

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/333818011>

# Industrial/breadwinner masculinities

Chapter · June 2019

DOI: 10.4324/9780429424861-5

---

CITATIONS

0

---

READS

1,808

2 authors, including:



Paul Mark Pulé

Chalmers University of Technology

2 PUBLICATIONS 5 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Ecological Masculinities [View project](#)

# Industrial/breadwinner masculinities and climate change: understanding the 'white male effect' of climate change denial

Paul Pulé & Martin Hultman

Cite as Paul Pulé & Martin Hultman (2019) "Industrial/Breadwinner Masculinities and Climate Change: Understanding the 'White Male Effect' of Climate Change Denial" Rydström, H., & Kinnvall, C. (2018). *Climate Hazards, Disasters, and Gender Ramifications*. Routledge

## Introduction

Modern Western men and masculinities are subject to socialised performances shaped by a mosaic of typologies. In this chapter, we consider the lives of those men who occupy the most privileged positions in society in the Global North and the masculine socialisations that define them. Stereotypical notions of idealised, hyper- (i.e. assertive, self-serving, entitled, aggressive/violent, myopically caring) masculinities have broadened beyond Weberian personae of middle-class, heteronormative, suburban, Protestant, educated, sporty, white 'gentlemen' to include characteristics that are relatable to much wider cross-sections of men such as: working-class, aggressive, overtly xenophobic and racist, patriotic, un- or under-educated white men, coupled with the paternalism, exclusivity, authority and entitlement that accompanies wealth. The levels of alleged marginalisation and the degrees to which Western white men across this spectrum of qualities claim being 'left behind' has instigated fresh backlashes throughout the Global North (Eisenstein 2016). Drawing from examples in Western Europe and the US, we focus on those whose primacy blinds them to their impacts on society and environment – individuals and constituencies who are enmeshed with fossil-fuel addicted industrialisation and corporatisation, are commonly aligned with climate change denial and whose allegiances are emboldened by traditional socialisations of masculine identities that we refer to as 'industrial/breadwinner masculinities', with the origins and applications of this term discussed momentarily.

The 2015 Conference of Parties (COP21) in Paris heralded broad international agreement to address global climate change. Subsequent conventions in Marrakech (COP22), Bonn (COP23) and Katowice (COP24) have seen progressive refinements and increasing international contention about compliance to those agreements. To-date, international cooperation has persisted, keeping hope for effective policy reform alive. However, and despite the consensus reached by the vast majority of researchers about the peril that is upon us, achieving and actioning mitigating responses to anthropogenic climate change has been far from the smooth start to a new beginning that was the great promise of the Paris Accord (Plumer 2018). So much so that more than 20,000 scientists have drafted a 'warning to humanity' (a reworking of an original letter to the Union of Concerned Scientists from some 25 years ago) unequivocally calling our attention to the sobering fact that the threats of a climate crisis have worsened and more rapidly than the most pessimistic of internationally agreed previous predictors indicated (IPCC 2018). We are in the midst of comprehensive changes to every biotic system on the planet due to runaway anthropocentric carbon pollution coupled with unfettered materialism and consumption rates, burgeoning population growth, catastrophic biodiversity loss and untold levels of stress upon all of life on Earth. These concerns collectively indicate that we are transitioning beyond 'climate change' and are now entering an era of 'climate breakdown' (IPCC 2018). Despite this, Saudi Arabia, Kuwait, Russia and the United States (with tacit support from Australia), as member states with heavy investments in fossil

1 fuels, recently combined forces to obstruct international proceedings that are designed to commit  
2 nations to strict carbon pollution controls (Doherty 2018). The significance of these steps in  
3 interrupting global cooperation on climate change is increasingly acute as rates of climate induced  
4 disasters accelerate (such as rogue storms, droughts, floods and heatwaves) resulting in tangible  
5 evidence of more extreme weather events of greater intensity over longer periods of time (ECIU  
6 2018). Such obstructions support corporate attempts to expand and extend fossil fuel development,  
7 spurred on by lobby groups and researchers who identify as unapologetic and vocal climate change  
8 deniers, their cumulative efforts assuring humanity's collision course with these apocalyptic scale  
9 concerns. The persistence of vocal tendencies to snub the climate data have been accompanied by  
10 rises in xenophobic isolationism in response to refugee crises and in the most overt cases, outright  
11 white supremacy; these concurrent trends singing from near identical song sheets, seeking recruits  
12 for their causes from very similar discontented (esp. male) constituencies within the white, working  
13 and middle classes, particularly throughout the Global North (Lockwood 2018).

