

Representations of masculinity in Tesla's consumer stories
A multimodal critical discourse analysis

Student Name: Matteo Vivi
Student Number: 504011

Supervisor: Dr. Anne-Mette Hermans

Master Media Studies - Media & Business
Erasmus School of History, Culture and Communication
Erasmus University Rotterdam

Master's Thesis
June 2020

Representations of masculinity in Tesla's consumer stories: a multimodal critical discourse analysis

ABSTRACT

Considering that scholars have recognized an aggressive and careless style of driving as well as the ability to manually steer and control a vehicle as a major element of “doing masculinity”, and that attention has been called to the incompatibility between the values of intra- and intergenerational respect and care proposed by environmentalism and the competitiveness and aim for short-term success characteristic of hegemonic scripts of masculinity, scholars have pointed to the gendered dimension of the symbolic complications connected with the adoption of both electric and self-driving vehicles for hegemonic masculinities. Drawing upon these premises, this study investigates the gendered dimensions of corporate representations of the transition to electric and automated systems of automobility. Specifically, Tesla is selected as a case study: how do Tesla's consumer stories related to the transition to electric and automated vehicles discursively shape scripts of hegemonic masculinity? To respond to the research question, the study analyzes Tesla's consumer stories on YouTube through multimodal critical discourse analysis. In particular, the analysis is methodologically executed through the examination of the “verbal-visual correspondence” between spoken dialogues and visual representations. Drawing upon literature on consumer adoption of electric and self-driving vehicles and on the possible gendered meanings and complications that these types of consumption could entail for different scripts of masculinity, the research argues against the adoption of an instrumentalist approach to the study of automobility. Through the adoption of a symbolic interactionalist view of gender and consumption along with a feminist approach to the study of mobility, the study analyzes how male Tesla owners orchestrate discourses of gender, technology, and sustainability to make sense of patterns of automobility and, most importantly, the gendered scripts that these allow them to enact. The main overarching result indicates that Tesla's consumer stories illustrate different scripts of masculinity in relation to men of different ages and ethnicities and multimodally connect these to different constructions of Tesla as a vehicle. In this way, the transitions to new patterns of automobility are represented as shaping frames of hegemonic masculinity in racialized and age-dependent ways, so that evidence supporting the theory of intersectionality is provided.

KEYWORDS: *masculinity, automobility, electric vehicles, automated vehicles, Tesla*

Table of Contents

Abstract and keywords	
List of abbreviations	
1. Introduction	5
2. Theoretical Framework	10
2.1. Consumption, symbolic interactionism, and gender	10
2.2. Consumption, discourse, and gender	14
2.3. Gender, automobility and hegemonic masculinities	16
2.4. Gender, environmentalism, and EVs	19
2.5. Gender, technology, and AVs	22
3. Method	25
3.1. Method	25
3.2. Sample	27
3.3. Procedure and operationalization	28
3.4. Reflexivity	32
4. Results	34
4.1. Men and environmentalism	35
4.2. Men and technology	49
4.3. Men and autopilot	56
5. Conclusion	62
References	68
Appendix A: Coding scheme	76
Appendix B: Tables of frequencies	82
Appendix C: List of analyzed sources	84

List of abbreviations

AV: automated (or self-driving) vehicle, a type of vehicle that is capable of driving itself with little or no human input.

BEV: battery electric vehicle, a type of electric vehicle that exclusively uses electric energy stored in rechargeable battery packs, with no secondary source of propulsion.

CDA: acronym for critical discourse analysis

EV: electric vehicle, a type of vehicle that uses one or more electric motors or traction motors for propulsion.

ICE: internal combustion engine vehicles, vehicles that are propelled through the combustion of fuel. It denotes traditional oil-based transport vehicle.

MCDA: acronym for multimodal critical discourse analysis

NF: acronym for “non-father”. It is used throughout the text to in the expression “NF men” to refer to those men who do not describe themselves as fathers nor are visually constructed as such.

1. Introduction

“I thought I’d originally only get six kegs back there but it really is an eight-keg-car” Tesla (2017).

In its *The 8 Keg SUV* video (Tesla, 2017), Tesla, the brand that in 2019 achieved the highest market share within the battery electric vehicle (BEV) producers worldwide (Wagner, 2020a), constructs a narration of its Model X that foregrounds discourses of hegemonic masculinity while leaving out any mention of what supposedly is the distinctive characteristic of its vehicles: the electric engine. Through the consumer story of a Californian beer brewer, the company’s SUV is in fact characterized as the “ultimate beer run machine” and is appreciated for its capacity to accommodate eight kegs of beer. Interestingly, along with the overt symbolism of traditional scripts of masculinity, where alcohol is represented in connection to sports as the protagonist of the video delivers beers to a baseball stadium with his Tesla, the car’s technological automation is highlighted in parallel with the automation of the beer production line: “our brewery is fully automated, so is my Tesla” (Tesla, 2017). By focusing on the man’s enthusiasm for autopilot while silencing any references to the electric engine, the video seems to construct a conventionally masculine appreciation of Tesla’s cars as primarily making sense of these vehicles as technologically advanced machines, rather than electrically driven ones. Given that “the dominance of privately-owned, gasoline-powered vehicles used primarily by single occupants is a major contributor to several societal problems, including climate change, [and] air pollution” (Sovacool & Axsen, 2018, p. 730), and the especially intense criticism directed at SUVs’ high levels of carbon emissions (Hultman, 2013), the environmental sustainability of Tesla’s Model X and its electric engine could nevertheless be presented as a favorable asset as well as a legitimate selling point for the vehicle. Considering, however, that scholars have called attention to the gendered complications of a masculine endorsement of environmentalism stemming from an incompatibility of values between environmentalism and hegemonic scripts of masculinity (Brough, Wilkie, Ma, Isaac & Gal, 2016; Franz-Balsen, 2014), and feminine connotations associated with environmental concerns and pro-environmental attitudes and behaviors (Davidson & Freudenburg, 1996; Swim & Geiger, 2018), the communicative strategies that Tesla employs in the aforementioned video might assume a gendered dimension of significance. Conversely, discourses of environmentalism and safety play a major role within Tesla’s narrative of a sustainable and safe mobility presented in company reports, where Tesla’s vehicles are praised for supporting the company’s mission of accelerating the world’s transition to a sustainable system of renewable energy and are described as “the safest car in the world” (Tesla, 2018). For this reason, how the brand envisions, constructs, and communicates its model of automobility seems to significantly vary between promotional videos and corporate social responsibility reports, two different communication channels reaching different audiences.

Considering all the above, two questions arise. In what sense and to what purpose is Tesla’s

model of automobility constructed within gendered frameworks of meanings? How do discourses of gender, technology, and sustainability coexist within Tesla´s brand storytelling? The current research draws upon these questions and sets out to qualitatively thematize these matters, expanding previous feminist social studies of automobility and feminist studies of technology by presenting Tesla as a case study. Therefore, the following research question has been designed: *how do Tesla´s consumer stories related to the transition to electric and automated vehicles discursively shape scripts of hegemonic masculinity?* Following Connell (2005), hegemonic masculinity is defined as “the configuration of gender practice which embodies the currently accepted answer to the problem of the legitimacy of patriarchy, which guarantees (or is taken to guarantee) the dominant position of men and the subordination of women” (p. 77). Specifically, as the current study focuses on representations of masculinity, the gendered structures of power dominated by hegemonic masculinity are analyzed mainly as subordinating different articulations of masculinity with respect to one another (Levon, Milani, & Kitis, 2017). Moreover, considering that only a few men actually meet the hegemonic standards in its entirety, but yet the majority of them display some characteristics of hegemony and benefit in some way from hegemonic structures of subordination, this study examines how Tesla portrays normative scripts of masculinity, defined as configurations of gender practice representing standards of masculinity that align with some aspects of how masculinity “ought to be” according to superior hegemonic standard (Connell, 2005). In order to answer the research question, multimodal critical discourse analysis (MCDA) was used to analyze Tesla´s consumer stories uploaded to the brand´s YouTube channel.

Drawing upon social interactionist theories of consumption (Heffner, Kurani, & Turrentine, 2006), this research adopts a symbolic interactionist approach to the study of automobility that sets out to analyze the gendered meanings that drivers attach to car use. By adopting a polysemic account of automobility that recognizes how passenger vehicles can elicit and be understood through multiple frames of significance (Sovacool & Axsen, 2018), this study contributes to expand the line of research that has argued against the adoption of what has been defined as a traditional instrumentalist approach to the study of automobility. In this sense, it refuses to reduce drivers to rational, utility-maximizing and socially isolated decision-makers who ground their mobility choices and motivations for car use solely in financial and functional considerations (Axsen, TyreeHageman, & Lentz, 2012; Mohamed, Higgins, Ferguson, & Kanaroglou, 2016). Rather, adopting Sovacool and Axsen´s (2018) definition of automobility as the broader socio-material system of intertwined societal and historic actors, practices and institutions that support car use, the researcher calls attention to non-instrumental meanings of car use and the gendered dimension that these might assume. Drawing upon Balkmar (2012) and Mellström´s (2004) recognition of automobility as a “major element of doing masculinity”, this study expands the results of feminist social studies of automobility by shedding light onto how shifts in patterns of mobility might shape scripts of masculinity and, specifically, how adoption of electric

vehicles (EVs) and automated vehicles (AVs) might weaken, maintain or reinforce hegemonic scripts of masculinity.

Additionally, considering that contemporary societal and academic discourses around autonomous driving often rest on deterministic understandings of the relationship between technology and the social, whereby technology is ascribed absolute power to shape societal structures (Weber & Kröger, 2018), this study sets out to problematize simplistic conceptualizations of AVs as the “technological fix” promising a safer and more efficient road transportation system through the rejection of technological determinism. Rather, the researcher argues in favor of a constructivist understanding of technology that recognizes technology and innovation as social and situated constructs (Wajcman, 2000). Specifically, this study expands the results of feminist studies of technology as it sheds light onto the gendered dimension of technology, and, more specifically, onto the interdependence of shifts in gender and technology (Faulkner, 2001). Lastly, since the majority of published studies have focused on consumers’ perceptions of EVs or AVs (Bennett & Vijaygopal, 2018; Graham-Rowe et al., 2012; Skippon & Garwood, 2011) mainly through the use of quantitative surveys designs (Hidrue, Parsons, Kempton, & Gardner, 2011; Kahn, 2007; Zhang, Yu, & Zou, 2011), this study expands the literature on the topic by qualitatively analyzing corporate representations of EVs and AVs, taking inspiration from similar critical analysis of automobile advertisements (Duerringer, 2015; Redshaw, 2018; Hildebrand & Sheller, 2018; Manderscheid, 2018).

The social relevance of the outlined inquiry resides mainly in the importance of expanding the multidisciplinary body of knowledge about technological advancements that could potentially improve future mobility, importance that is reflected by the growing societal and political debate concerning mass automobility and its detrimental consequences. Considering the need to reduce greenhouse gas emissions contributing to global warming (Egbue & Long, 2012; Graham-Rowe et al., 2012; Mohamed et al., 2016), EVs could present a partial solution, insofar that they promise to reduce the negative climatic and environmental impacts of traditional automobility by achieving independence from fossil-fuel combustion (Redshaw, 2018; Rezvani, Jansson & Bodin, 2015; Vassileva & Campillo, 2017).¹ Similarly, AVs claim to reduce mortality, increase safety and improve fuel economy by erasing human errors and transforming drivers into passengers (Balkmar & Mellström, 2018; Collingwood, 2018; Hohenberger, Spörrle, & Welpe, 2016), while contributing to redesign roads into “a calmer, safer, more cooperative social space without the aggression of bursting power, [...] that currently characterize them” (Redshaw, 2018, p. 86). Through the recognition of the variety of different meanings associated with automobility, the current research sets out to examine the ways in

¹ It is however important to point out that although no gas emissions are generated during the ride, the degree to which EVs can be considered an environmentally sustainable method of transportation depends both on the processes of production and disposal of the batteries carried by these vehicles and the source of the electricity that is used to charge them.

which gender is represented in automobile corporate representations to understand how gendered meanings of consumption might obstruct or incentivize the transition towards a more sustainable and safer mobility. In-depth and multidisciplinary understandings of these dynamics are especially relevant considering that both EVs and AVs currently still make up for just a small part of the automobility market share (Rezvani et al., 2015).

Additional societal relevance is provided by the object of the study. Corporate representations have been recognized by feminist scholars as insightful texts for the study of cultural relations of power and ideology, and therefore worthy of critical inspection (Lazar, 2007). From a feminist perspective, advertisements crucially contribute to construct gender as an omni-relevant category in the public sphere and, thanks to the seemingly innocuous, banal and often satirical nature of their representations, are able to mystify and obscure the relationships of power at work (O'Halloran, Tan, Smith & Podlasov, 2011). Crucially, as critical analysis of post-feminist advertising have shown, corporate representations can strategically exploit and depoliticize socially progressive notions of gender, so that “the convergence of capitalist consumerist and patriarchal systems [...] co-opts and subverts progressive discourses while maintaining the social status quo” (Lazar, 2007, p.159). In this sense, following the aforementioned prospect of a gendered “resegregation” of new forms of automobility (Weber and Kröger, 2018), it is important to examine whether Tesla’s representations employ similar dynamics in regard to masculinity and possibly support traditional hegemonic scripts of masculinity despite the endorsement of more progressive and less-normative mobility choices, especially in regard to environmentalism.

Lastly, scholars have highlighted the importance of the contribution that social sciences can offer to the process of developing new technologies: as new models of automobility are envisioned, designed, and discussed through an interdisciplinary debate among different societal stakeholders, “it is imperative for social scientists and the wider public to contemplate how these decisions concerning automobile spaces and bodies reproduce and remediate gendered and racialized social hierarchies and moral orders” (Hildebrand & Sheller, 2018, p. 78). In this sense, Law and Singleton (2000) argue for the performative nature of representations of technology, which, far from consisting of innocent descriptions, “make a difference, introduce changes, or, alternatively, bring aid and comfort to the existing performances of technological reality *while it could be otherwise [sic]*” (p. 769). It is therefore important to critically analyze how corporate representations of new models of mobility contribute to enact a particular version of new automobile technologies, and how these structures of knowledge play a part in shaping the people, spaces and bodies that interact with the technology.

This study is divided in the following chapter structure. Firstly, a review of the theory is presented to outline the theoretical analytical framework that guided the analysis of the data and the interpretation of the results. Accordingly, social interactionist theories of consumption are reviewed along with social studies of automobility. Secondly, a detailed description of the methodology is

presented, outlining the methodological execution of MCDA conducted by this study along with reflections on the epistemological dimension of the analysis. Thirdly, the results of the study are presented and discussed, illustrated through examples of both textual and visual data taken from the corpus. Lastly, the conclusion of the study aims to ground the results of the study more comprehensively within academic debates of social studies of automobility and feminist studies of technology and present some limitations of the study along with suggestions for future research on the topic.

2. Theoretical framework

The aim of this section is twofold. Firstly, a social interactionist analytical model framing the analysis of the gendered meanings of automobility and the modalities in which these might be utilized to support the construction of hegemonic discourses of masculinity is outlined. Accordingly, social interactionist theories of consumption and theory conceptualizing the relation between identity and discourse are reviewed. Subsequently, the significance of a gendered dimension of automobility is established by reviewing social studies of automobility that delineate the connections between hegemonic masculinity and automobility. Lastly, attention is called to any gendered complications connected to the transition to EVs and AVs.

2.1. Consumption, symbolic interactionism, and gender

Early theories of consumer behavior developed within the tradition of symbolic interactionism have expounded an analytical model that sets the basis for an insightful approach to the sociological examination of consumption. These scholars essentially contend that individuals engage in the examination of the symbolic meanings associated with a product to assess how these potentially interact with the expression of one's own self-concept (Schenk & Holman, 1980; Sirgy, 1982). By defining self-concept, or concept of self, as "the totality of the individual's thoughts and feelings having reference to himself [sic] as an object" (Sirgy, 1982, p. 287), consumption comes to be conceptualized as an autobiographical practice, insofar as individuals actualize a narration of their identity through their patterns of consumption. Drawing on these premises, and assuming that individuals are determined to enhance their own self-concept, self-congruity theory recognizes that consumers strategically orchestrate their consumptions in an attempt to associate with products whose meanings are seen to enrich and complement the enactment of their self-concept, while avoiding the ones that possibly obstruct or interfere with self-concept realization (Schenk & Holman, 1980; Sirgy, 1982). To this regard, Levy (1959, p. 119) specifies that "a symbol is appropriate (and the product will be used and enjoyed) when it joins with, meshes with, adds to, or reinforces the way the consumer thinks about himself [sic]".

