



The Making of an Environmental Hero: A History of Ecomodern Masculinity, Fuel Cells and Arnold Schwarzenegger

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ABSTRACT In 2007, Arnold Schwarzenegger received the European Campaigner of the Year award. Chosen by the readers of *European Voice* for his work on solving global environmental problems, he was hailed as a visionary environmental hero, at the pinnacle of his popularity as a politician. In Sweden the public was told to follow his lead and politicians were advised to learn from his example. How could this happen? How could Schwarzenegger be portrayed as an environmental role model, even in countries such as Sweden, a country known around the world for progressive policies in gender equality and the environment? This paper introduces and investigates the notion of 'ecomodern masculinity,' through the assemblage of Schwarzenegger's gender identity, environmental politics, and image in Sweden. While there has been research on gender inequity in relation to environmental and developmental goals, there has been little concern with constructions of how shifting hegemonic masculinity is embedded in environmental policy. As former California governor, actor, and Mr. Universe, Schwarzenegger's connection to the ecomodern politics that he prescribed is researched within a framework combining insights from the fields of gender and environmental studies. Ecomodern environmental politics and Kindergarten Commando masculinity are understood as attempts to incorporate and deflect criticism in order to perpetuate hegemony, to ensure that practices remain in effect, 'business as usual.' By looking at the historical changes in Schwarzenegger's identity intertwined with the rise of ecomodern discourse, this article illustrates those changes and broadens our understanding of global politics in the fields of energy and the environment.

Introduction

At the turn of the 21st century, humanity faces some very serious environmental problems, one of which is global climate change caused primarily by anthropogenic emissions generated from fossil fuels such as coal, oil, and natural gas. While awareness about global warming gradually increased over the past three decades and became more and more socio-politically embedded, different solutions were proposed in line with dominant ecological modernization policies which view market solutions and technical fixes as the answers. Fuel Cell and Hydrogen (FCH)

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technology was one such solution.¹ Politicians, heads of energy companies, journalists, and engineers promoted this solution as the best way to maintain private car ownership in times of environmental restraints. In Sweden, as they had often done in the past, these people turned their attention to events in California to legitimize their visions for the future. At this time Arnold Schwarzenegger was the governor of California, and his work regarding the implementation of FCH-favorable policies was hailed as visionary.

In 2003 Swedish journalist Tommy Hammarström recommended in his *Expressen* editorial page that readers “Drive like Arnold.”² Hammarström hailed California as a historic trendsetter and Swedes should now “[...] follow in his tracks, when Arnold turns up on his hydrogen highway.”³ Schwarzenegger was described as an important leader with a vision for the 21st century, and in his role as governor of California he materialized their coveted energy and environmental policy. Arnold was even voted European Campaigner of the Year in 2007 by the readers of *European Voice*, the leading provider of independent policy conferences and debates on key issues for the EU political and regulatory affairs community, for his work on solving global environmental problems.⁴

But how did Schwarzenegger become an environmental hero around the globe, including Sweden, of all countries, internationally renowned for its progressive environmental and gender politics? Wasn't Arnold just an action figure in popular culture, the protagonist in nonsensical comedies or a fantasy figure in unrealistic science fiction roles? Or should he be taken seriously and analyzed in an academic article on important issues such as energy and environmental policy?

Gender analysis in the studies of science, technology, and the environment has become increasingly important in recent years. This focus has opened up different perspectives and demonstrated the need for interdisciplinary analysis, which includes in-depth research on identity issues, bodily interconnectedness, and nature-cultures.⁵ Gender analysis has been prominent in relation to women affected by climate change⁶ and environmental activism by

¹ In engineering terminology, a fuel cell is a device that generates electricity from a fuel and oxidant reaction. Fuel cells operate continuously as long as the necessary reactant and oxidant flows (such as hydrogen and oxygen) are maintained, and the waste products (such as water) are continuously removed.

² This quote and others are translated by the author of this article from Swedish to English.

³ T. Hammarström, “Kör som Arnold,” *Expressen*, 22 November, 2004; e.g. L. I. Karlsson, “Full gas mot en renare miljö,” *Dagens Nyheter*, 22 July, 2004; L. Klint, “Terminator även i politiken,” *Kvällsposten*, 16 May, 2005.

⁴ “50 Europeans of the Year,” *European Voice*, accessed 6 December 2011.

<http://www.europeanvoice.com/article/imported/ev50-europeans-of-the-year-2007/58807.aspx>.

⁵ Among many others read Donna Haraway, “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective,” *Feminist Studies* 14, no. 3 (1988): 575–599; Mette Bryld and Nina Lykke, *Cosmodolphins: Feminist Cultural Studies of Technology, Animals, and the Sacred* (London: Zed Books, 2000); Stacy Alaimo, *Bodily Natures: Science, Environment and the Material* (Bloomington: Indiana University Press, 2010).

⁶ Read for example Valerie Nelson, Kate Meadows, Terry Cannon, John Morton, and Adrienne Martin, “Uncertain Predictions, Invisible Impacts, and the Need to Mainstream Gender in Climate Change Adaptations,” *Gender and Development* 10, no. 2 (2002): 51–9. Eric Neumayer and Thomas Plümper, “The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002,” *Annals of the American Association of Geographers* 97, no. 3 (2007): 551–566.

mothers.⁷ But less interest has been shown in the male aspect of identity, especially how different masculinities enhance or influence environmental issues. This lacuna is surprising since one of the first studies in which the concept 'hegemonic masculinity' was used, dealt with men in environmental social movements.⁸ Some historical studies have been conducted on hegemonic masculinity and environment, for example on colonialism in India,⁹ and the environmental movement of the 1960s,¹⁰ but very few studies try to understand contemporary masculinities with regard to energy and environmental questions; rural studies constitute an important exception.¹¹

Arnold Schwarzenegger's diverse character, as both a politician and an actor, has been used by several gender scholars as a litmus test to interpret hegemonic masculinity in the U.S. and the West in general.¹² Scholars have shown that Arnold changes when the culture changes, as he always seems to have the ability to be at the forefront of these changes. Researchers therefore argue that with Schwarzenegger they can sense shifts in masculinity.¹³

This essay furthers previous gender analysis of Schwarzenegger in environmental and energy policies. It introduces and investigates the notion of 'ecomodern masculinity' by looking into Schwarzenegger's gender identity and connections to the gradually strengthened ecomodern politics that he prescribed. In so doing, the paper broadens our understanding of the present form of global politics in the fields of energy and the environment. I argue that

⁷ Read for example Marci R. Culley and Angelique L. Holly, "Women's Gendered Experiences as Long-Term Three Mile Island Activists," *Gender & Society* 17, no. 3 (2003): 445-61. Celene Krauss, "Women and Toxic Waste Protest: Race, Class, and Gender as Resources of Resistance," *Qualitative Sociology* 16, no. 3 (1993): 247-62. Paul Mohai, "Men, Women and the Environment: An Examination of the Gender Gap in Environmental Concern and Activism," *Society and Natural Resources* 5, no.1 (1992):1-9.