14 Hyper-masculinities are at the heart of this pressing climate emergency. Accordingly, we reflect on an  
15 industrial/breadwinner typology and in doing so expose an alliance between the masculine identities  
16 of industrial elites and working-class workers (as well as their middle-class managers) at the 'coal  
17 face' of industrial productivity and corporatisation throughout the Global North; a typology of gender  
18 identity whose impulses are being met by tepid government regulations seeking systemic  
19 compromise and reform at-best (Hultman 2017). While acknowledging that critical analyses of  
20 traditional notions of hyper-masculinities do not provide us with the whole story, we suggest that  
21 both typologies (industrial/breadwinner in particular but also regulatory and reformist or ecomodern  
22 masculinities) share in common a tendency to yield to a 'white male effect' (or a dauntless approach  
23 to global through to personal risk) coupled with climate change denial or weak/non-existent climate  
24 concerns (Finucane et al. 2000, 160; Slovic et al. 2005; McCright and Dunlap 2011; Dunlap and  
25 McCright 2015). These typologies represent formidable bulwarks against transformative change  
26 towards a more sustainable future. Elsewhere, we argue that the most effective path towards a truly  
27 sustainable world requires an ecologised masculinities typology as a 'third way' (Hultman 2005; Pulé,  
28 2013; Hultman and Pulé 2018). While further explication of ecomodern and ecological masculinities  
29 is deferred to those works, we keep our focus in this chapter on a critical analysis of  
30 industrial/breadwinner masculinities specifically, reflective of this typology's most acute  
31 intersections with white male effect and its compounding impacts of climate change denial.

### 33 **The challenge of global climate change**

34 Climate change denial is spreading throughout Europe, North America and Australasia (which  
35 represent the same regions that have the largest per capita carbon footprints on the planet). This is  
36 correlated with growing populist movements adopting climate change denial as one of their  
37 imperatives, making it critical to investigate climate change denial within broader social, political and  
38 ideological contexts (Hultman and Anshelm 2017). This calls forth the need to expose climate change  
39 denial for what it is: a tactic of wealthy—mostly white Western—men (supported by a working- and  
40 middle-class base) to re-assert social, economic and political power and control over natural resource  
41 extraction and wealth distribution while wantonly disregarding the deleterious global, regional and  
42 local impacts of anthropogenic climate change on the current and future fecundity of society and  
43 Earth (Brulle 2014). Aligned with Greta Gaard (2015), we concur that 'climate change may be  
44 described as white industrial capitalist hetero-male supremacy on steroids, boosted by widespread  
45 injustices of gender and race, sexuality and species', implicating climate change denial as obtuse  
46 expressions of the hyper-masculine socialisations that others have referred to as Western

1 malestream norms (O'Brien 1981). Our examination of the intersection between climate change  
2 denial and white male effect considers the intersection of power and resource inequalities based on  
3 gender, class and race (along with ableness, sexual orientation, ethnicity and age). These variables  
4 have reasserted Global Northern white men's primacy through the ways that malestream norms  
5 persist and shape men's values and actions, further obfuscating the intrinsic value of non-human  
6 nature and those who are 'otherised' by a male-dominated world (Warren 2000). Recent  
7 considerations of violent extremism in the US corroborate these concerns (Kimmel 2017[2013],  
8 Kimmel 2018).

