is, and should be, quite literally selfless.³

How could this be? I had grown up reading Greer, Beauvoir, Firestone. How could I have reached my thirties with this archetype still deeply sewn into me?

While I had always wanted children, I realized, with a jolt, that I didn't hold mothers or the work that mothers do in high esteem. I had felt the need to hide certain aspects of my pregnancy and early motherhood from colleagues and employers. I had internalized the message that I had to keep motherhood separate, cloistered; I expected to be judged and found wanting by the working world for having children. I saw how the work of motherhood was valued neither economically nor socially: it was not regarded as a site of power or esteem. In fact, it was the opposite. While society still judges women without children, to be associated with 'the maternal' was to be silenced, limited and diminished. I was frightened of being defined by my reproductive labour – and being written off for it.

As I began to interrogate my attitude towards motherhood, I was shocked. I saw that I had perceived it as mindless and unintellectual, of low worth and of low value, dull, nothing to write home about. It wasn't *productive* in the real sense. Looking 'mumsy' was not something I aspired to. I didn't want to carry the 'stank of uncool motherhood', as the writer Rufi Thorpe puts it.⁴ Being a caregiver wasn't challenging, wasn't high status. I thought it was *easy* work. Ha!

I would soon learn that caregiving was much, much harder, more confronting, exciting, creative, beautiful, stressful, alarming, rewarding, tedious, transformative, enlivening and (occasionally) deadening than I imagined, and much more essential to a working society than we give it credit for. I felt increasingly compelled to figure out the reasons for the continuing lack of authentic respect and support for the invisible work of pregnancy, birthing children and caregiving. Not least because I was finding out first-hand how harmful it could be.

O

The experience of giving birth had been bamboozling. I was attracted by the idea of a 'natural' birth, and I believed what I'd heard and read: that, if I was relaxed and used my mantras and positive affirmations, I wouldn't feel too much pain, and everything would be fine. This was not the case.

In the hours, weeks and months that followed, I grew more and more alienated, frustrated by the lack of language to articulate the reality of childbirth. I had always believed in the power of words but, here, they failed me. No one was talking about pain; about birth as an emotional process; about how it felt to have grown another human, to be two people at the same time, and then to be vacated, to push a person into being.

I knew nothing about the emotional and psychological transition that follows birth. I had no idea that something was happening to my brain – that it was literally changing shape. I had no idea what was coming: the anxiety, the life-exploding romance, the guilt, the transcendence, the terror, the psychedelia, the loss of control, the rupture of self.

So instead, for a while, I acquiesced. I used the language I had been given: the official lexicon for talking about motherhood. I fell in line, finding that you could sometimes admit it was a bit tiring as long as you mostly assured the person you were talking to that you loved the child and oh, yes, it was definitely the best thing that had ever happened to you.

Blindsided and increasingly isolated, I fell down a rabbit hole. I had gone, but I didn't know where, or if I would return. I found I was confronted with my selves anew: my childhood self, the bare, naked roots of early psychic disturbances. This, I did not expect. I thought early motherhood would be gentle, beatific, pacific, tranquil: bathed in a soft light. But actually it was hardcore, edgy, gnarly. It wasn't pale pink; it was brown of shit and red of blood. And it was the most political experience of my life, rife with conflict, domination, drama, struggle and power.

 \mathbf{O}

Questions swirled around me. What was happening to my brain, my mind and my body? Why did it feel so wrong to be alone at home, mothering my young child? Why did it also feel so wrong to be away from her? Why did it seem as if my nervous system hadn't evolved for this?

I set about trying to solve the puzzle. Since I had a background in science, health and ecology journalism, I turned first to research papers and journals, and read about neurobiology, endocrinology, the study of maternal mental illness. I soon realized that cultural apathy towards this most dramatic of transitions in a person's life went hand in hand with the failure of science – biological and social – to address it. In 2011, researchers from Scotland wrote in the *Journal of Psychiatric and Mental Health Nursing* that there was a 'vacuum in the evidence base' in research on post-natal depression, the primary mental illness associated with motherhood.⁵ But a growing field of research had begun to focus on the maternal experience. Through the second half of the 2010s, the first landmark neuroscience studies had been published, showing just how drastically pregnancy and early motherhood

alters the brain, as well as how looking after infants can change the brains of non-pregnant caregivers.