⁸ Robert W. Connell, "A Whole New World. Remaking Masculinity in the Context of the Environmental Movement," *Gender & Society* 4, no. 4 (1990): 452-478.

⁹ Joseph Sramek, "Face Him Like a Briton": Tiger Hunting, Imperialism, and British Masculinity in Colonial India, 1800-1875," *Victorian Studies* 48, no. 4 (2006): 659-680.

¹⁰ Adam Rome, "'Give Earth a Chance': The Environmental Movement and the Sixties," *Journal of American History* 90 (2003): 534-41; Martin V. Melosi, "Lyndon Johnson and Environmental Policy," in *The Johnson Years: Vietnam, the Environment, and Science*, ed. Robert A. Divine (Lawrence: University Press of Kansas, 1987), 119-20; Maril Hazlett, "'Woman vs. Man vs. Bugs': Gender and Popular Ecology in Early Reactions to Silent Spring," *Environmental History* 9, no. 4 (2004): 701-729.

¹¹ For example: David Bell, "Farm Boys and Wild Men: Rurality, Masculinity, and Homosexuality," *Rural Sociology* 65, no. 4 (2000):547-61; Peter Hennen, "Bear Bodies, Bear Masculinity: Recuperation, Resistance, or Retreat?" *Gender & Society* 19, no.1 (2005): 25-43. Some of the few trying to understand hegemonic masculinities regarding energy and environment are the contributors in Mark Allister ed., *Eco-man. New Perspectives on Masculinity and Nature* (University of Virginia Press, 2004) as well as Malcolm Draper, "Zen and the Art of Garden Province Maintenance: The Soft Intimacy of Hard Men in the Wilderness of KwaZulu-Natal, South Africa, 1952-1997," *Journal of Southern African Studies* 24, no. 4 (1998): 801-828; Richard A. Rogers, "Beasts, Burgers, and Hummers: Meat and the Crisis of Masculinity in Contemporary Television Advertisements," *Environmental Communication: A Journal of Nature and Culture* 2, no. 3 (2008): 281-301.

¹² For discussions on hegemonic masculinity read for example Robert W. Connell and James W. Messerschmidt, "Hegemonic Masculinity: Rethinking the Concept," *Gender & Society* 19, no. 6 (2005): 829-858; Sharon Bird, "Welcome to the Men's Club: Homosociality and the Maintenance of Hegemonic Masculinity," *Gender & Society* 10, no. 2 (1996): 120-32; Robert W. Connell and Julian Wood, "Globalization and Business Masculinities," *Men and Masculinities* 7, no. 4 (2005): 347-64.

¹³ Michael Messner, "The Masculinity of the Governor: Muscle and Compassion in American Politics," *Gender & Society* 21, no. 4 (2007): 461-480; Boyle, "The Intertextual Terminator. The Role of Film in Branding Arnold Schwarzenegger," 42-60; Jeffords, *Hard bodies*.

Schwarzenegger's changing masculinity regarding violence and caring is also reflected in his politics, and therefore may function as an illustration of the hegemonic shifts in environmental and energy policies.¹⁴

The Influence of Schwarzenegger

The character of Arnold Schwarzenegger as a politician and an actor has been researched as an indicator to interpret masculinity in the U.S. as well as historical changes in hegemonic, dominating, masculinity.¹⁵ Arnold is very popular in the U.S. and worldwide.¹⁶ His identity goes beyond the role he plays in movies.¹⁷ Schwarzenegger has become a kind of 'intimate stranger,' to use the terminology of Maxwell Boykoff and Michael Goodman. This is a celebrity who has achieved such a status that they promote politics using the leverage of their popularity.¹⁸ This status makes him a relevant phenomenon to analyze if we are to understand the political shifts in gender and environmental politics.

There are several reasons to take Schwarzenegger's influence as a proclaimed environmental frontrunner seriously and to try to understand how his masculinity is entwined with environmental policy today. Schwarzenegger served as governor of California for two consecutive terms. California has a large gross domestic product (as large as France), a very high number of cars per person and a prominent political status in the world. It has a highly advanced industrialized production capability, and demanding and environmentally aware consumers. California is also recognized as a state where trends are created.¹⁹ This worldwide influence is evident if we look at how the automotive industry changed with the fluctuations in the Californian Zero-emissions Vehicle (ZEV) law. These laws were first enacted in September

¹⁴ The material on which this article is based includes several different types of empirical data which correspond with each other and are held together by my general research topic of FHC. My empirical material consists of reports, books, newspapers, magazines, parliamentary records, and field notes from participatory observations. The texts have been interpreted with a focus on both the shape of the empirical material and which actors are active within it. The analysis was made both with discourse analysis of media materials, a narrative reading focusing on text structure, word choice and metaphors as well as with actor-network theory which brings together how politicians, scientists, journalists and committed proponents are trying to establish the credibility of their own arguments required to describe the FCH as necessary in the future. For in-depth description of empirical material and methodology read Martin Hultman. *Full gas mot en (o)hållbar framtid. Förväntningar på bränsleceller och vätgas i relation till svensk energi- och miljöpolitik 1978-2005* (Linköpings Universitet, 2010).

¹⁵ Messner. "The Masculinity of the Governor: Muscle and Compassion in American Politics," 461-480; Sara Krakoff, "Arnold Schwarzenegger and Our Common Future," *Buffalo Law Review* 53 (2005): 925-961; Susan Jeffords, *Hard bodies*; Ellexis Boyle, "The Intertextual Terminator. The Role of Film in Branding Arnold Schwarzenegger." *Journal of Communication Inquiry* 34, no. 1 (2010): 42-60; Sara Martin Alegre, "Arnold Schwarzenegger, Mister Universe? Hollywood Masculinity and the Search of the New Man," *Atlantis* 20, no. 1 (1998): 84-94.

¹⁶ Read for example Michel Blitz and Louise Krasniewicz, *Why Arnold Matters: The Rise of a Cultural Icon* (New York: Basic Books, 2004); Joe Mathews, *The People's Machine: Arnold Schwarzenegger and the Rise of Blockbuster Democracy* (New York: Public Affairs, 2006); Gary Indiana, *Schwarzenegger Syndrome. Politics and Celebrity in the Age of Contempt* (New York: The New Press, 2005).

¹⁷ Jonathan Goldberg, "Recalling Totalities: The Mirrored Stages of Arnold Schwarzenegger," in *The Cyborg Handbook*, ed. Chris H. Gray (New York: Routledge, 1995), 233-254; Indiana, *Schwarzenegger Syndrome*.