Crucially, however, scholars have more recently argued that an uncritical application of self-congruity theory risks to rest upon simplistic conceptualizations in regard to at least two issues (Heffner et al., 2006). Firstly, attention needs to be directed to the concept of consumption stereotyping, on which self-congruity theory is grounded. Traditionally, the concept recognizes the possibility for consumption to function as a practice of identity narration in a transfer of meanings that occurs between the product and the consumer, whereby consumers affiliate their persona with the symbolic characteristics and discourses associated with the profile of a stereotyped user of a specific product through the consumption of that product (Sirgy, 1982). The concept of product stereotypes highlights self-concept as an intrinsically social phenomenon in this way, since "an individual forms

his [sic] self-concept by imagining how others see him [sic]" (Heffner et al., 2006, p. 10). Accordingly, socially situated individuals invest efforts in seeking/avoiding certain consumption patterns as they hope/fear other socially bounded individuals will attribute to them what they perceive as positive/negative meanings that they believe a certain product is socially charged with. It is therefore argued that early formulations of self-congruity theory hold an excessively simplistic account of the concept of consumption stereotyping insofar as they overlook how meanings are socially and historically situated constructions created by socially and historically situated individuals, and therefore apt to heterogeneity (Heffner et al., 2006). As a result, the theory has traditionally disregarded that different individuals might discern different discourses in relation to the same product or disagree on the positive or negative value of a symbolic attribution. This might be especially relevant if the products happen to exhibit new patterns of consumption, where a product stereotype might not even be formed yet. Similarly, a second issue relates to the assumption of the unity and staticity of one's own self-concept that an uncritical application of self-congruity theory might support. Although Schenk and Holman (1980) already problematized the matter by distinguishing a concept of the actual self from a concept of "the ideal self", referring respectively to "an individual's perception of what he/she is like [and] [...] the way the individual would like to be" (p. 611), the concept of situational self-image exposed by Heffner et al. (2006) is in this sense the most insightful. By defining situational self-concept as the meaning of self that an individual wishes other to have of him/herself within a specific social situation, the authors recognize the possibility for an individual to maintain a plurality of possible self-concepts. Individuals can enact and dismiss different images of the self in different circumstances by strategically associating themselves with meanings of different products in different social situations.

Drawing upon the relativization of the notions of product's meanings and self-concept advanced by these critiques, the current research calls for a relativization of the static account of congruity supported by early formulations of self-congruity in line with Heffner et al. (2006). Precisely, far from asserting that individuals do not value or seek congruity, it is argued that the very concept of congruity is in itself highly fluid and bound to the context of a specific social situation. The value of the congruity between the user's self-concept and the symbolic meanings of a product might in fact vary in different instances of consumption as individuals might foreground or background different self-concepts in different social situations. In this way, what is congruent at one time might result incongruent another time and what is congruent for an individual might be incongruent for others. Consequently, the existence of absolute product stereotypes that are homogeneously understood by different individuals in different social situations cannot be essentially assumed. Lastly, the power relations implied by such a metaphysical conceptualization of product stereotypes are excessively unidirectional and oppressive on the individual, as it seems to imply that consumers cannot create and attach new meanings to products nor deny or shift existing ones, so that "individuals

can express themselves only in ways that are permitted by existing definitions" (Heffner et al., 2006, p. 10).

In light of these considerations, the current research implements self-congruity theory with what Heffner et al. (2006) describe as a "products as self-creation" approach, which, by setting different product-consumer power relations, enables a new dimension to consumption as a self-narrative practice. In contrast with the aforementioned traditional model, which restricts consumers to a position of subordination to a product's meanings by limiting their active interaction to a mere choice between what meanings to seek and what to avoid, Heffner et al. (2006) recognize a more fluid and bilateral relation between a product's meanings and consumers, whereby consumers are capable of making sense of products in novel ways that might differ from the socially accepted image of product's stereotyped user. Consumption in this way becomes a more creative activity, where individuals have the capability to utilize consumption patterns to "invent and re-invent themselves" in novel ways (Heffner et al., 2006). Specifically, by making sense of patterns of consumption in innovative ways, subjects attribute novel meanings to products, which in turn infuse the subject's self-concept with new ideas and attributes, therefore realizing projects of self-creation and development of one's own self-concept through the praxis of consumption.²

Drawing upon the outlined analytical framework, the current research sets out to focus on the gendered dimensions of consumption, which is understood as an activity of gendered identity construction, narration, and regulation. Since gender is one of the most fundamental dimensions of symbolism (Levy, 1959) as well as a constitutive feature of social situations (West & Zimmerman, 1987), the symbolic meanings of consumption inevitably assume a gendered dimension of significance, which in turn discloses the possibility for individuals to realize a narration of the gendered dimensions of one's own self-concept through consumption. Following West and Zimmerman (1987), gender is understood as a structure of meanings and power accomplished through the socially and situationally bound enterprise of *doing* gender, executed through the management of situated, symbolic and social interactions: "a situated doing, carried out in the virtual or real presence of other who are presumed to be oriented to its production" (p. 126). In this sense, narration and performativity come to be grounded in the very ontological foundations of gender, so that gender, far from being an a-priori given reality, essentially needs to be narrated for the individual to become a gendered entity. Accordingly, assuming the general propensity to enhance one's own self-concept, gender schematicity theory posits that individuals prefer products connected with meanings that correspond and are congruent with the individual's gender identity over products that present "gender schema-discrepancies" (Worth, Smith, & Mackie, 1992). It is in fact argued that while the former

² A specific analysis of how consumer might be able to make sense of consumptions in novel ways is reported in Section 2.2.

foster and add to an individual's actualization of their gender identity, the latter obstruct it by communicating gender-discrepant discourses.

Crucially, however, similarly to what has been argued in relation to the concept of congruency, it is important to relativize the idea of gender schematicity. In this sense, gender schematicity should not be comprehended as resting on an absolute biological division between a masculine and a feminine sex which assumes that men consuming products that are socially constructed as feminine necessarily engage in a gender discrepant consumption. Rather, since gender has been defined as a social and contextual construction, gender schematicity is in itself a socially and contextually dependent phenomenon. Accordingly, what might be judged as gender discrepant by an individual in one situation might not be perceived as such by another one or by the same individual in different circumstances. Similarly, individuals have the power to create new gendered meanings that exceed the normative tendency to reduce gender to a binary categorization derived by biological differentiation of sexes, as well as shifting or refusing these normative criteria for gender discrepancy.

Yet, empirical experience provides clear evidence that our societies do tend to trace gender back to these normative scripts of biological sex differences, so that a seemingly perfectly binary world of masculine and feminine areas of meaning and behavior is sustained and reproduced (Avery, 2012; Gal & Wilkie, 2010). Considering that both gender and self-concepts are intrinsically social practices, individuals tend to internalize these normative social expectations and learn to reconduct behavior to a male/female dichotomy of actions, roles and meanings, which, eventually, leads them to accordingly recognize "the other half" as incongruent with their identity and to identify certain consumptions as "gender threats" (Ulrich & Tissier-Desbordes, 2018). Consequently, as everyday items are invested with gender associations, people tend to choose products whose symbolic meanings are normatively congruent with the gendered discourses associated with their biological sex (Gal & Wilkie, 2010). Aware of these dynamics, producers have been strategically exploiting these processes "by creating links between the advertised object and (sub)culturally accepted masculine or feminine symbols [...] to seduce the targeted group to buy a product" (van Oost, 2003, p. 194). This normally happens in at least two modalities: normative gender scripts can either be materialized into the very design of products or discursively affiliated to the product's symbolical meanings through advertising.³ It is important to highlight, however, that, far from being unilaterally imposed from the production side, a normative gendered dimension of consumption is often supported and perpetuated by consumers themselves, who sometimes fully reject marketers' attempts to bend normative gender scripts (Avery, 2012; Ulrich & Tissier-Desbordes, 2018).

³ van Oost (2003) provides an insightful example of how normative gender scripts are materialized into the very design of products analyzing the case of shavers, while Duerringer (2005) exposes how hegemonic scripts of masculinity are articulated within car advertising.

2.2. Consumption, discourse, and gender

Ainsworth and Hardy (2004) describe discourse as a form of social practice, and, consequently, present discourse analysis as a valuable tool to study identity. This aim of this section is therefore twofold: firstly, to clarify in what sense this study conceptualizes discourse as a social practice, and, secondly, to shed light onto the connection between the study of discourse and identity.

To conceptualize discourse as a social practice, the current research follows Fairclough's (1992) argumentation according to which discourse and social reality are connected through a dialectical relationship of reciprocal co-construction. Discourse is ascribed constructive power and it is understood as a mode of *action* that operates upon the world and individuals, and, as such, exists as intrinsically social. In this way, a dialectical relationship emerges. On the one hand, the conditions of existence of discourse are constructed upon, and therefore grounded in, social reality (that is to say that discourses are inevitably culturally and historically situated). On the other hand, social structures are recognized as resting upon, and therefore be grounded in, discursive foundations (that is to say that discourse creates social reality). In regard to this last point, Fairclough (1992) distinguishes three main ways in which discourses construct social reality: "the identity function relates to the ways in which social identities are set up in discourse, the relational function to how social relationships between discourse participants are enacted and negotiated, the ideational function to ways in which texts signify the world and its processes, entities and relations" (p. 64). The author establishes therefore a clear connection between dialogue and identity through the first constructive function of discourse.

Arguably, du Gay's (1996) definition of discourse provides an insightful perspective to explain how identities are discursively constructed. The author defines discourse as "a group of statements which provide a language for talking about a topic and a way of producing a particular kind of knowledge about a topic" (du Gay, 1996, p. 43). The first half of the definition clearly brings forward the nature of discourse as a *tool* that enables individuals to realize a certain activity, while the second half specifies this activity as sense-making, so that discourse emerges as a *tool for sense-making*. This means that individuals can employ discourses as a resource to make sense of the reality that surrounds them. However, since discourse has been defined as an activity of social construction, the sense-making activity that discourse consists of does not produce mere representations of the world, but rather an ontological construction of it: discourse constructs social reality by making sense of it. Consequently, identities become one of the contingent objects within one's own social reality that discourse can construct. Specifically, discourse constructs identities by making sense of them. As a result, far from existing a priori, identities are discursively constructed. In regard to the specific case of gendered identities, this means that "people, through their linguistic (and non-linguistic) behaviour, produce rather than reflect a priori identities as 'women' and 'men' in particular historical and cultural locations, although these produced identities are often viewed as natural, immanent, and transhistorical" (Lazar, 2007, p. 150).

Crucially, these considerations on identity and discourse add nuance to the social interactionist model of consumption discussed in the previous section (*Section 2.1*) by providing a more comprehensive understanding of how individuals guide those judgments of congruency/discrepancy that consumption has been defined to consist of. When individuals assess the congruency of a product's symbolic meanings, they measure it against the project of a discursive construction of their identity that Giddens (1991) calls biography, so that a certain consumption will be declared congruent in the sense that its symbolic meanings allow for a congruent narration of one's own biography. As a result, congruency, as well as gender schematicity, are not a property of the product's meanings as such, but of the discursive structure of identity that these meanings allow to construct. Giddens' (1991) theory of the project of the self asserts in fact that contingent behavioral decisions need to be *interpreted within* one's own biography in order to maintain a congruent narration of self-identity. Specific situations (or consumptions) need to be discursively constructed as congruent to be able to integrate with one's own biography and congruently connect an individual's past experiences with her/his future through the present circumstances. Crucially, both the congruency and the gender-schematicity that individual construct discursively are central to one's own identity because, as Giddens (1991) puts it: "a person's identity is not to be found in behaviour, nor -- important though this is -- in the reactions of others, but in the capacity to keep a particular narrative going" (p. 54). As a result, social studies of automobility should not only pay attention to how drivers discursively make sense of their patterns of mobility in specific instances, but also to how these meanings are constructed as congruent with the drivers' narrated biographies.

Lastly, these considerations related to the discursive construction of identity reveal discourse as the tool that individuals can use to make sense of consumption in novel ways. Since the symbolic meanings of a product have been defined as situated constructions (*Section 2.1*), and congruency has been defined as a characteristic of discourse, individuals can utilize discourse to redefine the symbolic meanings associated to a certain consumption by discursively making sense of them in ways that redefine them as suitable for a congruent and gender schematic construction of one's own gender identity. This is to say that individuals can make use of different discursive resources such as performative praxis or verbal explanations to attribute novel meanings to products, so that the newly redefined consumption will allow for the construction of a gender schematic identity discourse. Practically, this means that hegemonic masculinities could for example transform a traditional feminine consumption into a tool to construct a congruent discourse on their normative gender identity by verbally constructing it as a manly activity or by utilizing it in conjunction with 'normatively male' activities. Congruence and gender schematicity are therefore not judged unanimously by a homogeneous social audience on the basis of shared product stereotypes, but rather can be discursively constructed by the subject by utilizing appropriate discursive resources.

2.3. Gender, automobility and hegemonic masculinities

Several social studies of automobility have argued against the adoption of what is defined as a traditional instrumentalist approach to the study of automobility (Schuitema, Anable, Skippon, & Kinnear, 2013; Sovacool & Axsen, 2018; Steg, 2005). Specifically, this approach is accused of supporting a naïve understanding of automobility through the implementation of a restrictive analytical framework in the form of an exclusive focus on instrumental factors to explain mode of transport choices coupled with the assumption of a consumers' lucid and calculating rationality to interpret motivations for car use. Consequently, as individuals are assumed to orientate their mobility choices toward the most financially convenient and the least time-consuming mode of transportation, car use comes to be explained in terms of instrumental considerations that depict consumers preferring automobility mainly, if not solely, for its practical convenience in relation to speed, flexibility or safety. Studies employing a symbolic interactionist approach to the study of automobility, however, refuse to embrace what is defined as a reduction of automobility to a practical technology to move from A to B and argue in favor of the significance of non-instrumental considerations both as explanation and motives of car use, asserting that "people do not only drive their car because it is necessary to do so, but also because they love driving" (Steg, 2005, p. 160). Drawing upon Dittmar's (1992) tripartite model of material possession, authors employing a symbolic interactionist approach argue that individuals attach three distinct types of symbolic meanings to cars: instrumental, social, and affective (Schuitema et al., 2013; Sovacool & Axsen, 2018; Steg, 2005). These different structures of meanings help consumers to make sense of their mobility patterns and, as such, also function as motives for them to embrace or discard car use. Instrumental meanings refer to the utility and convenience that individuals attach to the use of a car. Social meanings are defined as describing the role that car use plays within the social construction and enactment of an individual's identity. Affective meanings refer instead to the emotions evoked by driving a car.

It is important however to cast a critical eye on the static distinction between instrumental and non-instrumental meanings (i.e. social and affective) traced by these studies. Firstly, the account seems to rely on a problematic differentiation between instrumental and non-instrumental discourses, whereby it is not completely clear why discourses that relate to cars as a convenient or inconvenience technology represented by instrumental meanings should not be considered as assuming social or affective significance. Similarly, it is not clear to what extent the feelings that people may experience in connection to car use might be considered independent from the social significance that those emotions assume within the construction of one's own identity. Nonetheless, this account provides an insightful analytical framework to the current study as it calls attention to the significance of the symbolic dimensions of automobility meanings, allowing for a symbolic interactionist analysis of car use that understands automobility as a type of consumption that individuals utilize to sustain and foreground a certain version of their situated self-concept. In line with this, Sovacool and Axsen

(2018) define cars as a means of identification, while Heffner et al. (2006) contend that transport vehicles contribute to processes of identity-formation, since individuals “recognize a ‘fit’ (or lack thereof) between themselves and their vehicles [...], stereotype themselves based on the vehicle they own [...] and make fairly significant deductions about a person based on the automobile he [...] owns” (p. 9). While a simplistic use of the product stereotyping argument already addressed in *Section 2.1*. should be refuted, automobility is identified as a discursive resource for the narrative construction of one’s own self-concept. Additionally, some of these authors call attention to the gendered dimension of these dynamics, so that passenger vehicles may reflect, reinforce, or question narratives of drivers’ gender identities. Following Sovacool and Axsen, (2018), passenger vehicles are understood as polysemic entities embedded in “a contested social space populated by overlapping competing and complementary frames” (p.732) and therefore able to evoke and be interpreted through multiple frames of meanings, with gender being one of them. Following the example of Hanson (2010), one way to consider the gendered dimension of automobility is to reflect on automobility shapes gender and how gender shapes automobility.

To this regard, a body of quantitative studies has measured the gendered differences in travel patterns finding that, on a daily basis, women travel less and are less likely to use cars than men.⁴ Considering that traditional gender roles prescribe patriarchal notions of mobility and immobility, whereby femininity is traditionally constricted to domestic spaces and prescribed restricted movement, while public space and expanded movement are conceived as the natural masculine “habitat” (Davidson & Freudenburg, 1996; Hanson, 2010), these studies seem to provide supporting evidence to claim that automobility might sustain and foster normative scripts of masculinity. Arguably, however, these results rest on a simplistic view of gender that fails to consider that contemporary gender scripts characteristic of post-modern societies might have changed from traditional standards to the point where essentially equating mobility with power, and immobility with lack of power, should be avoided (Gilbert, 1998). Lastly, these studies overlook that social inequalities rely on intersectional structures of power that cannot be reduced to an exclusive focus on gender (Lazar, 2007; Levon et al., 2017).