9 It is important to acknowledge that the complexities of human-induced climate change are  
10 existential as much as a social and ecological. The biotic, political and personal consequences of  
11 climate change highlight the pressing need to transform energy supplies, infrastructural  
12 development, mobility, consumption patterns and the very ways we conceptualise ourselves and our  
13 relationships within and beyond human communities. Such comprehensive challenges disrupt the  
14 very fabric of our social, economic and political machinations. Consider the spreading consumer  
15 habits of global human populations along with unprecedented increases in extreme weather events,  
16 average annual atmospheric temperatures, ocean acidification and warming, sea level rise  
17 accompanied by accelerated ice sheet shrinking, glacial retreats and loss of snow cover the world  
18 over (NASA 2018a). Compounding these indicators has been a notable increase in climate related  
19 disasters such as extreme heat and cold, droughts and flooding, storm surges and intense fires (ECIU  
20 2018). Additionally, consider the IPCC (2014, 40) research that noted the period between 1983 and  
21 2012 was the warmest 30-year period in the last 800 years, with the last 10 years being successively  
22 warmer than any earlier decades since 1850 with a 0.65-1.06°C temperature increase over the entire  
23 planet between 1880 and 2012. The National Aeronautics and Space Administration (NASA)  
24 concurred, concluding that 2016 was the warmest year on record since 1880 (and 2017 the second  
25 warmest), with the mean global temperature increasing by 0.99°C (NASA 2018b). Effectively, thermal  
26 expansion on a planetary scale has contributed to an 81 millimetre rise in global ocean levels since  
27 1993; past global climatic changes of these proportions that occurred during the Pleistocene (approx.  
28 12,000 years ago) resulted in complete transformations of surface vegetation, regional mass  
29 extinctions of plants and animals and sea level changes near 130 metres (Pittock 2009, 2-4; Spratt  
30 and Lisiecki 2016). The most recent climate science corroborates these risks (IPCC 2018). Further, the  
31 increased geological risks associated with these changes (earthquakes, tsunamis, landslides,  
32 avalanches, glacial outburst floods and volcanic eruptions) have been known for some time, are  
33 equally alarming and represent widespread devastation to humans and non-humans alike (McGuire  
34 2013, 9). Despite the historical record and contemporary exacerbation of these global symptoms of  
35 climate change, a dearth of political will from international leaders to respond with conviction and  
36 haste to protect our common future persists. Sadly, even processes of environmental regulation and  
37 industrial reform reflective of the ecological modernisation movement have deferred to human  
38 economic interests ahead of comprehensive social and environmental care. This raises the question:  
39 why has there been so much lethargy towards effectively tackling these planetary-scale problems?  
40 Notably, the intersections between climate crises and gender has been thin, and while gaining  
41 increased attention, requires more explicit exposure (Gaard 2015; Enarson and Pease eds. 2016;  
42 Hultman and Pulé 2018). The root causes of climate change can be found in hyper-masculinised  
43 'business as usual' approaches to global machinations, locating industrial/breadwinner masculinities  
44 at the very core of our social and environmental problems.

45  
46 **Industrial/breadwinner masculinities**

1 For our purposes, the term industrial/breadwinner masculinities is used here interchangeably with  
2 Western ‘patriarchal’, ‘hegemonic’ and ‘normative’ masculinities (which we apply primarily to men,  
3 but also the masculinities adopted by some women as well) that ensure that men – Western white  
4 men in particular (and the hyper-masculinised systems that support their primacy) – are socially,  
5 economically and politically advantaged over all others.

6 Notably, we use the term ‘industrial’ to emphasise the ways that the harmful social and  
7 environmental implications of industrialisation are backgrounded for the sake of capital growth. In  
8 the modern context, the prime beneficiaries of industrialisation are not only the owners of the  
9 means of production, but also include fossil fuel and mining executives, financial managers and  
10 bankers, corporate middle and senior level managers and administrators—the vast majority also  
11 being Western, white and male. We also include shareholders in this typology given they reap the  
12 profits of the companies that they have invested in, recognising that the demographics of this group  
13 can be quite variable, and include women investors who also benefit financially from hyper-  
14 masculinised systems as do those women (and others) – granted substantially fewer in number –  
15 who are corporate leaders or heads of state or closely bonded to the benefits accorded Western  
16 white men (Connell and Wood 2005). These prime beneficiaries of hyper-masculinised systems  
17 collectively represent those individuals who claim pride of place as the principal controllers of  
18 corporate capitalism and laud that primacy at the expense of those human and other-than-human  
19 others who are marginalised by a male dominated world (Anshelm and Hultman 2014b).

20 Clearly, we cannot simply attribute our social and ecological problems to men (and Western white  
21 men) alone. However, the dominance of men and male dominated culture stood against otherised  
22 people (specifically: women and LGBTIQ+ persons) and non-human life on Earth has been centuries  
23 in the making. Resource extraction, surplus production, wealth creation and the capacities to acquire  
24 and protect surpluses from others has long resulted in consolidated benefits for men ahead of all  
25 others. Building on Carolyn Merchant’s (1980) defining text *The Death of Nature: Women, Ecology*  
26 *and the Scientific Revolution*, we have noted that men have been historically rewarded for pursuing  
27 exploitative practices, despite far-reaching social and environmental costs. For centuries, masculine  
28 hegemonisation (or the hierarchicalisation of wealth distribution generated by natural resource  
29 exploitation) has implemented systematic levels of organised oppression against any challenges to  
30 the hubris that accompanies male domination. We have seen further refinements and an  
31 acceleration of that consolidation of wealth into the hands of ruling industrial elites, almost all of  
32 whom have been and continue to be men, gaining renewed traction in the 21<sup>st</sup> Century as disparities  
33 between rich and poor have widened.