¹⁸ Maxwell Boykoff and Michael Goodman, "Conspicuous Redemption? Reflections on the Promises and Perils of the 'Celebritization' of Climate Change," *Geoforum* 40, (2008): 395-406.

¹⁹ Maruo Kanehira, *Farväl till bensinbilen*, (Kommunikationsforskningsberedningen, 1996).

1990 to deal with car emissions. They mandated that two per cent of cars sold by 1998 in California be ZEVs. Car companies would have to pay a fine for every car that missed the target.²⁰ When ZEV was changed in 1996-97 in favor of fuel cell technologies and later on cancelled, the global automotive industry followed its alterations.²¹

In Sweden, Arnold was utilized as a positive example and leader of ecomodern change in the early 21st century. Arnold's initiatives for FCH were praised by researchers, included in state reports and mass media, and reused by lobby groups. Arnold was presented as a leader who took environmental issues seriously and put pressure on the automotive industry to create cleaner technologies.

Finally, celebrity status is increasingly important for politicians today. Arnold's popularity as an 'intimate stranger' was a major factor when he became governor of California. Along with the ecomodern promise that dominates today's politics, Arnold is said to be an apt metaphor for the U.S., and for the rest of the world's relationship to consumption and the environment. Historian Sarah Krakoff concludes "[...] like Arnold, Americans want to have it all – big cars, good times, boundless economic growth and, at the same time, clean air and water, and plenty of beautiful places to play."²²

Industrial Solutions and Cowboy Masculinity

Arnold Schwarzenegger started his career as a bodybuilder and became hugely successful, claiming the title of "Mr. Universe" once and "Mr. Olympia" seven times. It was as a bodybuilder that his acting career in the U.S. took off. He became an immensely popular role model in bodybuilding circles, symbolized in the movie *Pumping Iron* (1977), a film about his own career. Schwarzenegger also began to participate in politics, and his political career from then on became entangled with his acting roles. In the 1980s, he expressed his support for President Ronald Reagan, while, on-screen, he played the violent American hero who would save the world from corrupt politicians. His big breakthrough to a wider audience came when he portrayed the solitary male American hero who used weapons, spoke only a few words, and acted violently in movies such as *Conan the Barbarian* (1982), *Conan the Destroyer* (1984), *The Terminator* (1984), *Red Sonja* (1985), *Commando* (1985), *Raw Deal* (1986), *The Running Man* (1987), *Predator* (1987) and *Red Heat* (1988); a cowboy who would conquer the world while saving it from evil in the form of terrorists and dictators.²³ To compensate for the protagonist's lack of words, his films relied on physical action.

²⁰ Hans Fogelberg, *Electrifying visions* (Göteborgs Universitet, 2000); Mark Brown, "The Civic Shaping of Technology: California's Electric Vehicle Program," *Science, Technology and Human Values* 26, no. 1 (2001): 56–81; Robert Hoed, *Driving Fuel Cell Vehicles. How Established Industries React to Radical Technologies* (Delft: University of Technology, 2004); Stuart Peters and Anne-Marie Coles, "Strategic Innovation in Sustainable Technology: The Case of Fuel Cells for Vehicles," *International Journal of Environment and Sustainable Development* 5, no. 4 (2006): 338–354.

²¹ Matthew Eisler, *Overpotential: Fuel Cells, Futurism, and the Making of a Power Panacea* (New Brunswick: Rutgers University Press, 2012).

²² Krakoff, "Arnold Schwarzenegger and Our Common Future," 925–961.

²³ Amanda Fernbach, "The Fetishization of Masculinity in Science Fiction: The Cyborg and the Console Cowboy," *Science Fiction Studies* 27, no. 2 (2000): 234-255; Jeffords, *Hard bodies: Hollywood Masculinity in the Reagan Era*; Boyle, "The Intertextual Terminator. The Role of Film in Branding Arnold Schwarzenegger," 42–60.

In the energy and environmental political field, environmental historian Carolyn Merchant has identified this kind of mechanistic and objectifying masculinity as an important part of industrial modern society. During the Enlightenment, a separation between man/woman and culture/nature was created which led to the dichotomy of men/culture as rulers over women/nature. Merchant has identified an important change in organic metaphors of nature, which were dominant until this time in Europe, but then replaced by mechanical metaphors as nature was increasingly regarded as dead. This shift coincided with the rise of modern industrial-scale operators in which the use of nature in the form of resources, such as mining, drainage and deforestation, increasingly took over social practices. Merchant argues that her analysis of metaphors suggests that a shift was necessary to reshape nature in line with industrial modernity. The paramount example in her book about the death of nature is Francis Bacon's utopia *The New Atlantis*, in which a small group of masculine scientists with the aid of mechanical skills extract secrets from a feminized nature in order to transform them into commodities. This separation created a mechanical and economic understanding of nature that was part of the transformation of society towards industrialization, mechanization and capitalism.²⁴

This type of separation also occurred when Sweden was industrialized. From the 1920s, Swedish energy and environmental policy was aimed at industrial and large-scale energy transformations. This meant that when a number of environmental problems (including biocides, DDT and air pollution) that had the potential to challenge the industrial modern production system were highlighted in the 1960s, the dominant political parties and environmental groups all agreed that it was possible to resolve these problems with the help of modern industrial solutions, such as nuclear power. Until the early 1970s, there was an almost complete domination of this faith in nuclear power as Sweden sought economic growth and a rationalization of production to manage energy and environmental policy requirements. Industrial modernization was simultaneously presented as a cause of environmental problems and a prerequisite to overcoming them.²⁵

In the 1970s and early 1980s criticism was raised against modern industrial society's flaws and shortcomings in Sweden. Modern industrial logic was no longer able to handle a number of global environmental problems, such as acidification and anthropogenic climate change.²⁶ A number of Swedish public intellectuals formulated a vision of a low energy consumption society for the future. This ecological discourse contained arguments for small-scale technologies, the decentralization of power, and criticism against economic growth as a measure of prosperity, as well as the need to develop renewable energy sources. The foundations of society were the subject of intense debate which also encouraged the environmental movement to create visions of ecotopia. These visions were seriously discussed

²⁴ Carolyn Merchant, *Naturens död. Kvinnan, ekologin och den vetenskapliga revolutionen* (Stockholm: B. Östlings Bokförlag, 1994).

²⁵ Jonas Anshelm, "Among Demons and Wizards: The Nuclear Discourse in Sweden and the Re-enchantment of the World," *Bulletin of Science, Technology and Society* 30, no. 1 (2010): 43–53.