From a symbolic interactionist prospective, however, automobility might evoke hegemonic scripts of masculinity not only for the simple fact that it affords mobility to its owner, but also through the gendered connotations of symbolic meanings attached to car use. Hennighausen, Hudders, Lange and Fink’s (2016) empirical study attests, for instance, the role that luxury vehicles play in reinforcing perceptions of men’s social status and “mate-value” to women while favoring them in “intrexual competitions” since “male participants perceived a man who displayed conspicuous consumption of a luxury car more as a rival and a match poacher and less as a friend relative to a man who displayed a

⁴ Hanson (2010) provides a comprehensive review of this line of research and its results.

nonluxury car" (p. 8). In this sense, this study illustrates how automobility might support the construction of hegemonic masculinities through symbolism of competition and sexual prowess. Yet, in this case, it is arguably the authors who most strongly perpetuate the normativity of such results through simplistic interpretations of masculinity and by advising marketers to implement these normative gendered scripts in advertisement through the representation of competitive contexts (Hennighausen et al., 2016).

It is, however, interesting to notice that representations of masculinity in connection with similar hegemonic discourses seem to have become the dominant paradigm within car advertisements, at least in some countries.⁵ Shin, Hallett, Chipman, Tator and Granton (2005), for example, report a high prevalence of unsafe driving representations in North American automobile commercials, mainly in the form of fast and inattentive driving, to the point where they recognize the tendency to advertise automobiles by showcasing the vehicle's performance as a general industry trend. Drawing upon this, Redshaw (2018) argues that the symbolic discourses evoked by these dominant representations promote images and values connected to what is conceptualized as 'combustion masculinity':

"What I have referred to as "combustion" masculinity is the bursting, spurting speed and power indicating high performance demonstrated and expressed in various media, including representations of cars and their use. Combustion, or "fire power," is explosive and is associated with violent excitement, agitation, or discontent. It requires ignition or rapid oxidation and the constant burning of fuel. [...] Combustion power is noisy, invasive, and a dominating force capable of great destruction; it is both the source of power and an expression of power" (Redshaw, 2018, p. 89).

In this sense, the typical representation of combustion masculinity in advertisements is reflected in the depiction of a single man with no passengers driving fast and inattentively on a road with no other cars (Redshaw, 2018). As a consequence, a normative connection between masculinity and a risky and careless driving style based on accentuating speed and aggressiveness is reinforced, while any association between alternative values, such as safety and attentiveness, and male drivers is omitted.

Yet, it should be highlighted that automobility can surely be represented in connection with less normative scripts of masculinity, especially considering the variety of cultural meanings associated to automobility by different cultures. Watson, Lavack, Rudin-Brown, Burns and Mintz's (2010) study, for instance, finds that safety messages recur more frequently in Canadian automobile commercials than depictions of aggressive driving. Nevertheless, considering the social pressure to enact performances of gender-appropriate behavior (Steg, 2005), and that consequences of gender-norm transgressions might tend to be more negative for men than women (Gal & Wilkie, 2010), men might restrict their mobility choices to patterns that best conform to hegemonic scripts of masculinity.

⁵ It should be noted that some countries have regulated the content of car advertisements, explicitly banning depictions of dangerous and irresponsible driving. The Committee of Advertising Practice (2020) provides an example of how the Advertising Standards Authority regulates the content of car advertisements in the UK.

Following Redshaw's (2018) recognition of combustion driving as a characteristic of hegemonic masculinity, as combustion styles of driving perpetuate the image of a carefree man who seeks risk and danger and flaunts the noisy and invasive explosive force of combustion that is both the source of and the expression of power, men might be encouraged to enact combustion styles of driving. For this reason, the following sections shed light onto how transitioning to new automobility patterns, such as EVs and AVs, might weaken, maintain, or strengthen hegemonic scripts of masculinity.

2.4. Gender, environmentalism, and EVs

Considering the wide acceptance of the association between EVs and environmentalism to the point where EVs are commonly described as a 'pro-environmental technology' both by corporate advertising and governmental policies (Heffner, Kurani, & Turrentine, 2007), it is important to highlight the discursive and situated nature of the processes that have contributed to constitute EVs as "green" vehicles promoting sustainable transportation, and electric engines as zero-emission engines advancing renewable energy sources.⁶ Scholars have, in this sense, supported the very same association: a connection between EVs and discourses of environmentalism is in fact well established in the literature, to the point where environmentalism has been recognized as a denotative characteristic of EVs and EV adoption as a kind of pro-environmental behavior (Heffner et al., 2007). Accordingly, as Rezvani et al.'s (2015) metanalysis shows, EV adoption has often been operationalized, *inter alia*, through the quantitative correlation between consumers' pro-environmental attitudes and intentions to purchase an EV. Axsen, TyreeHageman and Lentz (2012) indicate, for instance, a positive correlation between environmentalism and EV adoption, so that the stronger an individual's pro-environmental attitudes are, the more EVs will appeal to them. Other scholars have highlighted how the demographics of early EVs adopters match the generalized profile of an environmentalist, mainly in terms of medium-high income and a relatively high level of education (Mohamed et al., 2016; Sovacool, Kester, Noel, & Zarazua de Rubens, 2018; Vassileva & Campillo, 2017). The stability of the EVs-environmentalism binomial has also been supported through a symbolic interactionist approach: "people who believe that a 'green' image fits with their self-image are more likely to have positive perceptions of EVs" (Schuitema et al., 2013, p. 48). Drawing upon this, Kahn (2007) shows that the "greeness" of the community a person is part of significantly influences EV adoption rates: members of politically "green" communities in California tended to purchase EVs more often, as environmentally sustainable vehicles provide them with the symbolic resources to construct a "green" self-narrative which was anticipated to be well received by their communities.

⁶ Axsen et al. (2012) define a so called pro-environmental technology as a technological artifact that "can be perceived by consumers as having pro-environmental attribute, regardless of actual life cycle impacts" (p. 64). Electric vehicles and solar panels belong for example to pro-environmental technologies.

Yet, the importance that symbolic interactionism attributes to the congruity between identity and consumption implies that those who do not want to be affiliated with environmentalism are bound to perceive the environmentalist meanings that are so deeply associated with EVs as incongruent with the project of discursive construction of their identity. EVs require not only adaptations to a new practical experience of driving (e.g. charging routines), but most importantly a cognitive effort in terms of a reconsideration of the social dimension of being a driver: “the individual might be compelled to consider an entirely new lifestyle sector, potentially involving the development of new aspects of self-concept, engaging new social groups, and/or learning new skills and expertise” (Axsen et al., 2012, p. 71). Drivers might therefore be concerned with how the adoption of these new patterns of consumption might symbolically impact the construction of their self-identity (Graham-Rowe et al., 2012). Specifically, previous literature recognizes two main negative stereotypes associated with EVs drivers. In some cases, EVs drivers were perceived to be people living slow-moving, dull, and boring lifestyles, often compared to housewives or retired couples (Bennett & Vijaygopal, 2018). In other cases, stereotypes assumed a distinctly political meaning, with EVs being described as “tree huggers” and radical environmentalists (Bennett & Vijaygopal, 2018; Graham-Rowe et al., 2012; Rezvani et al., 2015). Accordingly, some studies found that EVs drivers occasionally experienced feelings of embarrassment caused by the vehicles (Burgess, King, Harris and Lewis, 2013; Graham-Rowe et al., 2012; Schuitema et al., 2013). These results, however, are likely to be highly dependent on the vehicle’s brand since the meanings that might be attached to a specific EV are influenced both by the manufacturer’s brand image and the type of vehicle that is produced (e.g. subcompact, SUV...).

Additionally, scholars have called attention to the gendered dimension of the symbolic complications connected to EV adoption for hegemonic scripts of masculinity. Franz-Balsen (2014) recognizes these complications as arising from the conception of EVs as a pro-environmental technology which generates a fundamental dissonance between normative notions of masculinity and discourses of environmental sustainability. Specifically, the author identifies a conflict of values between the competitiveness and aim for short-term success of hegemonic masculinities and the intra- and intergenerational respect and care proposed by sustainability. At the same time, the normative association between femininity, care, and nature, supported not only by patriarchal gendered scripts but also by some essentialist forms of ecofeminism (Pease, 2019), constructs femininity as intrinsically more compatible with discourses of sustainability. In line with this, Brough et al., (2016) call attention to the existence of a conceptual association between ‘greenness’ and femininity taking the form of a “green-feminine stereotype” that might sustain the gender gap in sustainable consumption by encouraging men to “to avoid or even oppose green behaviors in order to safeguard their gender identity” (p. 568). Several studies have corroborated this hypothesis by showing that women generally express a higher level of concerns about environmental risks than men do (Davidson & Freudenburg, 1996), are more likely than men to endorse pro-environmental attitudes and more frequently engage in

pro-environmental behavior (Desrochers, Albert, Milfont, Kelly, & Arnocky, 2019). Similarly, individuals expressing more concern about climate change were perceived as more feminine than individuals expressing less concern (Swim & Geiger, 2018). Following these results, some scholars have advised marketers on gendered guidelines that seem to reiterate and leave unquestioned the normative account of environmentalism as a demasculinizing practice. Hwang and Choi (2017), for example, recommend to target “green” advertising specifically to women through a gendered segmentation of communication strategies to enhance effectiveness, while Brough et al. (2016) argue that “men’s inhibitions about engaging in green behavior can be mitigated through masculine affirmation and masculine branding” (p. 580).

Yet, it is important to highlight that reducing meanings of EVs to discourses of environmentalism greatly oversimplifies both how EVs drivers make sense of their consumption and how EVs might contrast with scripts of hegemonic masculinities. Scholars have in fact attested that some EVs owners grounded their decision to purchase an EV in discourses that exceed the logic of pro-environmental behavior, such as expected fuel savings (Hidrue et al., 2011) or the excitement to try the new and innovative technology characteristic of these vehicles (Vassileva & Campillo, 2017). Moreover, besides a “green” identity, EVs can signal users’ agreeableness, conscientiousness, and openness to experience (Schuitema et al., 2013) or a forward-thinking, modern and technology-oriented personality (Rezvani et al., 2015; Skippon & Garwood, 2011). This heterogeneity of meanings is also reflected in the motivations that drivers give to justify their aversion toward EVs, which similarly exceed discourses related to environmentalism. Scholars have indicated that some drivers hold negative perceptions of EVs because they judge some technical characteristics of the vehicles as impediments, such as an assumed lower speed in comparison to internal combustion engine vehicles (ICEs), long charging time, and the vehicles’ relatively short range (Egbue & Long, 2012; Graham-Rowe et al., 2012, Rowe et al., 2012). Crucially, however, these characteristics can also be interpreted as threatening scripts of hegemonic masculinity, and, more specifically, enactments of combustion masculinity. If a moderate speed directly contrasts with the explosive power of acceleration typical of combustion masculinity, charging time and short ranges slow down drivers in a more radical sense. The former forces the construction of charging routines, which pause the driving experience, whereas the latter demands the driver to plan the route in advance by taking in consideration range limitations, which significantly limit the freedom of the driver and often results in ‘range anxiety’.⁷ Arguably, however, these complications might have already been solved by some EVs manufacturers which produce sporty and fast EVs that seem to preserve that explosive energy typical of enactments of combustion masculinity despite featuring an electric engine (e.g. Tesla).

⁷ Range anxiety relates to BEVs and specifically is defined as “the fear of being stranded in a BEV because it has insufficient range to reach its destination” (Egbue & Long, 2012, p. 723).

2.5. Gender, technology, and AVs

Similarly to what social studies of automobility have done in relation to EVs, early studies of AV adoption have quantitatively measured users' perceptions of AVs through questionnaire surveys.⁸ Although the prospective of a reduction in accidents and emissions as well as an improvement in fuel consumption have been repeatedly identified as the main factors fostering positive attitudes towards AVs, these studies have reported significant levels of users' reluctance and apprehension (Kyriakidis et al., 2015). In particular, respondents have expressed concerns about the dangers of driving in an AV, the legal issues of liability in case of an accident and the risks deriving from software hacking (Schoettle & Sivak, 2014). Often disregarding these complications, contemporary societal discourses present AVs as the "technological fix" that promises a safer and more efficient road transportation systems. Weber and Kröger (2018) argue that these discourses rest on deterministic understandings of the relationship between technology and the social, whereby technology is reduced to its technical and instrumental value and ascribed a unidirectional and absolute power to shape societal structures. The aim of this section is therefore to call attention to the socio-cultural complications connected to the transition to AVs, and, specifically, to analyze how AVs might impact gendered enactments of hegemonic masculinities. For these reasons, the current research adopts a constructivist understanding of technology which rejects the deterministic capacity of technology to unilaterally determine the social, and recognizes it instead as socially constructed and situated (Wajcman, 2000). Specifically, this theoretical stance rests on the notion of the *socio-technical* that conceives technology as a constitutive part of a dialectical relation of co-construction with the social, according to which "technology is never "just" technical or "just" social. Rather, the relationship between technology and society is a densely interactive seamless web" (Faulkner, 2001, p. 82). Crucially, these considerations shed light on a gendered dimension of technology, and, more specifically, on the interdependence of shifts in gender and technology discourses that takes the form of a "a two-way mutually shaping relationship between gender and technology in which technology is both a source and consequence of gender relations and vice versa" (Faulkner, 2001, p. 81).

Interestingly, Dant's (2004) conceptualization of the *driver-car* construct represents an exemplary application of the notion of the socio-technical to the specific case of automobility. The driver-car is defined as the socio-technical construct formed by the unity of a driver and a vehicle and originates as the result of the aforementioned dialectical relation of co-construction between technology and the social insofar as "neither the human driver nor the car acting apart could bring about the types of action that the assemblage can; it is the particular ways in which their capacities are brought together that bring about the impact of the automobile on modern societies" (Dant, 2004, p.

⁸ Kyriakidis, Happee, and de Winter (2015) provide a detailed overview of the main results presented by early studies on consumer perceptions of AVs.

62). Consequently, the study of automobility cannot be reduced to the technological analysis of transport vehicles nor to the sociological investigation of driver experiences, but, rather, it needs to examine how the social experience of driving is extended or affected by technology as well as how the technological evolution of driving is extended or affected by the social. This especially applies when new patterns and sociotechnical practices of automobility are analyzed. The aim of this section is therefore to shed light onto how the gendered experience of driving might be extended or affected by AVs, as well as how the technological dimension of AVs might be extended or affected by social structures of gender.

Firstly, the technological novelty and innovation that often characterizes AVs as futuristic vehicles might foster normative enactments of masculinity: a number of gender studies of technology have in fact called attention to “men’s love affair with technology”, arguing that technology and masculinity are traditionally connected by normative scripts of gender (Kleif & Faulkner, 2003; Mellström, 2004). These authors contend that since “boys are more likely than girls to be socialized into hands-on tinkering with mechanical devices” (Kleif & Faulkner, 2003, p. 297), normative role divisions construct a masculine interest for technology as “natural”. Technology becomes therefore a normatively masculine option for men, so that male drivers could possibly embrace AV ownership to narrate their masculine passion for technology and innovation. However, complications arise when considering that the “old masculine love affair with automobile technology” has rested on gendered dynamics of aggressiveness, risk-taking and speed (Balkmar & Mellström, 2018). In this sense, AVs might constitute a threat for enactments of combustion masculinity, insofar as automatization brings about important redistributions of power balances within the socio-cultural system of driving (Weber & Kröger, 2018). By reducing human physical involvement required in driving and regulating the driving style through the enforcement of a safe and legal regime of mobility, not only do drivers lose the possibility of self-expression through driving, but they are also potentially limited to the more passive role of passengers (Balkmar & Mellström, 2018; Collingwood, 2018). More importantly, however, considering that Wajcman (1991) recognizes a normative masculine approach to technology as based on physical toughness and mechanical skills or “the professionalized calculative rationality of the technical specialist”, neither of these two scripts seem available to AVs “drivers”. In this sense, the technological innovation characteristic of AVs might support a process of “demasculinization” of automobility, a prediction that seems to be validated by the exemplary case of truck drivers. Starting by acknowledging the prominence of the cultural image of truck drivers as a normative prototype of masculinity who, by transporting heavy cargo on long distances for an extended amount of time, “demonstrate determination and bravery in the face of difficulty and danger” (Collingwood, 2018, p. 261), Collingwood (2018) argues that self-driving trucks might endanger enactments of gender identity by restricting drivers’ duties to the monitoring of the vehicle. Considering that social scientists have traditionally recognized automobility as an important aspect of “doing masculinity” and driver’s

masculinity as drawing on the ability to manually steer and control the vehicle as a technological object (Manderscheid, 2018), self-driving trucks endanger the position of power traditionally held by truck drivers as they demand to give up the manual control over the vehicle. In light of these complications that AVs might generate for hegemonic masculinities, AV adoption could potentially advance less hegemonic scripts of masculinity.