34 Accompanying those who own or directly benefit from ownership of the means of production are  
35 those working for them to generate surplus wealth. Judith Stacey’s (1990, 267) *Brave New Families:*  
36 *Stories of Domestic Upheaval in Late-Twentieth-Century America* introduced us to the term  
37 ‘breadwinner’, which refers to those working-class individuals who are commonly found at the ‘coal-  
38 face’ of extractive practices. Throughout human history, those individuals have also largely been men  
39 and in the context of Western social constructs they have also been predominantly white. Typically,  
40 breadwinner masculinities represent those individuals who toil in mines, work on manufacturing  
41 assembly lines, swing hammers, move goods and grow crops—practices that variably have  
42 deleterious environmental consequences. These workers are closely related to industrial  
43 masculinities discussed above, but represent a distinct and economically, politically and socially  
44 constrained group that serves as the ‘foot soldiers’ rather than the ‘lieutenants’ and ‘generals’ of  
45 Global Northern industrial means of production.

1 Like their industrial counterparts, breadwinner constituents are dependent upon resource extraction  
2 and in contemporary Global Northern contexts, representing individuals on the opposite end of a  
3 class hierarchy who are similarly deeply invested in the continued success of a corporatisation and  
4 the commoditisation of Earth's resources. That the mechanisms of global capitalism are presenting  
5 signs of increasing fragility (think here of: the Global Financial Crisis of 2007-2008; the European  
6 economic disaster of Brexit; the rise of populism; increasing rates of social and environmental  
7 refugees; growing xenophobia) is telling. The breakdown of systems of democracy in the pursuit of  
8 preserved profitability that advantage the few, with supposed 'trickle-down' benefits to the many is  
9 proving to be fundamentally flawed as a mechanism for wealth distribution, further to consequential  
10 social and environmental costs. Unfortunately, reactions to this state of affairs from within the ranks  
11 of an industrial/breadwinner typology have been misdirected by scapegoating those who are  
12 otherised rather than holding to account the harmful characteristics of the very systems that were  
13 designed to privilege them. Such an analysis sheds some light on self-professed billionaire Donald  
14 Trump's shock success in the US 2016 presidential election, his extreme wealth accompanied by an  
15 impetuous bravado that offered a sense of security and paternalism in the wake of growing  
16 frustration for those who continue to find the promises of corporate capitalism alluring even if  
17 largely out of their reach. Viewed through this lens, we begin to understand why a hyper-  
18 masculinised industrialist such as Trump would offer the most surety to working white individuals as  
19 the fracturing of global capitalism becomes ever more socially and environmentally evident. In order  
20 to 'Make America Great Again', the two constituencies joined forces to reassert the privileges of  
21 masculine hegemonisation. Accordingly, an industrial/breadwinner typology weds owners of the  
22 means of production and their workers to the pursuits of industrial growth and corporate capitalism,  
23 noting that each requires the other to thrive (Anshelm and Hultman 2014a).

24  
25 Developing an understanding of the influence of fossil fuel companies and their associated  
26 infrastructures (such as: automobile manufacturing and use, energy production along with cooling  
27 and heating, military technologies and the waging of war, including infrastructures associated with  
28 civil aviation and other forms of transportation), provides us with additional insights into the links  
29 between hyper-masculinities and climate change denial.

### 31 **Industrial/breadwinner masculinities and climate change denial**

32 Intersections between industrial/breadwinner masculinities and climate change denial reveal a  
33 disconnection between modern Western malestreams and Earthcare. As global social and  
34 environmental concerns gain momentum, climate change denial has ramped up to cast climate  
35 science as oppositional to assumed entitlements of masculine primacy (Anshelm and Hultman  
36 2014b). Aaron McCright and Riley Dunlap (2011) noted that the 1997 Kyoto Protocol triggered an  
37 initial reflex of conservative political activity (particularly in the US) buoyed by a small group of  
38 dissident and contrarian scientists who have lent their credentials to think tanks that champion  
39 climate change denial. It is well recognised that to maintain an illusion of intense controversy,  
40 industrialists, special interest groups and public relations firms have manipulated climate data in  
41 order to promote self-benefiting agendas. Consequently, the intersection between climate change  
42 denial and an industrial/breadwinner typology exposes the addiction of owners of the means of  
43 production and their workers to industrial growth and corporate capitalism, noting that each  
44 requires the other to thrive (Anshelm and Hultman 2014a). A central strategy has been to pit  
45 emotive views, reflective of socio-political and economic biases aligned with populist agendas,