As I read, I realized that there was a lot more 'nature' happening to me than I had been led to believe, but also a lot more 'nurture'. I studied the history of 'the modern institution of motherhood', learning how and why expectations of maternal servitude and self-sacrifice were first constructed, and how capitalism and patriarchal systems had combined to create our current ideas about womanhood and motherhood – producing what I will call the modern institution of *intensive* motherhood. I interviewed experts in the fields of evolutionary biology, social science, psychoanalysis, philosophy, neuroscience, healthcare and psychiatry, and saw how new parents were being failed by inaccurate assumptions about the benefits of the 'traditional' nuclear family structure – assumptions which routinely forgot or ignored how babies are raised by networks of people in the majority of the world.

When our baby was about nine months old, I had had a breakthrough. I happened upon a word I'd never read before, in an article in *The New York Times* written by a reproductive psychiatrist called Alexandra Sacks. It was a word which brought together everything I was feeling, seeing and reading about.

Matrescence.

'The process of becoming a mother, which anthropologists call "matrescence," has been largely unexplored in the medical community,' Sacks writes. 'Instead of focusing on the woman's identity transition, more research is focused on how the baby turns out. But a woman's story, in addition to how her psychology impacts her parenting, is important to examine, too.'

I breathed.

The article mentions the mixture of emotions that mothers experience. Joy, yes, 'at least some of the time'. 'But most mothers also experience worry, disappointment, guilt, competition, frustration, and even anger and fear.'

The idea that this was normal made my shoulders drop in relief for the first time in months. I kept reading.

'Too many women are ashamed to speak openly about their complicated experiences for fear of being judged. This type of social isolation may even trigger postpartum depression.'

I looked for 'matrescence' in my dictionary. Matins. Matisse. Matricide. No matrescence.

I checked my Dictionary of English Etymology. Matriarch. Matriculate. Matrimony. No matrescence.

I wondered if I could at least find any words that associated motherhood with an emotional journey.

I turned to the word *mother*.

- A. female parent.
- B. womb, from the fourteenth century, preceded by a cross, meaning obsolete. And ah, here was something. *Hysteria* (also with a cross). I looked up hysteria. 'Functional disturbance of the nervous system, which was thought to be due to disturbing of the uterine functions.'

I looked to the next entry for mother. 'Dregs, scum', from the sixteenth century. A 'mucilaginous substance produced in vinegar by fermentation', from the seventeenth century. And, 'original crude substance'. I wondered if these uses had been influenced by the Biblical story of Eve – eating the apple, disobeying God, the original sinner.

I checked other dictionaries. No entries for 'matrescence'. As I typed it on my computer the word processor insisted on underlining it with a dotted red line. It's still there now, years later, blotting the page with red. This isn't a word, it says. This isn't a thing.

Only, it is. After childhood and adolescence, there is no other time in an adult human's life course which entails such dramatic psychological, social and physical change.

I ordered a book published in 1973 called *Being Female: Reproduction, Power and Change*. It was edited by Dana Raphael, the late American medical anthropologist. Her essay 'Matrescence, Becoming a Mother, A "New / Old Rite de Passage" is cited as the first mention of the word. The book cover is typically 1970s: brown, orange and cream. Under the title, there is an artist's rendering of a woman sitting on the floor, her naked body partly concealed by her limbs.

In the essay Raphael compares Western cultures with that of the Tikopia, who live on a remote, volcanic island in the south-west of the Solomon Islands. In the West, when a child is born, the announcement would be 'a child is born'. The Tikopia would say, instead, 'a woman has given birth'. The Tikopia have a sense of the *newborn mother*.⁷

Raphael laments the historical lack of interest ethnographers have had in motherhood rites because, in the West, she explains, motherhood is considered 'dull and unchanging'.

I looked up rites of passage – celebrations or rituals that mark important transitions in a person's life. I couldn't think of any for matrescence. The list

on Wikipedia for 'Coming of Age' includes Bar and Bat Mitzvah, Sweet Sixteen, Debutante Ball, Scarification, First Menstruation, Walkabout. Then, there is a section on religious rituals. I have had the Christian ones. Baptism. Confirmation. I wondered if 'Baby Shower' might be included, the closest to a matrescence ritual I could think of. It wasn't. There was nothing about becoming a parent.