Yet, scholars have endorsed the option of a “regenderization” of automobility as a more plausible consequence of AVs implementation (Laurier & Dant, 2011; Weber & Kröger, 2018). Specifically, these authors argued that the automatization of driving will not only allow passengers to engage in other activities and provide more space for social interaction, but it will also crucially prompt a reorganization of bodies and power relations within the vehicle, as cars will come to be more clearly disclosed as social spaces. Consequently, in this newly constructed social space that is the car, “there is no reason to expect [...] the principal gendering of the symbolic order to disappear simply because the driver’s position in the car disappears” (Manderscheid, 2018, p. 38). In this sense, AV adoption could sustain the perpetuation of scripts of hegemonic masculinity.

3. Methodology

3.1. Method

The current study examines videos published on Tesla's YouTube channel through MCDA. Generally, MCDA was deemed the most appropriate research methodology to answer the research question for three main reasons. Firstly, considering the unsuitableness of quantitative methodologies to adequately process complex connotative meanings of visual and textual data (Brennen, 2017), a qualitative design was selected. Secondly, MCDA was chosen over other qualitative methodologies because, while interviews or focus groups would shed light on consumers' perceptions of EVs and AVs, attention is here directed to the discursive dimension of representations and how these are strategically constructed and displayed by the brand to narrate masculinity in relation to new modes of automobility. Lastly, unlike other forms of content analysis, MCDA allows to conduct in-depth examinations of the ideological depth of gendered meanings without neglecting the multimodal nature of representations: MCDA "takes into account the embeddedness of media texts both in technological artefacts and in social relationships and, hence, seeks to integrate the multi-modal with the critical analysis of discourse" (Chouliaraki, 2006, p. 153). In light of the variety of theoretical and methodological approaches with which scholars have made sense of both the critical and the multimodal nature of this type of discourse analysis, a clarification of the meanings that the current research assigns to both of these dimensions is necessary.

Scholars have traditionally defined the critical stance adopted by CDA as the analytical endeavor aimed at revealing the discursive and ultimately linguistic nature of social and cultural processes and structures (Fairclough, 2001; Wodak & Meyer, 2001). In this sense, CDA scholars have conceptualized discourse and social reality as connected through a dialectical relationship of reciprocal co-construction which ascribes constructive power to the former, so that social reality is understood as resting on discursive foundations (Fairclough, 1992). Following this tradition, this study conceives language as a form of social practice that can in this sense be *critically* analyzed to examine the discursive processes that construct gendered identities. In particular, similarly to what Lazar (2007) defines as feminist critical discourse analysis, this study adopts a feminist approach to CDA which aims to shed light onto "the complex, subtle, and sometimes not so subtle, ways in which frequently taken-for-granted gendered assumptions and hegemonic power relations are discursively produced, sustained, negotiated, and challenged" (p. 142). In line with the attention that CDA has traditionally invested to reveal the discursive nature of power relations and reproduction of structures of inequalities (Ainsworth & Hardy, 2004; Jones, 2012; Machin & Mayr, 2012), this study utilizes MCDA to examine the strategies that texts employ to discursively categorize people, actions and processes under intentionally chosen frames of gendered meanings to construct relations of power. Accordingly, gender is conceptualized as an ideological structure that is performed and renewed through discursive constructions enacted by individuals, societal institutions, and social discourses

(Lazar, 2007). Unlike more quantitative forms of content analysis that have been utilized in other analyses of car advertisements (Shin et al., 2005; Watson et al., 2010), MCDA allows to *critically* investigate how corporate representations contribute to transform, question or sustain ideological relations of power in relation to gender. Attention to ideology is particularly relevant considering that some studies have advised car manufacturers to establish gendered dialogues about EVs (Axsen et al., 2012; Graham-Rowe et al., 2012; Rezvani et al., 2015) and AVs (Hohenberger et al., 2016) with male audiences. In conclusion, following Roderick (2018), the term *critical* is taken to signify a “de-naturalizing” research agenda: the analysis carried out by this study is defined as critical as it sheds light onto the values, ideas, inferences and taken-for-granted assumption that have been foregrounded or backgrounded by the discourse to make certain gendered structures of power appear as natural and self-evident.

Scholars have argued in favor of a paradigmatic shift towards multimodal analyses of discourse by asserting that meaning is constructed by multiple semiotic modes coexisting within texts, rejecting in this way the communicative privilege that CDA had traditionally assigned to language (Kress & van Leeuwen, 2006; Machin & Mayr, 2012). Drawing upon this, this study adopts a multimodal approach to the analysis of discourse to discard the traditional logocentric understanding of communication as “profoundly monomodal and therefore blind to how communicative action is rarely, if ever, accomplished through a single semiotic mode” (Roderick, 2018, p. 161). In contrast, multimodality is here defined as a holistic approach to discourse analysis that investigates how meaning is constructed as the result of communicative and symbolic interactions between multiple semiotic resources (Jones, 2013; Lazar, 2007). In this sense, the current research is understood as conducting *multimodal* analysis as it investigates how meaning arises from the simultaneous co-deployment of multiple and different semiotic resources and not as the outcome of independent semiotic dynamics employed within autonomous semiotic modes (O’Halloran et al, 2011). Following Roderick (2018), such an account of multimodality rejects the traditional static notion of semiotic mode as a discrete channel of communication that functions independently and instead adopts Norris’ (2004) poststructuralist definition of a mode: “modes are not bounded units. A mode is a loose concept of a grouping of signs that have acquired meaning in our historical development” (p. 152).

This study focuses on both the visual and the verbal mode, examining what Harrison (2008) describes as a verbal-visual version of multimodal discourse. In particular, the analysis is methodologically executed through the examination of the “verbal-visual correspondence”, referring to “the tight coupling of words, images, and shapes into a unified communication unit [where] ‘tight coupling’ means that you cannot remove the words or the images or the shapes from a piece of visual language without destroying or radically diminishing the meaning a reader can obtain from it” (Horn, 1999, p. 27). Accordingly, the object of this multimodal analysis is recognized in what Horn (1999) defines as “visual language”, a multimodal entity arising from the interactions generated by the co-

deployment of both verbal and visual semiotic resources within the same text.

3.2. Sample

A corpus consisting of 48 videos of approximately 1-2 minutes in length was selected for analysis from Tesla's official YouTube channel (a complete list of the analyzed videos can be found in *Appendix C*). Purposive sampling guided the choice of the car manufacturer: the researcher decided to sample Tesla because the company represents a critical case within the automobile industry as it lies at the intersection of the two modes of automobility that the study sets out to investigate: Tesla exclusively produces EVs, more specifically BEVs, and includes autopilot technology on all of its vehicles. Moreover, the central role that sustainability and safety play within Tesla's brand narrative and the type of vehicles produced (fast sport cars, SUVs, trucks) interestingly result in a combination of potential non-hegemonic and more traditional gendered automobility scripts. In contrast with traditional manufacturers that are progressively investing into EVs while maintaining the production of ICEs, Tesla has recognized sustainability at the core of its brand rationale since its foundation. In the company's impact report published in 2018, Tesla presents its vehicles primarily as fostering the company's mission of accelerating the world's transition to a sustainable system of renewable energy and describes them as part of the Tesla Ecosystem, where, ideally, Tesla BEVs run on green electricity produced by Tesla's solar panel and stored in Tesla's energy units (Tesla, 2018). According to the aforementioned 'green-feminine' stereotype (Brough et al., 2016), such a strongly environmentally-conscious brand image could however complicate Tesla's relations with some male consumers. Nonetheless, the fact that Tesla owners are overwhelmingly male (Sovacool & Axsen, 2018) could indicate the company's ability to orchestrate "appropriate" gendered meanings of new forms of automobility. Specifically, following Hennighausen et al. (2016), traditional hegemonic scripts of masculinity could potentially be evoked by the vehicles' performances (e.g. acceleration, speed), design, and price point (with a starting point of a minimum of € 50.000), elements that contribute to construct Tesla's vehicles as luxury fast sport cars. Lastly, Tesla was sampled because the brand operates internationally in North America, Europe, Asia, Oceania and some countries in the Middle East, and its biggest markets, namely the USA, China, the Netherlands and Norway, spread over three continents (Wagner, 2020b). The brand's international reach allows the researcher to examine if Tesla varies the narration of the transitions to new modes of automobility and the related shifts in gendered scripts in relation to markets situated in different geographical areas and consumer audiences with different cultural backgrounds, as well as whether the brand presents different conceptualizations of masculinity in relation to different markets.

Purposive sampling also guided the selection of the corpus of videos from Tesla's YouTube channel. Following Tesla's own classification of videos into thematic playlists, *consumer stories*, consisting of videos featuring Tesla owners sharing their experiences with their Tesla vehicle, were sampled. In particular, the videos typically open with a close-up shot portraying the owner who, after

having introduced him/herself, goes on describing what he/she likes about the vehicle, the reasons for choosing a Tesla and how and what activities he/she uses the car for. Visually, shots where the owner is shown carrying out a variety of activities with and around the vehicle are alternated with close-up shots where the owner is portrayed talking in the vicinity of the vehicle in a format that resembles an edited video interview. *Consumer stories* were purposely selected over other types of content available on Tesla's YouTube channel (i.e. launch events, model guides, interviews with the company's CEO, and energy production/storage related content) as they were deemed the most insightful to investigate the gendered discourses that Tesla foregrounds and backgrounds in relation to EVs and AVs. Firstly, being professionally edited and scripted videos, Tesla's consumer stories resemble corporate advertisements, which have been recognized as a relevant type of data when analyzing the gendered nature of consumption, as marketers strategically associate their products with gendered values, emotions and framed styles of life (Harrison, 2008; O'Halloran et al., 2011). Secondly, *consumer stories* provide relevant data as the narratives utilized by owners reveal both the frames of meanings that Tesla has an interest in highlighting in regard to their vehicles and how the company envisions Tesla owners. Thirdly, the visual representations of the videos shed light onto how Tesla imagines different owners using its vehicles for different types of activities. In particular, the salience of this type of videos is in the case of Tesla especially justified by the novelty that EVs and AVs represent for the majority of drivers, both in terms of practical driving experience as well as symbolic meanings associated with their consumption. This novelty enhances in fact the role that these videos play in structuring how drivers make sense of the consumption: "when individuals face situations which require unfamiliar roles, they look to product meaning for assistance in fulfilling the new role" (Heffner et al., 2006, p. 11). Lastly, the sampled content gives the author the opportunity to investigate whether Tesla supports the same narrative of sustainable and safe mobility presented in company reports (Tesla, 2018) in more widely accessible texts that do not expressively aim to communicate the brand's social responsibility, such as advertisements or promotional YouTube videos, considering the difference in target audience.

3.3. Procedure and operationalization

Initially, all the sampled videos were downloaded and uploaded onto Atlas.ti, a software for qualitative data analysis. O'Halloran et al. (2011) argue in favor of the use of software technologies to conduct MCDA for multiple reasons. Firstly, digital tools can help enhance the critical dimension of the analysis through visualizations and schemes of correlations that facilitate the exploration of interconnections between various codes, providing clearer insight into trends and results that might not be readily noticeable through paper-based analyses. Secondly, digital tools can similarly enhance the multimodal dimension of the analysis assisting the methodological comparison of meanings produced by different modes since "the software environment allows the analyst to collocate within the one

interface a variety of different analyses in multiple configurations" (O'Halloran et al., 2011, p. 122). Thirdly, unlike paper-based analyses, the use of digital software does not involve an additional level of abstraction from what is actually represented on the screen, ensuring a closer proximity of codes to the original text. Lastly, digital analyses allow the researcher to share the coding and preliminary results more easily for feedback and revisions.

Firstly, the videos were divided into subcategories based on the geographical location of the video, i.e. North America (USA and Canada), Europe (Denmark, Germany, Belgium, Norway, UK), Asia (China, Japan and South Korea), and the type of Tesla featured in the video, i.e. Model X or Model S, to allow for easier cross-sectional comparisons at the last stages of the analysis. In the case of videos featuring non-English speaking owners, original English subtitles displayed on YouTube were added as a note to the videos on the software to allow for a smoother analysis of the dialogues. Subsequently, the corpus was watched in its entirety. Following Gleeson's (2011) approach, thematic analysis was utilized during this preliminary examination to ensure a general familiarity with the data. Specifically, attention was paid to both the visual and the verbal aspects of the videos and notes were taken in regard to general themes, complemented by a short description and detailed points of interest that stood out in the data. At this point, these preliminary themes were examined in relation to each other and their significance in light of theoretically driven consideration was assessed.

Successively, each video coded in the program. At first, open codes were attached to the videos as an initial classification of a specific segment of a video. At this stage, no code was derived *a priori* from the theory to leave room for the themes to emerge from the data. To ensure in-depth understanding both of how meaning is expressed in specific modes and how modes relate intersemiotically, verbal and visual aspects of the videos were taken into consideration within different rounds of analysis. The relative short length of the videos facilitated the process of watching a video multiple times. Firstly, attention was directed to spoken dialogues and how these structure gendered meanings of automobility in a specific video: the researcher created open codes by analyzing how owners verbally describe themselves, the vehicle, and the activity of driving. To do this, the denotative and connotative dimensions of the mentioned entities, people, places, activities, and objects were analyzed. Successively, the video was watched again, and attention was directed to visual representations and how these structure gendered meanings of automobility: the researcher created open codes by analyzing how the owner, the vehicle and the experience of driving are visually represented. To do this, the denotative and connotative dimensions of the people, places, activities, and objects represented as well as a set visual features of the videos that Machin and Mayr (2012) present as crucial elements of visual communication (e.g. angle, gaze and poses) were analyzed. Lastly, the video was watched once again while the researcher focused on the interaction between textual and visual meanings and how these could be purposively coordinated by corporate interests to advance certain gendered images of new forms of automobility while silencing others. At this point, notes were

added to specific segments of the video to comment on the intermodal construction of meanings. Crucially, this last round of intermodal analysis is the most important when conducting MCDA, as it ensures that meanings are analyzed as intersemotically constructed through the interactions of multiple modes rather than as the independent outcome of individual ones. Generally, the strategic guidelines that EVs and AVs brands have been advised to follow in order to establish an appropriately gendered communication with male audiences and avoid possible gendered complications in the symbolic meanings of consumption were taken as guiding the operationalization of gendered discourses of automobility in the sample. It is important to highlight, however, that the codes that were attached to the videos depended on the specificity of each representation, giving priority to *how* a specific kind of discourses was presented in each video.

Considering the advice to advertise EVs to men by replacing discourses of environmental sustainability with a focus on technological advancements (Graham-Rowe et al., 2012; Rezvani et al., 2015), videos featuring male owners showcasing the technological innovativeness of their vehicles (e.g. touchscreen, Tesla app) and/or shots portraying male owners interacting with the car's touchscreen, the Tesla app or other technological devices were coded as foregrounding normative scripts of masculinity. Similarly, since technological expertise has been recognized as traditionally connected to masculinity by normative scripts of gender (Kleif & Faulkner, 2003; Mellström, 2004), videos featuring male owners emphasizing their passion for technology and the importance that technology plays in their professions (e.g. computer engineers) were coded as foregrounding hegemonic scripts of masculinity. Additionally, since Bennett and Vijaygopal (2018) propose to address negative product stereotypes through the exploitation of traditional masculine symbolism and Hohenberger et al. (2016) recommend that "to foster positive emotions in men, policy or automaker campaigns should target them by activating status motives" (p. 381), videos featuring male owners in connection with traditional symbols of hegemonic masculinity (e.g. beer brewing facility, baseball stadium) and/or highlighting positive social connotations of early adoption of new technology (e.g. male owner describing that people know him because of his Tesla) were coded as characterizing Tesla vehicles in relation to normative scripts of masculinity. In light of what Redshaw (2018) defines as the typical representation of combustion masculinity, visual depictions of a single man with no passengers driving fast on a road with no other cars were coded as visually representing hegemonic scripts of combustion masculinity. Following Hennighausen et al. (2016), videos featuring male owners describing Tesla's vehicles as luxury fast sport cars and/or shots emphasizing Tesla's high speed and acceleration (e.g. close-up shots of the speedometer or fast-moving scenery) were coded as employing hegemonic scripts of combustion masculinity.

Contrarily, following a line of research generally advising brands to target environmentally friendly consumptions to female customers in light of the aforementioned 'green-feminine' stereotype (Brough et al., 2016; Hwang & Choi, 2017), videos featuring male owners describing their decision to

purchase a Tesla as an act of care for the environment and/or emphasizing the importance that environmental sustainability plays in their lifestyles (e.g. house running on sustainable electricity produced by solar panels) and/or profession (e.g. engineers working with sustainable energy sources) were generally coded as foregrounding non-normative scripts of masculinity. Similarly, considering that Collingwood (2018) and Weber and Kröger (2018) have presented autopilot technology as possibly creating gendered complications by hindering enactments of combustion driving, videos representing men interacting with the vehicle in autopilot mode or describing their positive experiences with autopilot were coded as advancing less normative scripts of masculinity. Lastly, following Scholz and Heilmann (2019) problematization of care in relation to hegemonic scripts of masculinity, videos portaying men in connection with discourses of care, either through visual representations of men carring out activites of care (e.g. driving children to school, kissing children) or verbal constructions of care, were taken to generally emphasize non-normative scripts of masculinity. Yet, in the case of fathers, these representitons were coded as foregronding more normative scripts of masculinity, insofar as care is implied by the patriarchal notion of the bread-winning father (Scholz & Heilmann, 2019).