1 against overwhelming field data and analyses by global experts. This has created an impression of an  
2 even debate. Many of these (mostly white male) contrarian voices have participated in generating  
3 climate controversy as industry-funded researchers who also hold strong beliefs in global market  
4 forces and a general mistrust of regulatory government policies (McCright and Dunlap 2011; Anshelm  
5 and Hultman 2014b). As is the case with an industrial/breadwinner typology, climate change deniers  
6 represent a well-resourced cadre of industrial researchers, corporate leaders, industrial owners,  
7 special interest groups and public relations firms who continue to throw massive resources at  
8 attempting (with varying degrees of success) to convince us that global warming is nothing other  
9 than a 'normal' geological cycle and concerns ought to be considered nothing more than hysteria  
10 (Farrell 2016). They claim that climate science is drummed up by a politically correct left to the  
11 detriment of the supposed 'good life' that has long been the great promise of centuries of  
12 uninterrupted male domination (Oreskes and Conway 2010). Their willingness to misrepresent and  
13 subjectively interpret climate science is difficult to understand in the wake of overwhelming evidence  
14 justifying concern and is, for some, considered a crime against humanity and the planet (Savransky  
15 2018). A telling example of this is the use of the public relations firm APCO by ExxonMobil to confuse  
16 popular disquisition on climate change that, unsurprisingly, was the same firm engaged by Philip  
17 Morris to confuse the health risks of tobacco smoking in the early 1990s (Monbiot 2009). Also  
18 consider veiled acknowledgement by ExxonMobil of the severe consequences of emissions from coal,  
19 oil and gas that has been intentionally downplayed by company management in order to extend  
20 consumer markets and preserve profits (Supran and Oreskes 2017).

21 A foundational explanation for the protestations of climate change denial is obvious. The mere  
22 suggestion that we live on a finite planet that is being rapidly transformed by anthropogenic factors  
23 such as carbon pollution directly challenges the primacy of those who stand to benefit the most from  
24 unfettered industrialisation (Anshelm and Hultman 2014a; Hultman and Anshelm 2017; Supran and  
25 Oreskes 2017). Effectively, to ignore or contest climate science is a reflex of refusing to 'bite the hand  
26 that feeds' those who gain the most through societal and natural resource exploitation. As an  
27 additional example, consider some of Sweden's vocal climate deniers, who have organisational  
28 affiliations in sectors where business research as well as science and technology studies meet. Per-  
29 Olof Eriksson, a former board member of Volvo and CEO of SECO Tools and Sandvik, wrote an  
30 influential article in the leading Swedish business paper *Dagens Industri* declaring his doubts that  
31 carbon emissions affect the global climate (Hultman and Anshelm 2017). Ingemar Nordin, Professor  
32 of Philosophy of Science, joined the fray by stating that the IPCC's 'selection and review of scientific  
33 evidence are consistent with what politicians wanted', which he considered to be just cause for  
34 treating such reports with suspicion (Hultman and Anshelm 2017). Economy Professors Marian  
35 Radetzki and Nils Lundgren claimed that in 2009, the IPCC deliberately constructed their models 'in  
36 an alarmist direction', alleging that climate science was being dramatised by those with special  
37 interests and hidden agendas to slow economic growth (Hultman and Anshelm 2017). While  
38 extremely well funded and as a result disproportionately visible, such contrarian views represent but  
39 a small proportion of the Swedish climate debate. Further to viewing these climate change deniers as  
40 anti-science, we argue that it is important to also understand how their very identities (even if  
41 women) have been shaped by industrial modernisation and how this configuration biases their  
42 interrogation of climate science precisely because the data affronts these individuals at the level of  
43 personal and professional identity, while also interrupting their acquisition of resources, power,  
44 privilege and domination.

45 Granted, an industrial/breadwinner typology has the most to lose from a complete redefinition of  
46 global systematics towards a truly sustainable future that places all life on equal footing. However,  
47 they are also and ironically, likely to be the biggest losers of collapsing global social, economic,

political and environmental systems as well (McCright and Dunlap 2011; Anshelm and Hultman 2014a). Adding race to these complexities reveals another important consideration.

### **White, male and in denial**

With recent successes of populist governments, attention has shifted towards the plights of working- and middle-class white men in the wake of an unavoidably heterogenous world. These groups have risen up in many Global Northern nations to vocally (and at times violently) support nationalist/white supremacist/neofascist male dominated leadership and hyper-masculine agendas that prioritise xenophobic and isolationist responses to global problems (consider recent electoral outcomes of 17%+ in Andalucía in Spain, Austria, Finland, Denmark, Hungary, Italy, Sweden, Switzerland and the US – as well as similar gains of right-wing movements in Brazil, India, Thailand and Turkey beyond the Global North) (Hochschild 2016; Youngs 2018).