²⁶ Måns Nilsson, "Learning, Frames and Environmental Policy Integration: The Case of Swedish Energy Policy," *Environment and Planning C, Government and Policy* 23, no. 2 (2005): 207–226; John McNeil, *Någonting är nytt under solen – Nittonhundratalets miljöhistoria* (Stockholm: SNS förlag, 2003).

throughout the 1980s. They challenged the dominant modern industrial energy and environmental politics.²⁷ Meanwhile, a similar change took place in gender politics.

From Industrial to Ecomodern

By the end of the 1980s, the so-called cowboy-masculinity that Schwarzenegger symbolized, both as bodybuilder and sole perpetrator of violence in his breakthrough movies, was being increasingly challenged by another male ideal of caring and compassion.²⁸ All of a sudden Schwarzenegger could be mocked, as shown by his character used in a sketch called "Pumping Up with Hans & Franz." Hans and Franz were a pair of muscle-bound chaps who imitated/spoofed Arnold Schwarzenegger by using padding for fake muscles, dull grey sweat suits, weight belts, and Austrian accents. The background of the set included stories of Schwarzenegger during his competition years; the sketch was introduced with Austrian music. The Austrian characters were a recurring sketch on the hugely popular television comedy show *Saturday Night Live* that intervened in, and re-located, cowboy masculinity.²⁹

Schwarzenegger himself seemed to adjust to this new masculinity. The role illustrating this shift is best found in the second Terminator film, *Judgment Day*. The film is the most popular and most financially successful of all the films in which Schwarzenegger has participated.³⁰ The role in *Terminator 2* can illustrate the beginning of a new form of hegemonic masculinity in which violence goes hand-in-hand with care, a change that this role came to symbolize. Cultural analysis of Schwarzenegger's character shows how the dominant norm of masculinity was challenged. In this film, he is depicted as both more sensitive and even more successfully violent. Interestingly, there are also two other potential protagonists in this film, both of whom are presented as inadequate: neither a muscular single mother nor the post-modern T-1000 robot can replace Schwarzenegger. The *Terminator 2*, which has a little more compassion and care, is instead described as the rational choice for a future in a messy world.³¹ So even if the cowboy-masculinity was challenged in this film, Schwarzenegger came out as the winner because he was able to incorporate compassion, sensitivity, and care in his masculinity.³² A similar process took place when Schwarzenegger himself appeared in an episode of Hans and Franz on *Saturday Night Live*. Instead of being the object of ridicule, he took over the scene by being ironic and compassionate. He came out on top; the episodes mocking him soon had to end.³³

²⁷ Per Lindquist, *Det klyvbara ämnet. Diskursiva ordningar i svensk kärnkraftspolitik 1972–1980* (Lunds Universitet, 1997); Anshelm, *Mellan frälsning och domedag*; Linnér, *Att lära för överlevnad*.

²⁸ Susan Jeffords, "The Big Switch: Hollywood Masculinity in the Nineties," in *Film Theory Goes to the Movies*, eds. Jim Collins, Hilary Radner and Ava Preacher (London: Routledge, 1993), 196–208.

²⁹ Mason Allred, "Pumping Up Masculinity: The Initial Intervention and Lasting Legacy of Hans and Franz," *The Journal of Popular Culture* 45 (2012): 241–263.

³⁰ Boyle, "The Intertextual Terminator," 42–60.

³¹ Jeffords, "The Big Switch," 196–208; Thomas Byers, "Terminating the Postmodern: Masculinity and Homophobia," *Modern Fiction Studies* 41, no. 1 (1995): 5–33; Boyle, "The Intertextual Terminator," 42–60; Frank Grady, "Arnoldian Humanism, or Amnesia and Autobiography in the Schwarzenegger Action Film," *Cinema Journal* 42, no. 2 (2003): 41–56.

³² David Greven, "Cyborg Masochism, Homo-Fascism: Rereading Terminator 2," *Postmodern Culture* 19, no. 1 (2008).

³³ Mason Allred, "Pumping Up Masculinity," 241–263.

A similar test of cowboy masculinity can be found in energy and environmental politics in the late 1980s. At this time in Sweden, ecological discourse won ground and began to challenge the modern industrial discourse. This shift was visible in public opinion, the election of Green Party members to the parliamentary assembly, the mass media debate greatly influenced by an ecotopian vision, regulations that favoured an ecological discourse, and ecologically minded energy projects.³⁴ The people who led the modern industrial discourse were fighting for their survival, challenged by those who practised an ecological discourse.³⁵ According to political scientist Måns Nilsson, The Confederation of Swedish Enterprise, industry leaders, the Swedish Trade Union and political parties on the conservative side used all their influence to maintain power. This intense clash had far-reaching implications as environmental politics were reshaped by industry influence to give rise to an ecomodern discourse.³⁶ The conventional ecological discourse with its preference for small-scale technologies, the decentralization of power and criticism of economic growth as a measure of prosperity, as well as the need to develop renewable energy sources, suffered a defeat that had major consequences for the future of Swedish energy and environmental policies. By the beginning of the 1990s, the ecomodern discourse had become dominant.³⁷

Ecological Modern Politics, Fuel Cells, and Ecomodern Masculinity

The conflict between an ecological discourse and an industrial modern discourse was shoved to the periphery of the debate in the early 1990s, as an ecomodern discourse began to dominate both international and national policies on energy and environmental issues. Economic growth was said to be the basis for a transition of energy and environmental policies towards a sustainable future. This ecomodern discourse had begun much earlier, but only since the early 1990s had it become dominant in energy and environmental policy, in Sweden and across the globe.³⁸

Ecomodern discourse spelled major change for energy and environmental policy. In descriptions, environmental problems changed from being threats to civilization, which demanded radical system-wide changes, to being characterized as mostly under control and soon to be solved. The private sector was described as a locomotive that would pull Sweden out of both economic and environmental crises. This ecomodern discourse enabled economic growth to be placed squarely at the centre of the environmental debate, as it was now claimed that there was no conflict between economic growth and environmental problems. In fact, it was declared that environmental problems actually fostered growth, innovation, and

³⁴ Djerf Pierre, *Gröna nyheter*; Martin Bennulf, *Miljöopinionen i Sverige* (Lund: Dialogos, 1994); Maarten A. Hajer, *The Politics of Environmental Discourse – Ecological Modernization and the Policy Process* (Oxford: Oxford University Press, 1997).

³⁵ Linderström, *Industrimoderniteten och miljöfrågans utmaningar*.

³⁶ Nilsson, "Learning, Frames and Environmental Policy Integration," 207–226.

³⁷ Martin Hultman, *Full gas mot en (o)hållbar framtid. Förväntningar på bränsleceller och vätgas i relation till svensk energi- och miljöpolitik 1978-2005* (Linköpings Universitet, 2010).