Since scholars that have applied MCDA to the study of identity have emphasized the significance of the intersections between gender and other categories of social identities (Lazar, 2007; Levon et al., 2017), scripts of gender were operationalized in connection with other systems of social categorization, specifically age and ethnicity. In particular, age was operationalized through different age categories (i.e. “20s”, “30s”, “40s-50s” and “60s”) that have been assigned to each owner as a code. Drawing upon the social constructivist approach to the study of age adopted by Andrews (1999) and Gullette (1997), age was conceptualized as a social construct rather than a strictly quantifiable phenomenon. In this sense, this study sees age “as arising out of social interactions and shared processes of meaning-making [...], that is not to say that there is no biological change with aging, but that the meaning of these changes is culturally and socially constructed” (Ainsworth & Hardy, 2004, p. 232). As the research did not have access to the biological age of the owners, the age-based categorization was guided by the researcher’s own interpretations not only of how the owners physically looked in the video, but also of how their age and lifestyle was symbolically constructed through both verbal and visual discourses and their denotative and connotative dimensions. Fatherhood was for example taken to symbolically construct male owners as older, while certain professions (e.g. DJ) were taken to symbolically construct male owners as younger.

Once the entire corpus had been coded following these procedures and operationalizations, open codes were examined in relation to one another, and similar codes were merged to form more general axial codes. These, in turn, were similarly examined and re-grouped to form more comprehensive selective codes. Each code was then interpreted in light of the theoretical framework and given a definition. Additionally, codes referring to the same area of meaning (e.g. masculinity,

Tesla as EV, Tesla as AV...) were merged into larger thematic families and were assigned the same color to facilitate clarity in the software interface. The resulting coding scheme was shared for feedback and revised accordingly. The corpus was then re-coded in its entirety with the revised coding scheme. A complete overview of the coding scheme can be found in *Appendix A*.

Once the coding process was completed, frequencies were analyzed to calculate the more quantitative dimensions of the results. Successively codes were compared to one another with the aim of identifying macro themes illustrating gendered scripts and meanings that are generally foregrounded or backgrounded in the entirety of the corpus. These macro themes were once again compared to one another in order to establish how different themes relate to each other. Eventually, a set of themes was selected to be presented in the results section of the paper and illustrated through examples of both textual (extracts of dialogues) and visual (screenshots) data taken from the corpus.

3.5. Reflexivity

Lastly, it is crucial to call attention to the importance of reflecting on the epistemological implications of the results of this study. Accordingly, this section aims to further elaborate on the conception of *critical* analysis adopted by this study, expanding its significance beyond the strictly methodological considerations exposed in *Section 3.1*. In this sense, following Lazar (2007), Mackay (2017) and Roderick (2018), the significance of the term *critical* is extended on a epistemological dimension, insofar as conducting a critical research is understood as openly engaging with epistemological considerations that problematize the relationship among the researcher, his or her ideological stance and the results of the study.

CDA scholars have argued against the epistemological assumption of the researcher's disinterested impartiality that has traditionally led to the adoption of what is described as an ideologically neutral and "scientific" stance for two main reasons. Firstly, feminist CDA scholars have grounded their argumentation in the conception of CDA as a practice of socio-political emancipation. Lazar (2007), for example, argues that CDA research must be openly committed to critiquing discourses sustaining the patriarchal social order, so that "critical praxis-oriented research [...] cannot and does not pretend to adopt a neutral stance" (p. 146). Secondly, other scholars have presented more distinctively epistemological considerations focusing on the conceptualization of the researcher as an interpretative "filter", whose socio-historical situatedness inevitably influences the results of the analysis (Mackay, 2017; Roderick, 2018). Specifically, it is argued that the variety of different readings that can be extracted from a text cannot be traced back to the heterogeneity of theoretical or analytical frameworks adopted by the researcher, but, crucially, results as a consequence of the dependency on the larger set of situated socio-cultural codes he or she has access to. As a result, whether explicitly acknowledged or not, critical considerations are contingent upon both the text and the analyst, so that not only results that are considered critically relevant by the researcher might be

dismissed as irrelevant by a particular reader, but also different researchers following the same theoretical and methodological framework might report different results. Drawing upon this, Mackay (2017) defines CDA as a work of interpretation:

“Yes, we can develop ‘systematic’, ‘retroductable’, ‘rigorous’, ‘explicit’, and ‘transparent’ methods by which we undertake ‘empirical investigation’, but, at the end of the day, we must interpret the ‘results’ in order to make sense of them. (We must also put an interpretation of what is and is not relevant into the processes we use to garner ‘results’). We are one of the ‘filters’ through which the questions pass and the ‘results’ come, and each of us is uniquely situated – indeed, embodied – in culture, in time, in place, in history, as well as in our ever-evolving personal narratives” (Mackay, 2017, pp. 556-557).

Following these epistemological considerations, this study does not present its results as the rational outcome of an utterly disinterested and “scientifically” objective analysis, but rather as a work of interpretations stemming from the contingent and situated encounter of the researcher and a corpus of texts. Considering that the critical nature of the analysis has been defined in terms of a “de-naturalizing” activity that aims to reveal the discursive nature of seemingly natural and self-evident structures of meanings (*Section 3.1.*), the same critical stance needs to be similarly applied to the results of the study. It is therefore important to openly present the researcher’s stance in regard to the subject of this study with the scope of allowing the reader to critically question the significance of both the chosen theoretical framework and the results in light of the ideological perspective favored by the researcher. To this regard, it should be noted that I acquired interest in the field of masculinity studies moved by a critical feminist stance towards hegemonic masculinity and normative binary structures of gender. Similarly, I decided to focus on the study of masculinity in connection with transportation studies inspired by a critical stance towards automobility, understood as the socio-material system of intertwined societal and historic actors, practices and institutions that support the societal predominance of car use (Sovacool & Axsen, 2018). Drawing upon these perspectives, I chose the object of the study as I was primarily interested in examining how Tesla manages to discursively combine a brand narrative strongly focused on environmental sustainability with an equally strong masculine brand image. Specifically, I thought that Tesla might conceal meanings of environmentalism that could possibly “feminize” the mobility patterns of hegemonic combustion masculinities through a “overmasculinization” of their vehicles through a combination of discourses of technology and combustion.

In conclusion, I believe that this type of acknowledgment reinforces the critical nature of the study, since “recognizing the place of interpretation does not invalidate our analyses, but in fact, makes them stronger, more democratic, and ultimately, more honest” (Mackay, 2017, p. 565), reminding the reader that the critical nature of this study consists of aiming to “making visible the [discursive] interconnectedness of things” (Fairclough, 1995, p. 36), and not to disclose hidden or repressed truths from the heights of a higher ethical standpoint.

4. Results and discussion

In order to present the results of the analysis in an insightful manner and respond to the research question, the current section is divided in three main subsections. Firstly, attention is given to representations of masculinity in relation to discourses of environmentalism that construct Tesla as an EV. Subsequently, the focus shifts towards representations of masculinity and discourses of technology that construct Tesla as a technologically advanced vehicle. Lastly, representations of masculinity are examined in conjunction with discourses and representations of the autopilot technology that construct Tesla as an AV.

Data analysis has revealed two main overarching results. Firstly, Tesla's consumer stories depict Tesla owners along distinctly gendered and racialized representations. On a sheer quantitative dimension of frequencies, Caucasian men are by far the most represented type of owner within the sampled corpus (a complete overview of the frequencies with which different types of owners are represented is reported in *Appendix B, Table 1*). Crucial in this sense is the complete absence of any non-Caucasian and non-Asian ethnicity within the sampled corpus: although a focus on Caucasian and Asian men could be explained by the fact that Tesla's biggest markets are located in North America, Europe and Asia (Wagner, 2020b), this observation does not justify the lack of diversity with which Tesla represent these societies. Moreover, Tesla's representations completely exclude two geographical areas where the manufacturer is active, as no consumer story from Central America (Mexico) nor the Middle East (Jordan and UAE) was found on Tesla's YouTube channel. Even in relation to the ethnicities that are represented, however, Tesla draws distinctions. Specifically, if videos portraying Caucasian owners predominantly feature one owner per video, leaving 1 or 2 minutes for each owner to articulate their discourses, the majority of videos portraying Asian owners reunite multiple owners in the same video through a collage of different individual consumer stories, where each single owner is often given only a few seconds to talk (see *Appendix B, Table 2*). Overall, Tesla seems to construct EVs and AVs as primarily white and masculine patterns of mobility.

Secondly, Tesla's consumer stories structure the representations of owners of different ethnicities and different ages in connection with different discourses of masculinity, providing supporting evidence for the theory of intersectionality in line with Lazar (2007) and Levon et al. (2017). In fact, if representations of Caucasian drivers adhere to age-dependent scripts of masculinity, with Caucasian men of different ages employing different discourses, enacting different gendered scripts and assigning different meanings to their vehicles, similar age-dependent differentiations of masculinity do not apply to Asian drivers, who are represented as employing discourses that are significantly less structured on an age-dependent divide compared to the ones enacted by Caucasian men. To highlight these contrasts, each of the three subsections addresses representations of Asian men only after having exposed how Caucasian men are represented in the corpus. Such a structure was consciously chosen in order to underline by way of contrast how Tesla's representations of masculinity

vary in relation to men of different ethnicities.

4.1. Men and environmentalism

4.1.1. Environmentalism and young Caucasian men

The analysis has shown that Tesla's consumer stories construct young white non-father (NF) men as utilizing endorsements of environmentalism to support normative scripts of combustion masculinity. In particular, this result was observed in relation to 2 out of the 5 young white NF men represented in the corpus and 8 out of the 11 videos that feature them (see *Appendix B, Table 1*). These discursive dynamics are exemplified by the case of Coen Swijnenberg, a white Dutch radio DJ who appears as the protagonist of a series of six videos called *The greatest drive with Coen Swijnenberg*.

At the beginning of the videos, the man employs discourses of environmentalism to construct his gendered identity in line with non-normative scripts of masculinity. Specifically, he structures his endorsement of electric mobility in terms of an act of caring for the environment, which Pease (2019) recognizes as contrasting with the normative conception of a masculine relationship with nature grounded in the hegemonic values of physical strength and triumph over nature.

Extract 1

I enjoy capturing the world we live in, and I like knowing (1) I am not impacting (2) the environment in a negative way (3). [...] For me, electric is the future.

By characterizing his relationship with the environment in terms of impact (2), the man echoes societal discourses around environmental pollution, a communicative choice that arguably contributes to foreground the idea of automobility having a negative impact on the environment. Crucially, however, he reveals to find satisfaction in the recognition of his "impact-less-ness" (1), contrasting in this way hegemonic scripts of gender that prescribe powerful and destructive "impactful-ness" to a normative masculine relationship with nature (Pease, 2019; Scholz & Heilmann, 2019). Interestingly, the clumsiness of the concept of "impact-less-ness" can be seen as reflecting the clumsiness with which the man seems to vocally conceal his involvement with actions of care, avoiding an explicit commitment to the active protection of the environment while limiting himself to the double negative construction of "not impacting the environment negatively" (3). This lack of an unequivocal vocal engagement might point to the possible gendered complication of a full masculine endorsement of care, in line with Scholz and Heilmann (2019). Yet, far from deriving only from the man's spoken words, the environmentalist dimension of the concept of "impact-less-ness" is multimodally constructed in the videos. As *Figure 1* shows, a written text at the end of each video of the series presents "impact-less-ness" as a characteristic of the vehicle rather than the driver, derived from the lack of gas emissions produced by the car. Lastly, Tesla's "impact-less-ness" is reinforced by shots portraying the car surrounded by nature, often filmed with majestic natural landscapes on the

background to symbolically convey the idea of the vehicle's ability to come in close contact with "untouched" nature without ruining, polluting, or having an negative impact on it. As a result, what is visually constructed as an impact-less vehicle supports the vocal construction of the driver's own "impact-less-ness".

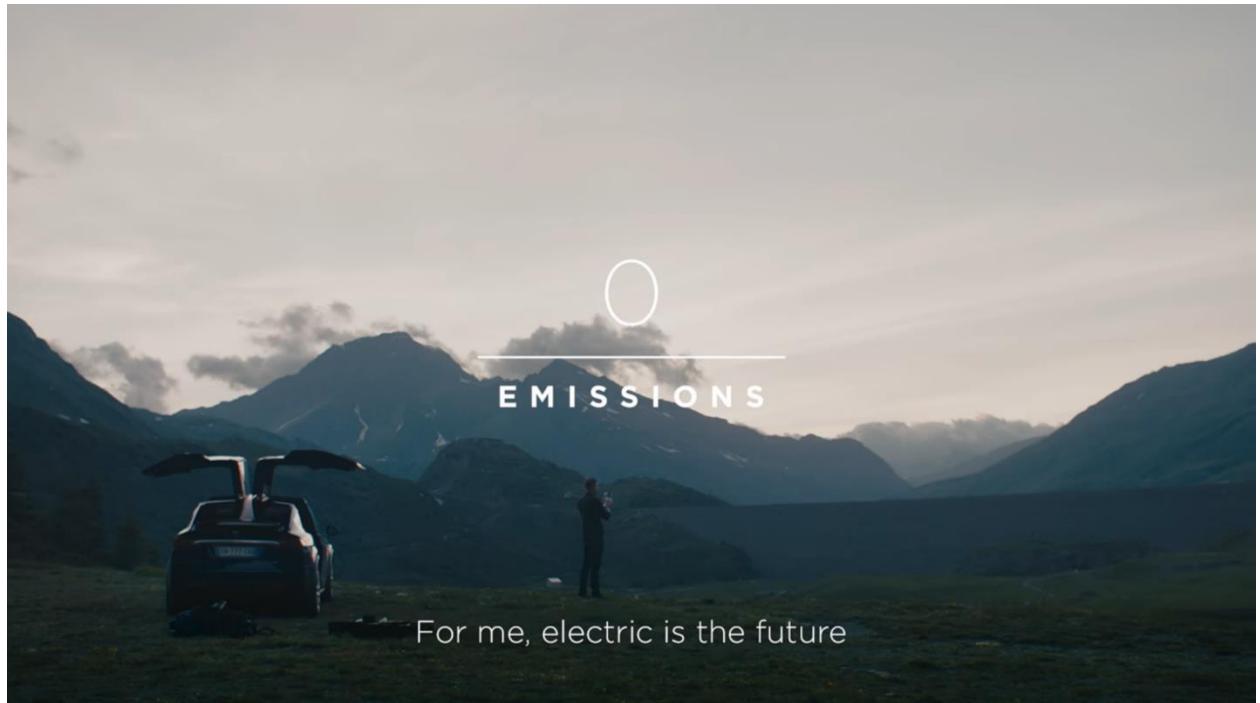


Figure 1

In particular, it is through the experience of driving a Tesla that young white NF men are able to reconnect with nature in a non-hegemonic way and eventually display characteristics of caring masculinities. As Coen drives surrounded by nature, the vehicle is multimodally constructed as the medium that allows a new connection between him and nature to arise. As *Figure 2* shows, by shooting these scenes from the inside of the car, the viewer adopts the driver's visual perspective so that a physical feature of the car, namely its front window, is visually constructed as connecting the inside driver with the outside nature. The man is in fact shown admiring the landscape through the window, which is described as a "panoramic windshield" from the text appearing on screen while the driver speaks of "a sense of being outside". Tesla's videos seems therefore to symbolically support Pease's (2019) idea that a non-hegemonic relationship between men and nature based on care can be recreated through a "corporeal connection to the material world that fosters an ethic of care for the environment" (p. 120).



Figure 2

The road trip portrayed by the video series can in fact be interpreted as a metaphor of the intellectual journey that leads to adopt an attitude of care for the environment.

Extract 2

Sometimes I like to escape and get away from it all. To just drive and leave the city behind (4). [long break] You become part of the landscape (5). It feels like ultimate freedom. [long break] We are all on this journey together, and it's about the decisions we make (6). [long break] Once you have seen the world from a different perspective (7), you realize: the future is electric.