This is not a new analysis since other researchers have also critiqued hyper-masculine hegemonies, highlighting ‘[d]elusions, of hyper-separation, transcendence, and dominance [that] ... engender denial of the many global [social and] environmental crises’ (Alaimo 2009: 28). Clearly, studies like these expose the limitations of socialisations associated with being Western, white and male, bringing with them a heavy reliance on anthropocentric notions that natural resources are humanity’s for the taking and that the wealth they generate is then distributed in accordance with presumed orders of entitlement that follow racial divisions of privilege.

In a world that favours white people ahead of people of colour, conundrums that confront white working- and middle-class persons are concealed. For white men, conditioning on the one hand encourages creativity, initiative, motivation, drive—a freedom to move forward with intention and gaining the greatest rewards along the way, despite (arguably in spite of) the risks; to be economically, politically and socially successful protector/providers. In doing so they are promised some of the spoils of profiteering and the (often illusionary) assurance of achieving the most revered of heights in society as modelled by the wealthy. Goals in a growth addicted society, of becoming rich, gaining power and with that having the capacity to shape the world in their own image that leaves them feeling safe, create powerful incentives to support demagoguery. Hegemonisation necessitates constraints on success within the confines of such a system, leaving many men to feel angry and hurt about the struggle to achieve their version of a promised dividend through the accoutrements of male domination that the ranks of populist and white supremacy groups have experienced increased visibility at public gatherings and organised demonstrations throughout the Global North that is second only to the rise of fascism in the 1930s, sharing concerns about the impact of climate science on growth in alignment with industrial/breadwinner trends (BBC 2017; Hultman and Anshelm 2017; Begley and Maley 2017). Like climate change deniers, populist support for veiled or overt white supremacy is, at its root, a fear-based response to global social and environmental changes that ignore intersectionalities.

We look instead towards non-binary critiques of unjust systems. From there, we aim to broaden care towards others, society and environment. To achieve this, we seek alternative socialisations of masculinities that include care for others as care for self, which stands in contrast to hyper-masculine socialisations. This wider view prioritises relational proximity over self-profit and connection over being right. Such a recommendation is intended as a stepping stone beyond the polarisation of gendered essentialism towards post-gendered celebrations of heterogeneity. This is an Earth-



inspired approach that offers an alternative to the hegemonisation accompanying industrial/breadwinner typologies, climate change denial and white male effect. Such a transformative response to the constraints of hyper-masculinities open us to more caring conceptualisation and practices that look beyond a history of male-domination as we seek to create a more socially and environmentally just world (Hultman and Pulé 2018).

## In Conclusion

Clearly, those masculinities most closely aligned with industrialisation are not only straining human societies and Earth's living systems by being complicit in populist support for climate change denial. Industrial/breadwinner masculinities also dominate global machinations and in doing so, control narratives that have great bearing on the ways that we shape current and future international cooperation agreements along with socialisations of future generations of men and masculinities (Fleming 2010). As we have demonstrated, it is no coincidence that the characteristic features of white male effect are entangled with industrial/breadwinner typologies and the climate change denial since they each align (indeed are dependent upon) malestream hegemonisation (McCright and Dunlap 2011; Anshelm and Hultman 2014a; Hultman and Pulé 2018). In order to chart a course towards a sustainable future, we have highlighted the devastating impacts of an industrial/breadwinner typology, noting the limited successes of green washed remedies as responses to climate crises. In doing so, this chapter has suggested transformative socialisations that remake masculinities as caring on broader, deeper and wider scales.

## References Cited

- Alaimo, Stacy. 2009. "Insurgent vulnerability and the carbon footprint of gender." *Kvinder, Køn and Forskning* 3/4: 22-35.
- Anshelm, Jonas, and Martin Hultman. 2014a. *Discourses of global climate change: apocalyptic framing and political antagonisms*. London: Routledge.
- Anshelm, Jonas, and Martin Hultman. 2014b. A green fatwā? Climate change as a threat to the masculinity of industrial modernity. *NORMA: International Journal for Masculinity Studies* 9, no.2: 84-96.
- Begely, Patrick, and Jacqueline Maley. 2017. "White supremacist leader Mike Enoch to visit Australia." *Sydney Morning Herald*, December 15, 2017. <https://www.smh.com.au/politics/federal/white-supremacist-leader-mike-enoch-to-visit-australia-20170513-gw46fn.html>
- British Broadcasting Commission (BBC). 2017. "White Supremacy: Are US right-wing groups on the rise?" *BBC [online]*, December 15, 2017. <http://www.bbc.com/news/world-us-canada-40915356>
- Brulle, Robert. 2014. "Institutionalizing delay: foundation funding and the creation of US climate change counter-movement organizations." *Climatic Change* 122, no. 4: 681-694.
- Connell, Raewyn, and Julian Wood. 2005. "Globalization and business masculinities." *Men and masculinities* 7, no. 4: 347-364.