³⁸ Arthur Mol, *Globalization and Environmental Reform. The Ecological Modernization of the Global Economy* (Cambridge, MA: MIT Press, 2001); Gert Spaargaren, "Ecological Modernisation Theory and the Changing Discourse on Environment and Modernity," in *Environment and Global Modernity*, ed. Gert Spaargaren, Arthur Mol and Fredrik Buttel (Sage Publications, 2000).

competitiveness.³⁹ The discourse paved the way for market solutions and a belief that competition would create 'green' jobs. In this vein, the state-owned electricity utility Vattenfall was turned into a company, the electricity grid was privatized, and research money was increasingly directed to private/public organizations. In addition, environmental organizations like The Swedish Society for Nature Conservation participated in this shift, running several campaigns favoring eco-friendly consumption patterns without questioning the total volume of the products.⁴⁰ The uniquely integrated Swedish Ministry of Energy and Environment was disbanded as well, and these issues were placed under the Ministry of Industry.⁴¹ These changes meant that the focus shifted to finding specific technologies to reduce emissions, that descriptions of technologies were modified, and new discourse coalitions were created.⁴²

One technology supported by proponents of an ecomodern discourse was fuel cells, proclaimed as an emission-free technology (a description later fancied by Schwarzenegger). In the mid-1990s Chrysler and Daimler-Benz constructed prototypes of fuel cell and hydrogen vehicles and applied for a number of patents. To have this major investment pay off, they lobbied intensively to change the Californian Zero Emission Law (ZEV) in 1996, watering down its quotas (and hence delaying the production and deployment of battery electric autos like the EV-1), in exchange for a promise to develop the ZEV fuel cell car. In line with this effort, Chrysler introduced a gasoline-powered car retrofitted for hydrogen. According to press releases, the fuel cell emissions were perfectly harmless, and the company expected to have prototype cars rolling within two years. Chrysler marketed its technology with optimism and confidence. But this was done by leaving out some significant details, such as the fact that hydrogen has to come from somewhere, and that turning gasoline into hydrogen did in fact produce emissions. The automotive companies gave the impression that fuel cells were a solution in themselves, which journalists, politicians, and researchers duly passed on. According to engineers and motoring journalists, the 'car of the future' was no longer electric and part of a changed transport system, but one powered by fuel cells with less need to change automobile infrastructures.⁴³

The heyday of cowboy masculinity, where characters spoke only a few words and acted with violence while defending the supposedly innocent, appeared to have met its end at the same time as the rise of ecomodern politics. In his films from the 1990s onwards, as well as in his political career, Schwarzenegger combined the two rather contradictory qualities of toughness and compassion in the same figure.⁴⁴ This can be seen in movies such as *Kindergarten Cop* (1990), *Junior* (1994) and *Jingle All the Way* (1996), and in political

³⁹ Lennart Lundqvist, "Capacity-Building or Social Construction? Explaining Sweden's Shift towards Ecological Modernization," *Geoforum* 31 (2000): 21–32; Lennart Lundqvist, "Implementation from Above: The Ecology of Power in Sweden's Environmental Governance," *Governance: An International Journal of Policy and Administration* 14 (2001): 319–337.

⁴⁰ Jonas Anshelm, *Det vilda, det vackra och det ekologiskt hållbara. Om opinionsbildningen i Svenska Naturskyddsföreningens tidskrift* (Umeå Universitet, 2004).

⁴¹ Linderström, *Industrimoderniteten och miljöfrågans utmaningar*.

⁴² Hultman, *Full gas mot en (o)hållbar framtid. Förväntningar på bränsleceller och vätgas i relation till svensk energi- och miljöpolitik 1978-2005*.

⁴³ Hultman and Yaras, "The Socio-Technological History of Hydrogen and Fuel Cells 1978-2005 in Sweden; Mapping the Innovation Trajectory," 12043–12053.

⁴⁴ Jeffords, "The Big Switch," 196–208.

campaigns in which he emphasized his commitment to children.⁴⁵ Schwarzenegger made his way into politics as part of George W. Bush's Council on Physical Fitness and Sports 1990-1993. Later on he served as chairman of the California Governor's Council on Physical Fitness and Sports. At this time he transformed himself into a Kindergarten Commando.⁴⁶ Toughness, determination and hardiness, which still formed the core of Kindergarten Commando masculinity, incorporated situationally-appropriate moments of compassion and, sometimes, even vulnerability.⁴⁷

The Governor who will Lead us into the Green, Clean Ecomodern Future

In 2003, Arnold Schwarzenegger used his celebrity status as an 'intimate stranger' to gain access to *The Tonight Show with Jay Leno*, *Oprah* and *The Howard Stern Show*, and announced that he intended to run for governor of California.⁴⁸ In his campaign, he alluded to his film roles promising to "terminate" his opponents and say "hasta la vista" to California's budget problems.⁴⁹

In energy and environment policies, Schwarzenegger had quite an image problem. He had ties to Enron and was the initiator and advertising pillar for an energy-inefficient vehicle, the Hummer.⁵⁰ In fact, Schwarzenegger's image problem could be illustrated by his penchant for big cars and, especially, the Hummer. From the mid-1990s, these kinds of cars became dramatically larger and larger, with so-called Sport Utilities Vehicles (SUV) becoming popular. In the U.S., for example, these vehicles represented 54 per cent of new vehicle sales in 2003.⁵¹ In SUV marketing, it was Arnold Schwarzenegger and General Motors' Hummer that, in the most obvious way, symbolized a combination of violence and lack of boundaries.⁵² The sociologist Marius K. Leudickes' analysis of interviews and web-based discussion pages shows that the Hummer is a "[...] very special and distinctive product" cherished mainly by men.⁵³ When the sociologist Jeremy Schulz interviewed the owners of the Hummer, they said the car

⁴⁵ Alegre, "Arnold Schwarzenegger, Mister Universe?" 84–94.

⁴⁶ Messner, "The Masculinity of the Governor," 461–480; Jeffords, "The Big Switch," 196–208. For other examples in this period of a similar change read Margaret Wetherell and Nigel Edley, "Negotiating Hegemonic Masculinity: Imaginary Positions and Psycho-Discursive Practices," *Feminism and Psychology* 9, no. 3 (1999): 335-56; Stephen Whitehead, "Hegemonic Masculinity Revisited," *Gender, Work, and Organization* 6, no.1 (1998): 58-62.

⁴⁷ Messner, "The Masculinity of the Governor," 461–480; Alegre, "Arnold Schwarzenegger, Mister Universe?" 84–94; Indiana, *Schwarzenegger Syndrome*.

⁴⁸ Indiana, *Schwarzenegger Syndrome*.

⁴⁹ Boyle, "The Intertextual Terminator. The Role of Film in Branding Arnold Schwarzenegger," 42–60.