'The critical transition period which has been missed is MATRESCENCE, the time of mother-becoming,' writes Raphael. 'During this process, this rite of passage, changes occur in a woman's physical state, in her status within the group, in her emotional life, in her focus of daily activity, in her own identity, and in her relationships with all those around her.'

The book was published ten years or so before I was born. Almost half a century later, we still barely acknowledge the psychological and physiological significance of becoming a mother: how it affects the brain, the endocrine system, cognition, immunity, the psyche, the microbiome, the sense of self. This is a problem. Everyone knows adolescents are uncomfortable and awkward because they are going through extreme mental and bodily changes, but, when they have a baby, women are expected to transition with ease – to breeze into a completely new self, a new role, at one of the most perilous and sensitive times in the life course.

O

Learning about matrescence eventually gave me the confidence to talk openly to other new mothers and I soon realized that many were similarly startled by what they were experiencing. Many were feeling that they were to blame for the extent of their struggles. We joked obliquely about the stress we were under, about the 'maternal hospital fantasy' – the idea that breaking a minor limb would be a good way to get a rest and be looked after for a night. Here, I realized, were the results of twenty-first century parenting norms, which had become much more intensive, child-centred and demanding than they ever had been before. These norms, combined with neoliberal economic policy, the erosion of community and the requirement for most families to have two incomes to live because of the ever-higher cost of living, were leading to staggering levels of tension, guilt and ill health among mothers.

Pregnancy and early motherhood is a vulnerable time for a woman's health and wellbeing. Across the globe, a woman dies every two minutes due to pregnancy and childbirth, with the majority of deaths happening in low-income countries.⁹

Even with advances in modern medicine, and in high-income countries with skilled medical care, new mothers are highly susceptible to illness and disease. It is difficult to know exactly how many women become unwell in the period before and after becoming a mother. In the UK, where I live, it was previously thought that 10-15 per cent of women develop a mental health problem in pregnancy or the first year of new motherhood – including mild and moderate to severe depression, anxiety, PTSD, psychosis - but more recent figures suggest it could be as many as 20 per cent of women. 10 This means over 100,000 women a year in the UK become mentally unwell in matrescence. Globally, the prevalence of postnatal depression is 17 per cent. With two billion mothers in the world, this means over 350 million women experience perinatal mental health problems. The likelihood of depressive episodes doubles during this period, compared with other times in a woman's life. 11 This figure rises for women of colour, those in disadvantaged socioeconomic groups who face systemic health inequalities, and women who have experienced loss (miscarriage, stillbirth, neonatal death or a child taken into care). 12, 13, 14 Suicide is the leading cause of death in women in the perinatal period between six weeks and one year after giving birth in the UK. 15 Clearly, this is a grave situation.

But these figures are likely too low: the National Childbirth Trust (NCT), the most influential parenting institution in the UK, estimates that in fact half of new mothers experience mental health problems but only half of those will seek help. Many women, for various intersecting reasons – many of which are to do with the threat of stigma and discrimination and, ultimately, the fear of their babies being taken away from them – are reluctant to seek treatment. As the writer and activist Sandra Igwe has written, this is a serious problem facing Black women in England, for whom a lack of trust in services, fear and shame represent major obstacles to seeking the medical care they need. 17

'Generally in society we don't pay the attention we should to mental wellbeing,' Dr Alain Gregoire, a consultant perinatal psychiatrist, told me. 18 'Or value mothers or take an interest in parents and young children.' The lack of adequate investment in maternity services and poor postnatal care attests to this. In 2014, a report from the Chief Medical Officer for England concluded that postnatal care was 'not fit for purpose'. 19

A 2019 survey commissioned by *Motherdom* magazine showed just how many women were feeling low (45 per cent), anxious (54 per cent) and depressed (35 per cent) since having a child.²⁰ One in five hadn't told anyone about their feelings and over half (59 per cent) said they did not feel supported by their family. Almost half the new mothers surveyed (45 per