In light of the normative and traditional division between culture as a masculine sphere of influence and nature as its feminine counterpart advanced by essentialist accounts of ecofeminism (Pease, 2019), the journey might symbolically assume gendered meanings in that the man leaves the place of culture, the city (4), to drive into nature, abandoning therefore a normatively masculine space of movement to enter a normatively feminine one. Nonetheless, far from reducing nature to an antithetical opposition to masculinity, Pease (2019) argues however that a masculine relationship with nature has traditionally been justified by the cultural image of “The Wild Man”, which normatively frames men’s relationship with nature along the hegemonic values of physical strength, toughness and the drive to triumph over the wild. This image is described as reiterating essentialist view of masculinity and, consequently, patriarchal gender structures. Consequently, considering the existence of cultural ideals like “The Wild Men”, Tesla does not represent shifts towards non-hegemonic scripts of masculinity through the construction of a connection between men and nature per se, but rather by grounding this relationship in non-hegemonic values of care. Far from building a merely sensorial connection, Coen describes in

fact his experience in terms of a cognitive reinterpretation, as this newly found connection with nature provides him with the ability to perceive the world from a different perspective (7). Arguably, this new perspective symbolizes the discovery of an attitude of care for the environment: after becoming “part of the landscape” (5), he constructs his patterns of mobility as a responsible choice (6), which seems to point to how, by choosing to drive a Tesla, he consciously communicates that he takes care of the environment. In this sense, Tesla seems to build a non-hegemonic connection between masculinity and nature through a sensorial experience of connection with the landscape that triggers a cognitive shift of values towards environmentalism and care.

Yet, although Tesla has so far been found to represent EV adoption as fostering non-hegemonic scripts of masculinity, the analysis has revealed that how drivers implement that very same “impact-less-ness” characteristic of EVs into how they make sense of their driving behavior can also prompt the maintenance of normative scripts of combustion masculinity. The meaning of the “zero emissions” message shown in *Figure 1* is in fact extended by another piece of written text right after this first one at the end of each video of the series, which reads “zero compromises” (see *Figure 3*). With this statement, Tesla establishes a conjunction between a characteristic of the vehicle, namely its environmental sustainability, and an attitude of its driver, namely his freedom. The lack of compromises is arguably symbolically reflected in the multimodal constructed of a feeling of freedom for the driver: as the “zero compromises” tagline is shown, the driver’s freedom is vocally constructed through his spoken words (as the subtitles show in *Figure 3*) and visually reflected in the emptiness of the road the car is shown driving on as well as the vastness of the natural landscape highlighted by the moving perspective of the shot. As a result, Tesla constructs driving an environmentally friendly car as a liberating experience that provides the male driver with a sense of freedom, liberating him from any compromise. In this sense, Tesla seems to oppose some of the negative consumer’s stereotypes that scholars have observed in relation to EVs that constructed these vehicles as significantly limiting the freedom of the driver through charging routines and limited range (Egbue & Long, 2012; Graham-Rowe et al., 2012; Rowe et al., 2012).



Figure 3

Crucially, in the case of young white NF masculinities, this sense of freedom boils down to the freedom to perform combustion masculinity, with videos featuring shots that closely resemble what Redshaw (2018) defines as typical representations of combustion driving. These scenes strategically utilize visual close-ups of fast-moving elements to symbolically construct the car as driving fast, such as close-up shots of the tire that emphasize its fast rotation, as *Figure 4* shows. An exemplary depiction of combustion driving is represented in a video titled *This is LUDICROUS*, where Coen Swijnenberg is shown driving a Tesla Model S on a racetrack as he activates “Ludicrous Mode”.⁹ The setting depicts Tesla as a racing car and the whole video focuses solely on the multimodal construction of the car’s acceleration: shots lowered down onto the street level in front of the vehicle visually give a sense of acceleration while the lack of background music acoustically emphasizes the sounds that the car produces as it accelerates. Interestingly, however, as the video ends with the car stopping on the finishing line, presumably after completing a lap, a written text, reading “sigh of relief” (*Figure 5*), appears on screen while the driver is heard exhaling. By showing the previously examined tagline “zero emissions, zero compromises” right after this shot, the video arguably constructs the driver’s exhale as expressing a sense of reassurance as he remembers that, thanks to the vehicle environmental “impact-less-ness”, he has not had a negative impact on the environment despite the combustion style

⁹ Ludicrous mode can be activated as one of the acceleration settings from the control panel: the function increases the car’s acceleration. Significant is also the choice of the term *Ludicrous*, which seems to connect the driver’s fun and “insanely amusing” driving experience with a combustion style of driving.

of his driving.¹⁰ Tesla's message is therefore clear: combustion driving does not need to be abandoned in the name of environmentalism because Tesla is able to preserve both the drivers' freedom of driving fast and aggressively *and* their "impact-less-ness". In this way, Tesla manages to bring together what in the context of traditional oil-based mobility were two opposite scripts, namely combustion and environmentalism. Crucially, however, far from resulting in a mere juxtaposition of combustion and environmentalism, Tesla's narrative sets the possibility for the former to be grounded in the latter. In this sense, Tesla drivers are not simply described as combustion *and* "impact-less", but rather, by constructing "impact-less-ness" as the combustion driver's reassurance, the video seem to communicate that Tesla drivers can indulge in combustion driving *thanks to* the car's "impact-less-ness". If this were the case, non-normative scripts of care for the environment could end up prompting the enactment of normative scripts of masculinity insofar as the male driver could use them to justify his combustion style of driving.

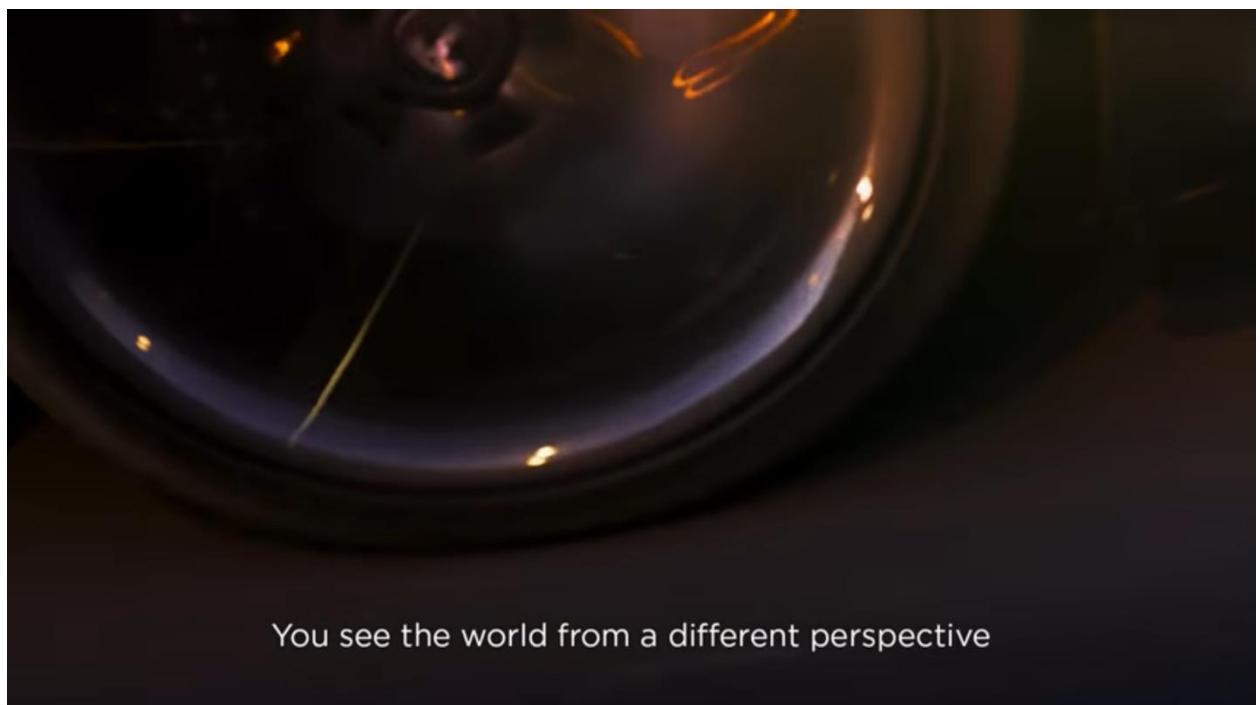


Figure 4

¹⁰ It should be noted that different interpretations are available: the driver's sigh of relief could for example also refer to his sense of reassurance as he realizes that his dangerous style of driving did not produce any physical damage. Nonetheless, it is here argued that Tesla emphasizes the exposed environmental interpretation by showing the tagline "zero emissions, zero compromises" right after this shot.



Figure 5

4.1.2. Environmentalism and older Caucasian men

The analysis has revealed that older white men and white fathers are systematically represented in line with what Scholz and Heilmann (2019) define as caring masculinities through a multimodal construction of their activities of care. Specifically, this result was observed in relation to 12 out of 31 older white men and white fathers represented in the corpus (see *Appendix B, Table 1*). Vocally, these men connect discourses of environmentalism to different types of caring attitudes. In particular, older white men explain their EV adoption in terms of a responsibility they hold towards others and future generations, whereas fathers specifically speak of a responsibility they hold towards their children. Visually, their vehicles are symbolically constructed as artifacts that they use to enact activities of care, such as driving children to school, spending time with family members or personally deliver goods to clients.

Although young white NF men are also represented in connection with discourses of care, it is important to call attention to how a masculine understanding of care differs between younger and older white men. Unlike their younger counterparts, older white men do not ground discourses of care in the vehicle's "impact-less-ness", but rather in more committed terms of a proactive involvement to produce a positive societal impact. One clear example of this is father-of-two Stephane, a white Canadian engineer who appears in a video called *Generations*.

Extract 3

When I got the Tesla, I was able to say, ok I am part of the electric movement (1) as a Tesla owner, I can be involved in this and make the change happen (2). I was looking for a job that can help bring more EVs on the market (3). We have one project which is working on electrifying school busses. Kids,

when they go to school, if they go to school with an electric vehicle, it's putting in their mind that, ok electric mobility is possible (4).

By presenting his EV adoption as a contribution towards the realization of a societal shift towards electric mobility (2), Tesla becomes the artifact that materializes Stephane's ambition within his patterns of consumption, so that the man values his vehicle primarily on symbolical dimension, as the vehicle enables him to communicate his involvement in the electric cause through his pattern of mobility. Crucially, the fact that he explicitly characterizes the shift towards electric mobility as a social movement (1) shows that he constructs his EV adoption as an act of micro-activism, in line with the predominant narrative supported by social studies of EV adoption (Heffner et al., 2007; Rezvani et al., 2015; Vassileva & Campillo, 2017). By making sense of his profession through a similar rhetoric of micro-activism (3), the man constructs the electric shift as a recurrent underlying theme within his biography that motivates and coherently reunites different aspects of his life under the same purpose. In this way, the man describes himself as being moved by the desire to actively impact society in a positive way, rather than merely avoiding having a negative impact.

Moreover, if care as understood by younger men might prompt hegemonic enactments of masculinity, care as understood by older white men is presented along non-hegemonic scripts of masculinity. Stephane vocally describes his environmental activism and proactive involvement as an act of care towards future generations (4), which constructs the man's gendered identity as non-hegemonic, as his intergenerational respect contradicts the competitiveness and aim for short-term success typical of hegemonic masculinity (Franz-Balsen, 2014). Another example is Thomas, a white Danish man who drives a Tesla as a taxi and appears in a video called *Tesla Taxi Brothers*. Thomas employs discourses of care as he vocally constructs his decision to switch to an electric vehicle as an act of care towards others. Specifically, thanks to its silent electric engine, Tesla is narrated as allowing him to protect disadvantaged parts of his local community from noise pollution. Similarly to Stephane, Thomas' other-orientedness evokes non-normative scripts of masculinity as it contradicts the competitiveness typical of hegemonic masculinity (Franz-Balsen, 2014).

The non-hegemonic nature of these vocal constructions of masculine care is also visually supported by representations that oppose the combustion style of driving enacted by their younger counterparts. The central element in this regard is the environment in which the vehicle is shown driving. Far from rushing through desolated natural landscapes, these men are predominantly portrayed driving in urban settings (*Figure 6*), which affect the act of driving both on a physical as well as on a symbolic dimension. Most notably, obstacles found in urban environments, such as other cars, buildings, or pedestrians, physically prevent the vehicle to carelessly accelerate, so that these men are shown driving at reduced speeds. An insightful example of this is illustrated by *Figure 7*: as John, a white Scottish man appearing in a video called *A Clean Future*, slowly drives through the crowded center of Edinburgh (*Figure 6*), the vehicle's slow speed is emphasized by a close-up shot of the wheel

focusing on its slow rotation, which, interestingly, contrasts with how the motion of the wheel is utilized as a visual symbol of high velocity in connection to younger white masculinities (*Figure 4*).



Figure 6



Figure 7

At the same time, however, by transforming the activities that these men carry out while driving their Tesla, urban settings provoke a shift in the symbolic meanings attached to the act of driving a car. Instead of driving to “leave the city behind”, these men are shown using their Tesla to

drive home, drive their kids around or personally deliver goods to clients. In this way, far from associating driving with a sense of freedom found in solitary driving experiences that encourages enactments of combustion driving as in the case of younger white drivers, the way these men use their cars symbolically constructs their vehicle as artifacts that they use to carry out acts of care and stay close to individuals they care for, activities that align with Scholz and Heilmann's (2019) descriptions of caring masculinities. The case of Fangio, a white Belgian male chocolatier appearing in a video called *Sweet Ride*, illustrates this: Fangio is shown using his Tesla to transport his chocolate to his clients while he vocally stresses that he does it personally "to have that personal touch with the chefs of the hotels".

The fact that older white men utilize their Tesla to carry out actions of care is especially emphasized by those who describe themselves as fathers or are visually constructed as such. Fathers tend to construct their EV adoption as a pseudo-educational tool that they use to pass their environmental values and a sense of responsibility to care for the environment down to their children. The case of Stephane is again exemplary.

Extract 4

My son (5) is 11 years old now, he is asking me, ok where do we start the car, what are the options, and they are playing with the screen. Their interest is inside the Tesla. It's already inside them (6) that oil car is not an option. The first car they'll want to drive is electric (7). I'm very proud of that (8).

Stephane explicitly describes this intragenerational transmission of legacy in terms of a preference that cognitively becomes part of how his kids envision mobility (6) and ultimately affects their future mobility choices (7). Yet, in the case of fathers, scripts of care cannot be understood as unequivocally non-normative, as care for one's children is implied within the role of protection of the family that is normatively assigned to fatherhood (Scholz & Heilmann, 2019). Moreover, the father-children relationships represented in Tesla consumer stories are often infused with symbolic meanings that shape these representations along normative gendered scripts. In Stephane's case, for example, normative masculinity is reproduced by multimodal constructions of automobility as a masculine area of interest and expertise. Stephane explains in fact that, by educating his two sons about sustainable automobility, he is repeating what his father did with him, verbally constructing automobility as a way through which fathers bond with their sons (5). Visually, the same idea of fathers sharing their masculine passion for cars with their sons is symbolized by shots where Stephane is shown playing with a remote-control car with his sons. The gendered nature of these representations is furthermore emphasized by the absence of any woman in the video. As a result, although allegedly proposing non-normative values of care and environmentalism, Stephane contributes nonetheless to transmit to his children the normative paradigm of men as car enthusiasts, as shown in *Figure 8*.

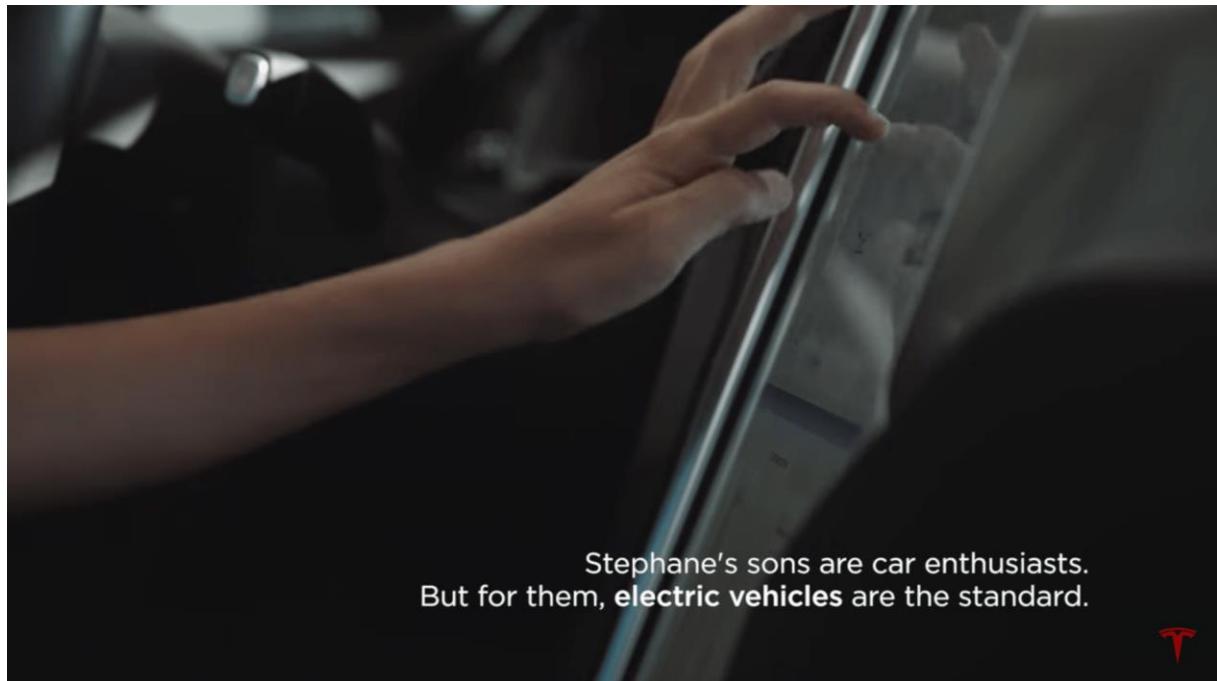


Figure 8

4.1.3. Environmentalism and Asian men

The analysis of Tesla's representations of Asian men revealed that the discourses that Asian men employ to make sense of their environmentalism and, most importantly, the gendered scripts that these allow them to enact are significantly less structured on an age-dependent divide compared to the ones enacted by Caucasian men. Consequently, the age-based distinction of the discursive ties between masculinity and environmentalism previously presented in regard to Caucasian men does not apply to Asian men.