⁵⁰ Carol Stabile, "Getting What She Deserved: The News Media, Martha Stewart, and Masculine Domination," *Feminist Media Studies* 4, no. 3 (2004): 315–332; Jeremy Schulz, "The Vehicle of the Self: The Social and Cultural Work of the H2Hummer," *Journal of Consumer Culture* 6, no. 1 (2006): 57–86; Marius Leudickes, "Brand Community under Fire: The Role of Social Environment for the HUMMER Brand Community," *Advances in Consumer Research* 33, no. 1 (2006): 486–493.

⁵¹ David Campbell, "The Biopolitics of Security: Oil, Empire and the Sports Utility Vehicle," *American Quarterly* 57, no. 3 (2005): 943–972.

⁵² Elaine Cardenas and Ellen Gorman, eds., *The Hummer: Myths and Consumer Culture* (Lexington Books, 2007); Krakoff, "Arnold Schwarzenegger and Our Common Future," 925–961.

⁵³ Marius Leudickes, "Brand Community under Fire: The Role of Social Environment for the HUMMER Brand Community," *Advances in Consumer Research* 33, no. 1 (2006): 486–493.

symbolizes strength, violence, safety and masculine potency.⁵⁴ But while the purchase of a Hummer was described as a way to achieve the American dream, General Motors and Schwarzenegger faced widespread criticism.⁵⁵ Owners were criticized for encouraging irresponsible driving and exacerbating the greenhouse effect. The vehicle aroused disgust among those who argued that carbon dioxide emissions from cars should be reduced. This criticism was a problem for Schwarzenegger in his political career, especially when he tried to get elected governor of California. His solution was a Hummer with fuel cell and hydrogen technology, which connected the candidate to the great expectations raised at the turn of the millennium by the automotive industry (e.g. Daimler-Chrysler), utilities (such as Shell and Statoil), political leaders and part of the environmental movement (such as the World Watch Institute and Bellona). In a high-profile State of the Union speech in 2003, George W. Bush, a Schwarzenegger supporter, said that FCH would make international treaties like the Kyoto Protocol unnecessary because a 'hydrogen economy' could combine economic growth, environmental protection, and energy security.⁵⁶ Bush's advocacy, backed by a national investment in FCH, was echoed by world leaders.⁵⁷ Romano Prodi, the-then President of the European Commission, and President Bush spoke about their common objective to create a "hydrogen economy."⁵⁸ The attention can also be seen in significantly increased numbers of international conferences, significantly more texts and images published in the mass media, increasing numbers of articles in Swedish journals, numerous articles in international scientific journals, more patent applications per year, and a large increase in prototype vehicles manufactured primarily by the automotive industry.⁵⁹

In his political performance as governor, Schwarzenegger aligned himself with high expectations for fuel cells and hydrogen. With his hydrogen Hummer, Schwarzenegger could describe himself as ecomodern. His energy-inefficient Hummer was no longer a problem when the fuel was hydrogen and the exhaust was only water. Like Schwarzenegger's combination of violence and caring in his movie roles, the combination of economic growth and the environment created the perfect image to justify the cost of driving a Hummer. The ecomodern green wash of the Hummer-with-hydrogen made it possible to brand these giant cars with an image of care and responsibility for the environment. Thus, both ecological modernization and hybrid masculinity can be understood as attempts to incorporate and deflect criticism in order to perpetuate hegemony, to ensure 'business as usual.' The ecomodern masculine configuration is that of responsible care for the environment while modern society can continue unchanged.

⁵⁴ Schulz, "The Vehicle of the Self," 57–86.

⁵⁵ Campbell, "The Biopolitics of Security," 943–972.

⁵⁶ G. W. Bush, "State of the Union," 2003, accessed 15 September 2005. <http://www.whitehouse.gov>

⁵⁷ William McDowal and Malcolm Eames, "Forecasts, Scenarios, Visions, Backcasts and Roadmaps to the Hydrogen Economy: A Review of the Hydrogen Futures Literature," *Energy Policy* 34 (2006): 1236–1250; Mike Hudson, *et al.*, "Constructing a Typology of H₂ in Cities and Regions: An International Review," *International Journal of Hydrogen Energy* 33, no. 6 (2008): 1619–1629.

⁵⁸ G. W. Bush, "European Council President Konstandinos Simitis and European Commission President Romano Prodi Joint Statement on The Hydrogen Economy," accessed 15 January 2004. <http://www.eere.energy.gov/>

⁵⁹ Martin Hultman and Christer Nordlund, "Energizing Technology: Expectations of Fuel Cells and the Hydrogen Economy, 1990–2005," *History and Technology* (in press).

In articles on the future of the automobile, journalists in Sweden described the state of California, with Arnold Schwarzenegger as its leader, as a “pioneer.” According to environmental journalist Lars Ingmar Karlsson, problems of motoring were solved in California. In *Dagens Nyheter*, Karlsson stated that California should be the model to follow in order to combine growth and environmental care, thus enabling modern societies to advance “full speed towards a cleaner environment.”⁶⁰ In articles from *Veckans Affärer*, *Dalademokraten* and *NyTeknik*, California was described in a similar way as having found the silver bullet solution. They pointed at Arnold Schwarzenegger’s hydrogen-fuelled Hummer as both powerfully high-tech and environmentally friendly. As noted earlier, Tommy Hammarström urged his readers from the *Expressen* editorial page to follow the moves of Arnold. His political stance was a success story worth repeating.⁶¹ Schwarzenegger’s vision was even more appreciated in *Kvällsposten*. It was Schwarzenegger, in his role as the ‘Terminator governor,’ who would put the auto industry to a challenging test, according to Lars Klint:

The Terminator challenges the powerful automotive industry based in Detroit in a way they have never experienced before. Perhaps he expresses himself a little differently than in the action role on film, but the message is as bang hard and uncompromising. Go ahead and build cars powered by fuel cells that combine hydrogen and oxygen in a process with only water as emissions.⁶²

In the descriptions of Schwarzenegger, the journalists used his science-fiction character, Terminator, to emphasize his message and to predict and forcefully change the future. Above all, they reused Arnold Schwarzenegger’s construction of himself as an avid practitioner of ecomodern discourse.

FHC as Enablers to Combine Economic Growth and Environmental Concerns

Environmental friendly technology has increasingly been a slogan for solving environmental problems since the rise of ecomodern discourse in the early 1990s. In the early 2000s, high expectations were placed on fuel cells as the epitome of ecomodern technology by ecological modernization proponents.⁶³ A historical analysis of the ecomodernization of fuel cells is therefore a useful prospect if we are to understand the interplay between politics and technology. When cars with fuel cells were presented at motor shows they were described in terms of “looking into the future.”⁶⁴ The image of a future with FCH was generally embraced by journalists and engineers, who mentioned both in the same sentence and thus formed a tight

⁶⁰ L. I. Karlsson, “Full gas mot en renare miljö,” *Dagens Nyheter*, 22 August, 2004.