- 1 Doherty, Ben. 2018. "Australia's silence during climate change debate shocks COP24 delegates." The  
2 Guardian [online], Dec 15, 2018.  
3 [https://www.theguardian.com/environment/2018/dec/10/australias-silence-during-climate-  
change-debate-shocks-cop24-delegates?CMP=Share\\_iOSApp\\_Other](https://www.theguardian.com/environment/2018/dec/10/australias-silence-during-climate-<br/>4 change-debate-shocks-cop24-delegates?CMP=Share_iOSApp_Other)
- 5 Dunlap, Riley, and Aaron McCright. 2015. "Challenging Climate Change: The Denial  
6 Countermovement." In *Climate Change and Society: Sociological Perspectives*, edited by Riley  
7 Dunlap and Robert Brulle, 300-332 . New York: Oxford University Press.
- 8 Enarson, Elaine and Bob Pease. 2016. *Men, Masculinities and Disaster*. London: Taylor & Francis Ltd.
- 9 Energy Climate and Intelligence Unit (ECIU). 2018. *Even Heavier Weather: Tracking the fingerprints of  
10 climate change, three years after the Paris Agreement* [online]. Dec 14, 2018.  
11 <https://eciu.net/reports/2017/heavy-weather>
- 12 Eisenstein, Charles. 2016. "The Election: Of Hate, Grief, and a New Story. Charles Eisenstein: Author  
13 & Speaker." Charles Eisenstein, September 16, 2017.  
14 <https://charleseisenstein.net/essays/hategriefandanewstory/>
- 15 Farrell, Justin. 2016. "Corporate funding and ideological polarization about climate change."  
16 *Proceedings of the National Academy of Sciences* 113, no. 1: 92-97.
- 17 Finucane, Melissa, Slovic, Paul, Mertz, C. K., Flynn, James, and Theresa Satterfield. 2000. "Gender,  
18 race, and perceived risk: The 'white male' effect." *Health, risk & society* 2, no. 2: 159-172.
- 19 Fleming, James. 2010. *Fixing the sky: the checkered history of weather and climate control*. New York:  
20 Columbia University Press.
- 21 Gaard, Greta. 2015. "Ecofeminism and climate change." In *Women's Studies International Forum*  
22 (Vol. 49, 20-33). Oxford: Pergamon.
- 23 Hochschild, Arlie. 2016. *Strangers in Their Own Land: Anger and Mourning on the American Right*.  
24 New York: New Press
- 25 Hultman, Martin. 2005. *Att förstå risker: En översikt av olika kunskapsperspektiv*.  
26 Krisberedskapsmyndigheten. KBM: S FORSKNINGSSERIE NR 8.
- 27 Hultman, Martin. 2017. "Natures of masculinities: conceptualising industrial, ecomodern and  
28 ecological masculinities." In *Understanding Climate Change through Gender Relations*, edited  
29 by Susan Buckingham and Virginie le Masson, 87-103. London: Routledge.
- 30 Hultman, Martin. and Paul Pulé. 2018. *Ecological Masculinities: Theoretical Foundations and Practical  
31 Guidance*. London: Routledge.
- 32 Hultman, Martin, and Jonas Anshelm. 2017. "Masculinities of climate change. Exploring examples of  
33 industrial, ecomodern and ecological masculinities in the age of Anthropocene." In *Climate  
34 Change and Gender in Rich Countries*, edited by Marjorie Cohen, 19-34. London: Routledge.
- 35 Intergovernmental Panel on Climate Change (IPCC). 2014. *Climate Change 2014: Synthesis Report*.  
36 *Contribution of Working Groups I, II and III to the Fifth Assessment Report of the*  
37 *Intergovernmental Panel on Climate Change*, edited by R.K. Pachauri and L.A. Meyer. Geneva:  
38 World Meteorological Organization.
- 39 Intergovernmental Panel on Climate Change (IPCC). 2018. *Global warming of 1.5°C: An IPCC Special  
40 Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global*

- greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (Summary for Policy Makers), edited by V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield. Geneva: World Meteorological Organization.
- Jylhä, Kirsti, and Nazar Akrami. 2015. Social dominance orientation and climate change denial: The role of dominance and system justification. *Personality and Individual Differences* 86: 108-111.
- Kimmel, Michael. 2017[2013]. *Angry White Men: American Masculinity at the End of an Era*. New York: Nation Books.
- Kimmel, Michael. 2018. *Healing From Hate How Young Men Get Into – And Out Of – Violent Extremism*. Oakland: University of California Press.
- Lockwood, M. 2018. "Right-wing populism and the climate change agenda: exploring the linkages." *Environmental Politics*, 27, no. 4: 712-732.
- McCright, Aaron, and Riley Dunlap. 2011. "Cool dudes: The denial of climate change among conservative white males in the United States." *Global environmental change* 21, no. 4: 1163–1172.
- McGuire, Bill. 2013. *Waking the Giant: How a changing climate triggers earthquakes, tsunamis, and volcanoes*. Oxford: Oxford University Press.
- Merchant, Carolyn. 1980. *The Death of Nature: Women, Ecology and the Scientific Revolution*. New York: HarperCollins
- Monbiot, George. 2009. *Heat: How to Stop the Planet from Burning*. Boston: South End Press.
- National Aeronautics and Space Administration (NASA). 2018a. "Cryosphere: Science Research Portal." NASA, March 27, 2018. <https://neptune.gsfc.nasa.gov/csb/index.php?section=53>
- National Aeronautics and Space Administration (NASA). 2018b. "January 2018 was fifth warmest January on Record." *NASA Global Climate Change: Vital Signs of the Planet*, March 27, 2018. <https://climate.nasa.gov/news/2683/january-2018-was-fifth-warmest-january-on-record/>
- O'Brien, Mary. 1981. "Feminist theory and dialectical logic." *Signs: Journal of Women in Culture and Society* 7, no. 1: 144-157.
- Oreskes, Naomi. and Erik Conway. 2010. "Defeating the merchants of doubt." *Nature* 465, no. 7299: 686-687.<sup>[1]</sup><sub>SEP</sub>
- Pittock, A. Barrie. 2009. *Climate Change: The Science, Impacts and Solutions* (Second ed.). Collingwood: CSIRO Publishing.
- Plumer, B. 2018. "Climate Negotiators Reach an Overtime Deal to Keep Paris Pact Alive." *The New York Times* [online], December 17, 2018. <https://nyti.ms/2QTOSqY?smid=nytcore-ios-share>
- Pulé, Paul. 2013. "A Declaration of Caring: Towards ecological masculinism." (PhD diss., Murdoch University).
- Radetzki, Marian, and Nils Lundgren. 2009. En grön fatwa har utfärdats. *Ekonomisk debatt* 5, no. 37: 57-65.<sup>[1]</sup><sub>SEP</sub>

- 1 Savransky, Rebecca. 2018. "Schwarzenegger planning to sue oil companies for 'knowingly killing  
2 people all over the world'." *The Hill*, March 21, 2018. [http://thehill.com/blogs/blog-briefing-](http://thehill.com/blogs/blog-briefing-room/news/377894-schwarzenegger-targeting-oil-companies-for-knowingly-killing)  
3 [room/news/377894-schwarzenegger-targeting-oil-companies-for-knowingly-killing](http://thehill.com/blogs/blog-briefing-room/news/377894-schwarzenegger-targeting-oil-companies-for-knowingly-killing)
- 4 Slovic, Paul, Ellen Peters, Melissa Finucane, and Donald MacGregor. 2005. "Affect, risk, and decision  
5 making." *Health psychology* 24, no. 4: S35.
- 6 Spratt, Rachel and Lisiecki, Lorraine. 2016. "A Late Pleistocene sea level stack." *Clim. Past*, 12: 1079-  
7 1092.
- 8 Stacey, Judith. 1990. *Brave New Families: Stories of Domestic Upheaval in Late-Twentieth-Century*  
9 *America*. Berkeley: University of California Press.
- 10 Supran, Geoffrey, and Naomi Oreskes. 2017. "Assessing ExxonMobil's climate change  
11 communications (1977–2014)." *Environmental Research Letters* 12, no. 8 (084019): 1-18.
- 12 Warren, Karen. 2000. *Ecofeminist Philosophy: A Western Perspective on What It Is and Why It*  
13 *Matters*. Maryland: Rowman & Littlefield.
- 14 Youngs, Richard. 2018. The Ordinary People Making the World More Right-Wing. Carnegie Group  
15 [online], December 19, 2018. [https://carnegieeurope.eu/2018/11/05/ordinary-people-making-](https://carnegieeurope.eu/2018/11/05/ordinary-people-making-world-more-right-wing-pub-77647)  
16 [world-more-right-wing-pub-77647](https://carnegieeurope.eu/2018/11/05/ordinary-people-making-world-more-right-wing-pub-77647)
- 17