The example of the young Chinese male drivers appearing in a video titled *Zero-emission road trip – East China* helps to shed light onto how Tesla's multimodal construction of the discourses of environmentalism employed by young Asian NF men diverges from how their white counterparts are represented in relation environmentalism.

Extract 5

Imagine if everyone was driving a Tesla (1) and there would be much less pollution (2). If everyone were to drive electric cars, the sky would be blue again (3).

The explicit thematization of the problem of pollution (2, 4) allows young Chinese drivers to construct their EV adoption as an act of micro-activism, similarly to older white men.¹¹ The fact that the drivers

¹¹ Considering that 7 out of the 8 of the young Asian NF men represented in the corpus are Chinese, discourses employed by Chinese men are taken to be representative for young Asian NF men in general. The only non-young Chinese NF Asian man is a Japanese owner who does not employ discourses of environmentalism and is therefore presented in Section 4.2.2. within the discussion on masculinity and discourses of technology.

in this video envision what were to happen if everyone were to adopt their own mobility choices (1) shows how these men see themselves as environmental pioneers who chose to contribute towards a positive societal impact, symbolized by the metaphor of the sky becoming blue again (3). In this way, they implicitly encourage other drivers to follow their example, constructing electric mobility as a communal enterprise that needs to be adopted on a wide societal level, so that everyone's contribution is demanded (1). Interestingly, the whole storyline of the video symbolically reflects the communal character of the Chinese adoption of electric mobility by featuring 20 Chinese owners embarking all together on a road trip, which contrasts with the solitary adventure of the young white driver analyzed in *Section 4.1.1*. This idea seems to be confirmed by observing that only 3 out of the 16 videos featuring Asian drivers in the entire corpus portray a single owner per video, while the other 13 reunite multiple owners in the same video through a collage of different individual consumer stories (see *Appendix B, Table 2*). As a result, the driving experience of young Chinese drivers contrasts with the individualistic sense of freedom that encourages careless and aggressive driving in young white NF men, and is rather constructed as a collective action of environmental activism through which the participants construct their mobility choices as guided by their wish to take care of the environment. Crucially, these discourses of environmentalism are visually supported by representations of a careful and cautious style of driving, similar to the one enacted by older white masculinities and that distinctively contrasts scripts of combustion as defined by Redshaw (2018). As *Figure 9* shows, the close proximity of one vehicle to the other, along with the narrowness of the path (emphasized through a visual perspective that partially covers the path while accentuating the visual contrast with the high and steep hills) contribute to depict the car's slow speed as appropriate in that environment, while the hypothetical enactment of combustion style of driving is by contrast symbolically constructed as dangerous and inadequate.

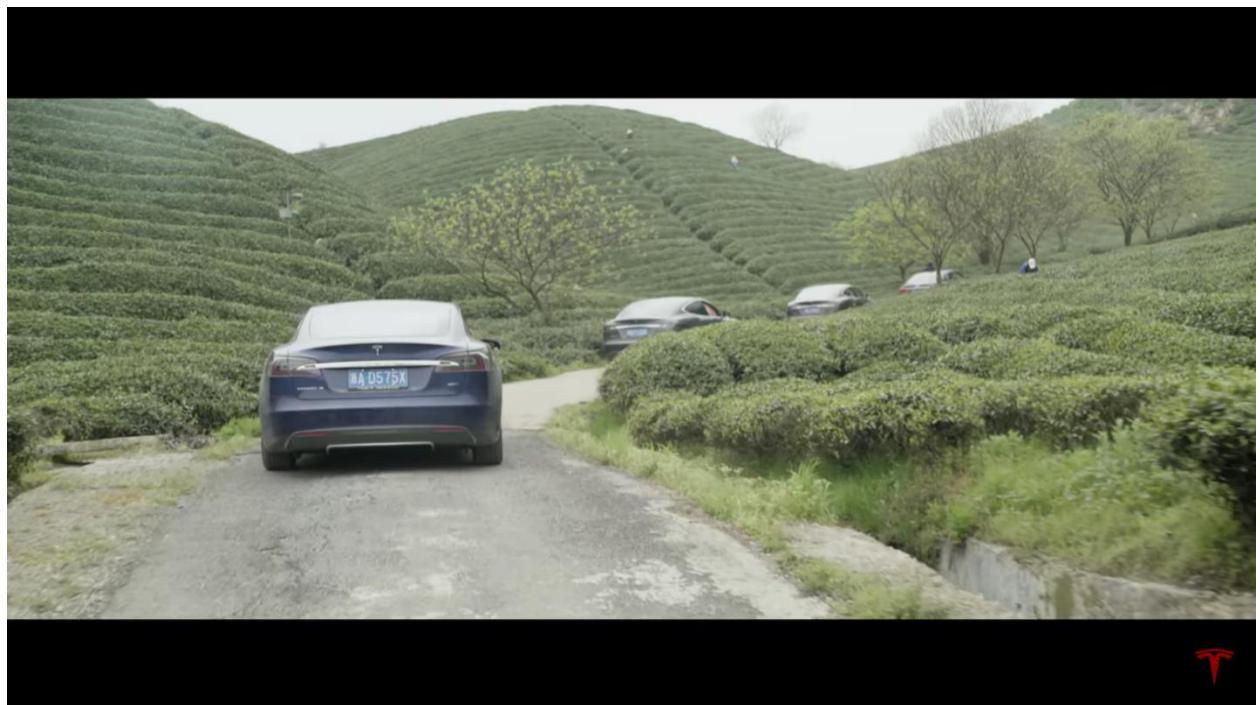


Figure 9

All in all, young Asian NF men seem to be open to scripts of environmentalism that, in the case of white masculinities, are instead presented as an option available only for older men or fathers excluded from age-dependent scripts of combustion masculinity. Young Asian men utilize in fact their endorsement of environmentalism to narrate their proactive involvement in taking care of the environment, without the need to compensate these discourses with normative enactments of combustion style of driving. Specifically, this result was observed with regard to all 4 young Asian NF men that employ discourses of environmentalism in the corpus (see *Appendix B, Table 3*). Interestingly, even when young Asian NF men do make sense of Tesla as a zero-emissions vehicle, this is not utilized as a justification for enactments of combustion, as shown by the case of a young Tibetan Tesla owner appearing in a video titled *Tesla in China*.

Extract 6

In Tibet, there's little pollution (4) and Tesla cars are zero-emissions and zero-pollution and also zero noise (5). To drive a Tesla here is very meaningful. Driving a Tesla feels right (6).

Despite fully embracing the characterization of Tesla as an impact-less vehicle (5), the man has in fact replaced the sense of freedom typical of young white masculinities with a feeling of rightfulness (6), which, instead of encouraging careless driving, seems to persuade him to remain as "impact-less" as possible.

It is however important to highlight that, although Tesla's representations of young Asian NF men seem to reflect non-hegemonic scripts of masculinity when compared to Western standards of masculine hegemony, complications arise if these representations are carelessly judged as non-

hegemonic. Following Louie and Edwards (1994), the application of Western cultural images of hegemonic masculinity to the analysis of Chinese masculinity is essentially inappropriate because it posits a specifically Western notion of masculinity that defines the manifestation of brute physical strength as a condition for hegemony to gendered scripts that have been developed under different historical and cultural circumstances. As the authors put it, “Chinese masculinity has evolved in a historical and cultural context that required no inspiration and gained no benefit from comparisons with the West” (Louie & Edwards, 1994, p. 148). As a result, judging Tesla’s representations of young Chinese men as foregrounding non-hegemonic scripts of masculinity simply because these men are represented as openly embracing care for the environment without enacting aggressive combustion styles of driving would subject Chinese scripts of masculinity to Western standards of hegemony grounded in the Western assumptions of a masculine propensity to violence and rejection of care, which, crucially, are not reflected in traditional Chinese ideals of masculinity (Louie & Edwards, 1994).

The results have also shown that both older Asian men and Asian fathers are represented as more open to blend non-normative endorsements of environmentalism with normative enactments of combustion driving than their white counterparts, an option that, in the case of white masculinities, is reserved to young NF men. Specifically, this result was observed with regard to 4 out of the 7 older Asian men and Asian fathers that employ discourses of environmentalism in the corpus (see *Appendix B, Table 3*). Unlike older white men and white fathers, whose employment of non-hegemonic meanings of environmental care seems to push them to reject combustion driving to maintain a certain congruency of gendered discourses throughout the videos, older Asian men and Asian fathers men performs significantly different scripts of masculinity within the same video. A good example of this is provided by a Chinese father living in Shanghai appearing in a video titled *Tesla in China*.

Extract 7

As a dad (7), I chose Tesla for its safety (8). I truly trust it. [...] A 7-year-old girl knows that there are electric cars. This way we planted a seed of environmental protection in a kid’s heart (9).

The man firstly employs discourses of safety (8) to construct himself in line with the normative notion of a protective father (7), switches to scripts of combustion as he enthusiastically praises Tesla for its fast acceleration (*Figure 10*), and lastly employs script of caring masculinity by mixing environmentalism with a caring attitude towards his child (9). The case of Asian fathers produces in this sense even more interesting results, as the hybrid nature of their gendered discourses do not follow what for white men appear to be strictly defined gendered scripts of both fatherhood and masculinity: not only do Asian fathers not seem excluded from age-depended scripts of combustion driving, but their endorsement of combustion does not prevent them from explicitly exhibiting caring attitudes. Crucially, this fluidity of discourses symbolically resembles the harmony and balance that the traditional Chinese ideal of masculinity that Louie and Edwards (1994) recognize as the “Wen-Wu

paradigm” prescribes between the literary and artistic pursuits of the “Wen” and the attributes of physical strength and military prowess of the “Wu”. Older Asian Tesla owners arguably reflect this ideal of masculinity in that they seamlessly embrace care and environmentalism while demonstrating aggressive power of combustion masculinity.



Figure 10

4.2. Men and technology

4.2.1. Technology and Caucasian men

The results of the analysis have shown that Tesla differentiates how discourses of technology are structured by Caucasian men of different ages. Specifically, older white men and white fathers are represented as making sense of their Tesla in relation to the vehicle’s technological components and features to construct their gendered identities in line with normative scripts of masculinity. Through a multimodal construction of Tesla as a technologically advanced vehicle, these men are able to narrate their normative masculine passion for technology and innovation through their mobility choices. This result was observed with regard to all of the 11 older white men and white fathers that employ discourses of technology in the corpus (see *Appendix B, Table 3*). In contrast, young white NF masculinities are represented as ascribing marginal importance to technology, with only 1 out of the 11 videos portraying these men featuring verbal discourses of technology (see *Appendix B, Table 3*), which is therefore almost completely relegated to the unimodality of visual representations. The example of Simon, a 55-year-old white Australian man, helps to shed light onto how Tesla differentiates the multimodal construction of discourses of technology in relation to white men of different ages.

Extract 8

Because the Model S is such a software-driven environment (1) it does actually integrate with the work aspects of my life (2) really quite well as well. So you get into the car in the morning and your daily appointments are sitting on the screen ready for you, if you want to go driving somewhere the car already knows (3) where you're heading, so it's very easy to load that destination into the car. The vehicle becomes an extension of you (4).

Far from emerging solely through rapid visual representations of the driver's hands interacting either with the Tesla app on a smartphone or with the touchscreen located next to the driver's seat, as it is the case with younger white NF masculinities, Simon's video structures discourses of technology in their full multimodality. Visual representations of the man's interactions with technological components of the vehicle are vocally reinforced by extensive and passionate monologues regarding Tesla's specific technological attributes. Simon places technology at the very core of how he makes sense of his Tesla to the point where the car is described as a 'software-driven environment' (1) and almost no room is left to non-technology related discourses throughout the video. Accordingly, the app is described as "one of the big things about the car" and praised beyond its practical utilizations as the technological feature that enables owner-vehicle communication, as the owner is able to *talk* to the vehicle thanks to the app, while the touchscreen is constructed as the technological component that enables the vehicle to talk to the driver. Crucially, the vehicle's communicative ability is described as stemming from its *knowledge* of the driver and his habits (3): Tesla knows Simon so well that it is able to select and show the necessary information to integrate with the man's daily life (2). Lastly, Simon values the relationship that arises through this technologically mediated communication to the point where technology enables the vehicle to literally function as an extension of the driver (4), employing discourse that closely resemble Dant's (2004) conceptualization of the *driver-car* as a unitary technosocial construct.

Moreover, older white men are represented as characterizing Tesla as a technologically advanced vehicle through discussions around the vehicle's software updates that were not recorded in relation to younger white men. This is shown in a video called *Better Over Time*, where four different older white American owners repeatedly characterize their Tesla primarily in connection to the car's ability to support software updates.

Extract 9

We started, I wanna say, with a 3.2. Now we're on 8 (5). [...] So even in our classic 2012 car (6), it gets better with time (7).

The video emblematically opens with one of the men describing his Tesla solely in terms of its software updates (5). Crucially, all the men in the video make sense of Tesla's software updates in connection to discourses of novelty and growth, declaring to appreciate the updates because they

provide regular innovation, so that Tesla is described as regularly acquiring new and innovative technological capacities and functions. Arguably, these discursive strategies allow these men to enact normative scripts of masculinity, as, by focusing on the novelty and the growth of their vehicle's array of technological features, they are able to construct themselves as technology and innovation enthusiasts, which Kleif and Faulkner (2003) and Mellström (2004) recognize as hegemonic scripts of masculinity. These discourses are reflected by what is both the title and the catchphrase of the video: by describing how Tesla "gets better with time" thanks to its software updates (7), older white men show appreciation for Tesla's technology as a source of continuous innovation and technological improvement that allows them to continuously keep constructing themselves as innovation and technology enthusiasts, regardless of how old the "hardware" of the vehicle (or the driver) is (6). Some of the men in the video also explicitly connect feelings of excitement and delight to the experience of software updating, emphasizing their enthusiasm for technology in a way that seems to vaguely echo the normative masculine stereotype of the "nerdy tech guy" (Kleif & Faulkner, 2003).

The stereotypically masculine love for technological innovation is furthermore represented through multimodal constructions of older white men and white fathers as early EV adopters, which was not recorded in relation to younger white NF masculinities. Vocally, these men introduce themselves by stating how long they have been Tesla owners for: usually, this takes the form of a specific year of adoption. Visually, they are often constructed as innovation enthusiasts through text that appears on screen as the men introduce themselves, usually describing them as one of the first owners of Tesla in a certain country, as shown in *Figure 11*.



Figure 11

Similarly to older white men and white fathers who employ discourses of environmentalism,

older white men and white father who normatively constructs themselves as technology and innovation enthusiasts are represented in connection with styles of driving that oppose what Redshaw (2018) defines as typical representations of combustion driving. The videos often present shots of their vehicle parked in the garage or right in front of their house, whereas, when the car is not completely stationary, they are shown either driving at reduced speeds around residential neighborhoods or driving back home. Arguably, these geographies of movement deter the viewer from assigning that same feeling of freedom typical of younger white masculinities (*Section 4.1.1.*) to these men's driving experience. As exemplarily shown in *Figure 12*, the driving environment of residential neighborhoods visually contributes to restrict the physical space that is given to the vehicle through narrow roadways and bike lanes, while other elements of the scenery, like the presence of pedestrians, crossings and streets signs that call for cautious driving, symbolically slow the vehicle down. Ultimately, all of these elements contribute to symbolically delineate hypothetical enactments of a combustion style of driving as detrimental, dangerous, and inappropriate. Similarly, the recurrent presence of the house (*Figure 13*) visually constructs these cars as vehicles that these men use in close proximity to their families. Accordingly, rather than embarking on solitary and adventurous road trips like younger white men (*Section 4.1.1.*), they are shown driving with their partners or their children. These discourses are sometimes also reflected in their conversations, with men mentioning driving activities that imply spatial proximity to their house or symbolically to the family, such as driving kids to school or commuting. Interestingly, in one case ownership of the car is even attributed to the entire family, rather than being presented as a personal possession of the man, as shown in *Figure 12*. Yet, the woman is never shown driving the vehicle.¹²

¹² Although Tesla's representations of women generated interesting results within the sampled corpus of videos, a detailed analysis of women's representations falls out of the scopes of this study, as the focus is directed to the construction of masculinity.