⁶¹ T. Hammarström, “Kör som Arnold,” *Expressen*, 22 November 2004.

⁶² L. Klint, “Terminator även i politiken,” *Kvällsposten*, 15 May, 2005.

⁶³ Joseph Huber, *New Technologies and Environmental Innovation* (Cheltenham: Edgar Elgar Publishing, 2004); Joseph Huber, “Pioneer Countries and the Global Diffusion of Environmental Innovations: Theses from the Viewpoint of Ecological Modernization Theory,” *Global Environmental Change* 18, no. 3 (2008): 360-367.

⁶⁴ J. E. Berggren, “En tjuvtitt på framtiden” – och skvaller om Volvo,” *Expressen*, 22 October 2005; R. Collin, “Här tittar Tokyo in i framtiden ...,” *Aftonbladet*, 21 October 1999.

cohesion. It was clearly spelled out that cars or buses with FCH were “future vehicles” and “future coaches.”⁶⁵

During this period, Schwarzenegger made a lot of public appearances and stated that FCH could reduce emissions of harmful substances by 50 per cent within 10 years. As governor, he issued an executive order to design State Highway 21 as a hydrogen highway.⁶⁶ In another example, he and Maria Shriver, his former wife, lit the official and highly symbolic Christmas tree in Sacramento, which was powered by a fuel cell. This was meant to show how much Schwarzenegger supported energy efficiency and emission-free technology. The power for the Christmas tree was from the electrical grid, but, thanks to FCH could claim energy independence unaffected by power outages. The tree lights could function throughout the holiday season and not produce any greenhouse gas emissions. Schwarzenegger presented himself as a purveyor of ecomodern discourse, someone who made a serious effort to protect the environment while not forsaking growth. He constantly used ecomodern discourse, emphasizing win-win situations that combined economic growth with environmental solutions.

As stated above, Swedish journalists identified Schwarzenegger as an environmental hero in many articles, and this symbolism was also taken up by the lobby organization SamVäte. With the help of project funds from the city of Gothenburg and its region, SamVäte proposed hydrogen as the future energy carrier. At one of SamVäte’s meetings, which I attended, the project leader, Sven Wolf, had a screensaver on his computer which showed Schwarzenegger refuelling his Hummer with hydrogen. At each change of PowerPoint presentation we saw a smiling Arnold, a hydrogen pump and a big blue Hummer; this image dominated the room. The fact that this image was used at the meeting in Malmö was characteristic of SamVäte. In its first meeting in Gothenburg, Wolf introduced the proposal to build a hydrogen highway along the west coast of Sweden with a picture of Arnold Schwarzenegger in his Hummer. SamVäte presented California and its leader as a model, a region to follow. This conveniently overlapped with the mass media image. California was portrayed in a final report as a frontrunner regarding non-polluting transport: cars that run on hydrogen with the help of fuel cells. California “[...] with Arnold Schwarzenegger in the lead,” was the prototype. He was regarded as an environmental hero who could point the way toward the ecomodern future.⁶⁷

Asymmetric Symmetry?

The argument that economic growth did not destroy the environment was one important clue as to how ecomodern discourse preserved hegemony; on the contrary, economic growth was seen to be essential to solving various environmental problems. It has been suggested that Sweden is a pioneer in combining economic growth with solutions to environmental problems. Researchers have even claimed that the country is one of the most ambitious and ecologically

⁶⁵ M. Ensevi, “Framtidens bil är redan här,” *Göteborgstidningen*, 4 May, 2001; D. Lilja, “Framtidens bilar,” *Expressen-GT-Kvällsposten*, 28 September, 2002; N. Andersson, “Framtidens bilar ger industrin tändning,” *NyTeknik*, 11 December, 2002; A. Sundström, “Jag är stolt över att köra miljövänligt,” *Dagens Nyheter*, 10 October 2004.

⁶⁶ Woodrow W. Clark, et al., “Hydrogen Energy Stations: Along the Roadside to the Hydrogen Economy,” *Utilities Policy* 13, no. 1 (2005): 41–50.

⁶⁷ Hanna Jönsson, et al., *Slutrapport vätgasväg längs västkusten* (SamVäte, 2005), 39.

modernized in the world,⁶⁸ holding a key leadership position in the context of climate change.⁶⁹ The basis for this argument is the so-called Environmental Kuznets Curve (EKC) and its empirical durability. It too is premised on the powerful assumption that economic growth is the inevitable solution to environmental problems.⁷⁰ However, what is actually clear today is that such a correlation between the reduction of total global emissions and increased global GDP growth cannot be established.⁷¹ Even the study that formed the basis for the popularization and widespread use of the EKC hypothesis found no correlation between economic growth and lower emissions of substances that can give rise to global environmental problems, such as carbon dioxide.⁷² Instead, what seems to be happening is that different countries, companies, and citizens send emissions to other locations, and to different times.⁷³ Emissions are thus displaced from countries such as the Netherlands, the USA, Sweden and Japan to countries such as China and India.⁷⁴

A similar displacement practice is at work in Schwarzenegger's proposal that fuel cells might be a silver bullet technology, moving the emissions of Hummer and other vehicles from the tailpipe to hydrogen production. Schwarzenegger drew simultaneously on his image as a science fiction hero and a responsible, compassionate man, when he transformed himself into a Kindergarten Commando and Governor.⁷⁵ Scholars in gender analysis claim that this hybrid masculinity might be an explanation for Arnold's popularity today.⁷⁶ But when scrutinized closely, it does not seem to be a symmetrical combination; rather, it seems to be as asymmetric as ecomodern discourse. Caring and compassion are subordinated to toughness and strength

⁶⁸ Martin Jänicke, "Ecological Modernisation: New Perspectives," *Journal of Cleaner Production* 16, no. 5 (2008): 557–565; Lennart J. Lundqvist, *Sweden and Ecological Governance: Straddling the Fence* (Manchester: Manchester University Press, 2004).

⁶⁹ Steven Sarasini, "Constituting Leadership via Policy: Sweden as a Pioneer of Climate Change Mitigation," *Mitigation and Adaptation Strategies for Global Change* 14, no. 7 (2009): 635–653; Mathias Zannakis, *Climate Policy as a Window of Opportunity: Sweden and Global Climate Change* (Göteborgs Universitet, 2010).

⁷⁰ David Stern, "Economic Growth and Environmental Degradation: The Environmental Kuznets Curve and Sustainable Development," *World Development* 24, no. 7 (1996): 1,151–1,160; Simone Borghesi and Alessandro Vercelli, "Sustainable Globalisation," *Ecological Economics* 44, no. 1 (2003): 77–89; Vivek Suri and Duane Chapman, "Economic Growth, Trade and Energy: Implications for the Environmental Kuznets Curve," *Ecological Economics* 25, no. 2 (1998): 195–208.

⁷¹ Eugene A. Rosa, Andreas Diekmann, Thomas Dietz and Carlo C. Jaeger, eds., *Human Footprints on the Global Environment: Threats to Sustainability* (Cambridge, MA: MIT Press, 2010).

⁷² Suri and Chapman, "Economic Growth, Trade and Energy," 195–208; Jean Agram and Duane Chapman, "A Dynamic Approach to the Environmental Kuznets Curve Hypothesis," *Ecological Economics* 28, no. 2 (1999): 267–277; Marzio Galeotti, Alessandro Lanza and Francesco Pauli, "Reassessing the Environmental Curve for CO₂ Emissions: A Robustness Exercise," *Ecological Economics* 57, no. 1 (2006): 152–163; David Stern, "The Rise and Fall of the Environmental Kuznets Curve," *World Development* 32, no. 8 (2004): 1,419–1,439.

⁷³ Andrew Wyckoff and Joseph Roop, "The Embodiment of Carbon in Imports of Manufactured Products: Implications for International Agreements on Greenhouse Gas Emissions," *Energy Policy* 22, no. 3 (1994): 187–194.

⁷⁴ Dale Rothman, "Environmental Kuznets Curves – Real Progress or Passing the Buck?: A Case for Consumption-Based Approaches," *Ecological Economics* 25, no. 2 (1998): 177–194.

⁷⁵ Jeffrey Broxmeyer, "From the Silver Screen to the Recall Ballot: Schwarzenegger as Terminator and Politician," *New Political Science* 32, no. 1 (2010): 1–21.

⁷⁶ Messner, "The Masculinity of the Governor: Muscle and Compassion in American Politics," 461–480; Alegre, "Arnold Schwarzenegger, Mister Universe? Hollywood Masculinity and the Search of the New Man," 84–94.

reflected in Schwarzenegger's latest films *Collateral Damage* (2002) and *Terminator 3: Rise of the Machine* (2003), as well as his political statements against "girly men," the poor, and women's rights.⁷⁷ The phrase "girly men," especially, has been analyzed as a Freudian slip, exposing values that Arnold tries to hide in various ways when doing politics in the 21st century.⁷⁸ Schwarzenegger's veto of the same-sex marriage bill in 2005 and 2007 while simultaneously claiming to have married homosexual staff members can also be understood as the same kind of vacillating position and asymmetric politics. Byers found this asymmetric combination in *Terminator 2* in the early 1990s, where artefacts in Arnold's hands become precision weapons that did the job, while a muscular single mother character could not push the artefacts hard enough to release their power. Byers claims that this situation depicts a hegemonic discourse in which caring, compassion and vulnerability have no chance of playing an important role in the future in and of themselves; they can only be important if they submit to a certain type of masculinity.⁷⁹

Ecomodern Masculinity

In this article, we have followed how environmental and energy politics have evolved towards ecomodernization, intertwined with Schwarzenegger's transformation. In the 1980s there was clear antagonism between the ecological and the modern industrial discourse regarding energy and environmental policies. These two discourses were forced off the scene in the early 1990s, as ecomodern discourse began to dominate politics. This change in politics meant that economic growth, technology, market solutions and environmentally friendly consumption came to the forefront. At the same time the focus shifted towards emissions control. Using an analogy, I have described the change in hegemonic masculinity from cowboy-masculinity, where characters spoke only a few words and acted violently while defending the supposedly innocent, to a hybrid Kindergarten Commando where toughness, determination, and hardness was incorporated with situationally-appropriate moments of compassion and care.

But this new type of ecomodern masculinity, which is presented as a symmetric amalgamation that combines care for the environment and economic growth, can instead be understood as highly asymmetric because it conserves and favours existing system solutions, for example in the transport sector. The ecomodern discourse put the focus on emissions, not on the production of fuel. This is primarily reflected in the changing direction of the future of cars. The arguments for a pollution-free fuel cell technology legitimize the continued expansion of private cars; as a result the vision for new transport systems becomes obsolete. It enables a vehicle as energy-inefficient as the Hummer to be described as environmentally friendly, since the exhaust from the hydrogen conversion is only water. The consequence of ecomodern discourse is that established structures of an auto-based system no longer need to be changed, including ever-increasing numbers of cars or energy consumption without limits. Thus, ecomodern masculinity comes with an asymmetry. No matter how many technologies like the Hummer are being remodelled to make them 'eco-friendly', the energy for the

⁷⁷ Messner, "The Masculinity of the Governor: Muscle and Compassion in American Politics," 461–480; Indiana, *Schwarzenegger Syndrome*; Ronald Pelias, "Jarheads, Girly Men and the Pleasures of Violence," *Qualitative Inquiry* 13, no. 7 (2007): 945–959; Byers, "Terminating the Postmodern," 5–33.

⁷⁸ Edwin Battistella, "Girly Men and Girly Girls," *American Speech* 81, no. 1 (2006): 100–110.

⁷⁹ Byers, "Terminating the Postmodern," 5–33.

production of that hydrogen still needs to be accounted for as well as the resources used to manufacture huge cars. There is a similar asymmetry and blind spot in much of our thinking about global CO₂ emissions: they are not lowered in countries with ecomodern economic growth such as Sweden, instead they are increasingly outsourced to other countries. Emission-free technologies ultimately seem to suffer the same problems as before, with environmental problems simply being shifted in place and time, rather than actually being addressed.

Today, Schwarzenegger is no longer governor. He has also received negative publicity in recent years because of his infidelity. In the end, his wife Maria Shriver had had enough and divorced him. His ecomodern masculinity, where toughness, determination, and hardness would go hand-in-hand with well-chosen moments of compassion, vulnerability, and eco-friendly technology, today appears to be a cover up. Whether or not future ecomodern energy and environmental policies will travel the same road is difficult to predict. But the optimism surrounding various ecomodern utopias such as a “hydrogen economy,” an institutional framework such as carbon emission trading schemes, or silver bullet technologies such as fuel cells, today appears to be out of fashion. At the same time solutions such as electric cars, geo-engineering, and nuclear power are championed by actors also performing what arguably can be understood as ecomodern masculinities.

Given today’s financial situation, where our world-ecological system once again seems to be dealing with resources in a disastrous way, it is important to reanalyze and intervene in the discussion about how energy and environmental policies are culturally rooted. Not least, it is time to think about which lifestyles and masculinities are resilient in the long run.

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