Figure 12



Figure 13

4.2.2. Technology and Asian masculinities

In a similar manner as presented in *Section 4.1.3.* in regard to environmentalism, the analysis of Tesla's representations of Asian men revealed that the discourses that Asian men employ to make sense of Tesla as a technologically advanced vehicle and, most importantly, the gendered scripts that these allow them to enact are significantly less structured on an age-dependent divide compared to the ones enacted by Caucasian men. Consequently, the age-based distinction of the discursive ties between

masculinity and technology previously presented in regard to Caucasian men does not apply to Asian men.

Unlike their white counterparts, young Asians NF men are represented as utilizing discourses of technology to normatively construct themselves as technology and innovation enthusiasts. Accordingly, far from relegating technology to the unimodality of visual representations, their videos feature elaborate verbal discussions of technology, which, notably, closely resemble the ones employed by older white men and white fathers, as they similarly thematize Tesla's software updates through metaphors of novelty and growth. Specifically, this result was observed with regard to all 5 young Asian NF men that employ discourses of technology in the corpus (see *Appendix B, Table 3*). Yet, far from reducing the significance of these representations to the quantitative observation that young Asian men are represented as talking more frequently about technology than their white counterparts, the discussion needs to qualitatively highlight how these men frictionlessly combine discourses of technology and combustion in a way that is not at all represented in conjunction with Caucasian men. One clear example of these discursive dynamics is a young Asian man appearing in a video called *Living with a Tesla in Hong Kong*, who firstly enacts scripts of combustion by associating the memory of the first time he ever drove a Tesla with its speed and acceleration at the beginning of the video and then describes Tesla's software updates as his favorite feature of the vehicle.

A similar result was observed in conjunction with both older Asian men and Asian fathers, who are likewise depicted as blending discourses of technology and scripts of combustion in a way that is not represented as available to Caucasian men. Unlike their white counterparts, Tesla's consumer stories multimodally construct older Asian men as enacting scripts of combustion. At the same time, however, these men also extensively make sense of Tesla as a technologically advanced vehicle, which differentiates them from young white NF men. Specifically, this result was observed with regard to all 5 Asian men and Asian fathers that employ discourses of technology in the corpus (see *Appendix B, Table 3*). The cases of Koutaro, an older Japanese father appearing in a video titled *Tesla Japan / Future (Extract 11)* and Yoshihiko, an older Japanese man appearing in a video titled *Tesla Japan / Owner Stories (Extract 12)* are exemplary.

Extract 11

So one morning when you get up, you find that it has more features. That you can now drive 10 km further or that the top speed is up 5 km/h (1), you wouldn't think it possible!

Extract 12

For me, it's a device connected to the Internet of Things (2). And it's fun to drive (3). It's so spacious inside, the kids really love it (4).

Yoshihiko merges discourses of technology and combustion by making sense of Tesla's software updated as a technological structure that supports the growth of the vehicle's performance and speed

(1). The most emblematic manifestation of these discursive dynamics is enacted by Koutaro, who vocally combines discourse of technology (2), a normative masculine appreciation of automobility (3) and scripts of fatherhood (4) while the video visually represents him as enacting a combustion style of driving. As shown in *Figure 14*, the man is in fact portrayed activating “Ludicrous Mode” right when he describes Tesla as a ‘device’ connected to the Internet of Things (2).

Extract 13

For me, it is a device connected to the Internet of Things, it is not a car (6).

The extent to which Asian men display this fluidity of discourses is especially illustrated by the example of Japanese drivers who seamlessly enact scripts of combustion despite employing discourses of technology that primarily characterize Tesla as a technological device, and only secondarily as a vehicle of transportation. In a different video titled *Tesla Japan / Future*, Koutaro views Tesla as a device and even explicitly denies it being a car (6), but still enjoys driving fast (*Figure 14*). Similarly, Takeshi, an older Japanese man appearing in a video titled *Tesla Japan / Owner Stories*, describes Tesla as “more as a revolution in user interface than in electric vehicles” but is later shown enthusiastically commenting on Tesla’s fast acceleration.

As a result, similarly to what was presented in *Section 4.1.3* in connection with older Asian men, environmentalism and combustion, the fluidity of discourses with which both younger and older Asian owners construct themselves as “nerdy” technology enthusiasts while demonstrating aggressive power of combustion symbolically resembles the harmony and balance between two forces that Asian men seamlessly combine in line with the traditional Chinese ideal of a “Wen-Wu” masculinity, (Louie & Edwards, 1994), while Western men recognize the same principles as contrasting and incompatible.



Figure 14

4.3. Men and autopilot

4.3.1. Autopilot and Caucasian men

The results of the analysis have indicated that Tesla's consumer stories represent autopilot as exclusively used by older white men, while young white NF men are excluded in terms of both verbal and visual discourses. It is therefore argued that, in this way, Tesla's videos support Weber and Kröger's (2018) hypothesis advancing that autopilot constitutes what Ulrich and Tissier-Desbordes (2018) define as a "gender threat" for some hegemonic masculinities. Representing young white NF men driving in autopilot mode would hinder enactments of combustion masculinity and therefore result incompatible with the very way in which Tesla represents how these men narrate their gendered identity through mobility, as analyzed in *Section 4.1.1*. Following this logic, older men are contrarily represented as using autopilot precisely because they are constructed by Tesla as excluded from age-dependent scripts of combustion.

Yet, it is important to point out that, although autopilot does not represent a gender threat for non-combustion white older men per se, *how* these drivers make sense of autopilot and *how* they narrate their experiences driving with it could possibly "demasculinize" these men's gender identity, similarly to what Collingwood (2018) documented in regard to truck drivers. To construct a normative narration of their AVs adoption, older white men were found to strategically integrate verbal characterizations of autopilot within larger discourses of technology that contribute to construct it as a technological gadget. This, in turn, allows them to narrate their experiences with the technology in a way that supports normative gendered scripts of a masculine love for technology and innovation (Kleif & Faulkner, 2003; Mellström, 2004). These discursive dynamics are equally exemplified by the only

two white men that are portrayed as using autopilot (see *Appendix B, Table 3*): Fangio, the white Belgian male chocolatier who was introduced before and Dan (*Extract 14*), a white American male beer brewer appearing in a video called *The 8 Kegs SUV* (*Extract 15*).

Extract 14

Details are important to me (1). Colors, the crunch, the bite (2). And that's the same for a Tesla. Features like autopilot and other nice gadgets (3) that make the car unique (4). That way I think Tesla is the perfect match for me.

Extract 15

Our brewery is fully automated, so is my Tesla (5) [long break] I love technology as a whole (6). Autopilot: I'm addicted to it (7). It makes those frustrating drives and massive traffic fun because it takes over for you (8). It is fun, it is really fun (9).

Fangio explicitly describes autopilot as one of the many technological gadgets featured by Tesla (3). Discourses of technology are visually reinforced by two different shots that portray the man's hand interacting with the touchscreen, while the autopilot is activated. Similarly, Dan only mentions autopilot after he has asserted his normative passion for technology (6), so that the viewer is prone to make sense of it as one of the specific technological features of the car that the man is passionate about.

A normative narration of AV adoption however is not only achieved by making sense of autopilot under a technological frame of meanings, but crucially also by associating "safely masculine" meanings to the technology itself. It is insightful to notice that the only two white men that are represented as discursively engaging with autopilot in the entire corpus describe it as a *unique* technology (4) and as a *fun* technology (9). Through these descriptions, these men arguably manage to background less normative conceptualizations of the autopilot technology, leaving out both discourses of safety and shifts in power dynamics. Fangio metaphorically compares the attention to details (1) that he puts into crafting chocolate (2) to the attention that Tesla has put into the car's technological array of equipment, so that autopilot becomes one of the quality details, one of the "nice gadgets" that makes the vehicle *unique* (4), rather than safe for example. Similarly, Dan conceals the possible gendered complications of a shift in power relations implied by the autopilot taking control over the driving through a recurrent multimodal and symbolic construction of automation along normative scripts of masculinity. Vocally, Tesla's capacity to drive autonomously is compared to the capacity of the man's brewery to autonomously brew beer (5). The same comparison is visually constructed by recurrent depictions of industrial machinery involved in the automated production of beer, with close-up shots highlighting the autonomous motion of the bottles of beer on the production line, which symbolically resemble the autonomous opening and closing of Tesla's doors and trunk emphasized by several shots through the video. By constructing automation as a technology that plays a normative

masculine role in his professional life, Dan is able to safely embrace it also in his patterns of mobility (7). Lastly, although Dan explicitly acknowledges his loss of power (8), he arguably avoids having to elaborate on possible gendered complications stemming from shifts in power dynamics by describing his experience with autopilot as ‘fun’ (9). His refusal to seriously process these shifts is visually symbolized by a close-up shot that portrays his hands on the steering wheel although the vehicle is on autopilot mode (*Figure 15*), arguably symbolizing his denial to give up that feeling of manually steering the wheel of a car that Balkmar (2012) and Mellström (2004) recognize as a “major element of doing masculinity”.



Figure 15

4.3.2. Autopilot and Asian men

In a similar manner as presented in *Section 4.1.3.* in regard to environmentalism and in *Section 4.2.2.* in regard to technology, the analysis of Tesla’s representations of Asian men revealed that the discourses that Asian men employ to make sense of Tesla’s autopilot and, most importantly, the gendered scripts that these allow them to enact are significantly less structured on an age-dependent divide compared to the ones enacted by Caucasian men. Consequently, the age-based distinction of the discursive ties between masculinity and automated mobility previously presented in regard to Caucasian men does not apply to Asian men.

Unlike their white counterparts, young Asians NF men are multimodally represented interacting with the autopilot technology: their consumer stories feature extended discussions of autopilot as well as visual representations of driving in autopilot mode. Yet, unlike older white men, they make sense of their experiences with this technology through discourses that arguably present less normative scripts of masculinity. One clear example of these discursive dynamics is a young Asian

man appearing in a video called *Living with a Tesla in Hong Kong*.

Extract 16

I think it is so hard in Hong Kong to find a peace of mind (1). No matter if you are on a bus or even in a car with an engine. And with a Tesla, it makes so much easier especially with the autopilot on the highways. It is almost like swimming to me. You find that peace and then you can kind of hear that inner voice of yours (2). [long break] You will always remember it. You will always remember that feeling (3).

Far from being described as a technological gadget or being over-masculinized through overtly masculine symbolism, the man discusses autopilot in relation to how it impacts the driving experience. Young Asian NF men attach positive feelings to the experience of driving in autopilot mode, which they describe as relaxing because it transforms what is normally a stressful activity in the context of Asian metropoles (1), into a peaceful experience (2). This result was observed with regard to all 3 of the young Asian NF men that are represented in connection with autopilot (see *Appendix B, Table 3*).

At this point, a comparison between how Tesla constructs the emotional dimension of Caucasian and Asian young men's driving experience can shed light onto racialized representations of masculinity. Whereas white men are shown to find a sense of freedom through the activity of driving, as Tesla connects them with external natural spaces (*Section 4.1.1*), Asian men find a sense of peacefulness as Tesla shields them from the outside chaos and, thanks to autopilot, discharges them from having to engage in a stressful activity. As a result, if young white men's emotional connection with the vehicle leads them to "impactfully" express their sense of freedom by driving "with zero compromises" (*Figure 3*), young Asian men's emotional connection with the vehicle helps them to reconnect with their inner tranquility (2), an image that symbolically opposes the explosive excitement and agitation that Radshaw (2018) recognizes as typical of combustion masculinities. Visually, the Asian male driver is not even shown into the vehicle anymore (*Figure 16*) as he verbally reflects about his feeling of peacefulness.



Figure 16

Similarly to young Asian men, older Asian men and Asian fathers are depicted as making sense of autopilot in less normative ways than their white counterparts. This, however, does not impede them to enact scripts of combustion both verbally and visually. Once again, Japanese drivers most emblematically represent this fluidity of discourses, particularly in a video called *Joy of driving*. On the one hand, the video represents Japanese men describing autopilot as reliable and safe. Significantly, this is the only instance in the entire corpus where the driver is visually represented as not holding his hands on the steering wheel during autopilot mode, as illustrated in *Figure 17*. At the same time, however, right after these scenes, the same men are heard enthusiastically commenting on Tesla's acceleration, which is visually emphasized by text appearing on the screen, as illustrated in *Figure 18*. As a result, the fluidity of discourses with which older Asian owners construct their "joy of driving" as residing both in the autopilot "making things so much easier" and the vehicle's combustion performance resembles the harmony and balance between two forces that Asian men seamlessly combine in line with the traditional Chinese ideal of a "Wen-Wu" masculinity, (Louie & Edwards, 1994), while Western men recognize the same principles as contrasting and incompatible. This result complements what was presented in *Section 4.1.3* in connection with older Asian men, environmentalism, and combustion, and in *Section 4.2.2.* in connection with Asian men, technology, and combustion.



Figure 17



Figure 18

5. Conclusion

The current research has investigated the gendered dimension of Tesla's representations of the transition to electric and automated automobility. Specifically, Tesla's consumer stories have been analyzed to examine how the adoption of EVs and AVs is multimodally represented and how these representations contribute to shape scripts of hegemonic masculinity. Therefore, the aim of this final section is twofold. Firstly, the results of the study are presented to answer the research question in light of the symbolic interactionist theoretical framework and the academic debate around automobility presented in the review of the literature. Lastly, some limitations of the study are highlighted along with suggestions for future research on the intersection between gender and social studies of automobility.

In accordance with Sovacool and Axsen (2018) and Steg (2005), the results have provided evidence against the adoption of what has been defined as an instrumentalist approach to the study of automobility. The analysis of Tesla's consumer stories has in fact highlighted that Tesla owners are represented as making sense of their patterns of mobility through discourses that fundamentally exceed the logic of purely pragmatic and utilitarian motivations for car use. In line with Dittmar's (1992) tripartite model of material possession, Tesla owners employ both affective and social meanings to make sense of their mobility choices. Therefore, in accordance with Heffner et al. (2006), this study provides evidence for the significance of a symbolic interactionist analysis of car use, insofar as Tesla's representations construct transport vehicles, and specifically EVs and AVs, as a consumption that contributes to the discursive processes of the owner's identity-formation.

The results have furthermore indicated that Tesla's consumer stories predominantly construct Tesla's vehicles as EVs, whereas discourses that characterize them as AVs remain remarkably marginal. In particular, in line with the predominant discourses sustained by the literature on EVs adoption (Rezvani et al., 2015), the videos support the conception of EVs as a pro-environmental technology. Discourses of environmentalism are in fact employed by all types of male owners, regardless of age or ethnicity, who construct their EV adoption as a pro-environmental behavior, similarly to what Heffner et al. (2007) found in their study. In contrast, both verbal and visual representations of the autopilot technology are infrequent, rather exceptional, and predominantly presented in connection with Asian men, despite the fact that all Tesla vehicles are fully capable of self-driving. However, considering the primary role that autopilot plays within Tesla's narrative of a sustainable and safe mobility presented in company reports, where Tesla's vehicles are described as "the safest car in the world" (Tesla, 2018), the results of this study indicate that Tesla seems to follow Morsing, Schultz and Nielsen's (2008) suggestion to target different stakeholder groups with different communication strategies on different communication channels. In particular, it is argued that this differentiation of discourses might reveal a gendered dimension of significance. The scarcity with which autopilot is thematized in Tesla's consumer stories might in fact suggest that Tesla understands

autopilot as a technology that threatens hegemonic enactments of masculinity through automobility, in line with what Balkmar and Mellström (2018) and Callingwood (2018) present as the hypothesis of "demasculinization" of automobility through AV adoption. Accordingly, while the reduction of the human physical involvement required in driving and the enforcement of a safe and legal driving style induced by autopilot fit the brand's narration of a safe mobility presented in company reports, Tesla seems to recognize the profound consequences that these changes in power relations have for the masculine driver, whose ability to manually control the vehicle has traditionally been recognized as an important aspect of "doing masculinity" (Manderscheid, 2018). Following this logic, Tesla decides to foreground discourses of autopilot when advertising its vehicles to consumers in more widely accessible and less expressively CSR-oriented promotional videos to avoid possible gendered complications.

The main overarching result indicates that Tesla's consumer stories illustrate different scripts of masculinity in relation to men of different ages and ethnicities and multimodally connect these to different constructions of Tesla as a vehicle. In this way, the transitions to new patterns of automobility are represented as shaping frames of hegemonic masculinity in racialized and age-dependent ways, so that a general and universal answer to the research question of how Tesla's consumer stories related to the transition to electric and automated vehicles discursively shape scripts of hegemonic masculinity cannot be provided. In this sense, Tesla depicts the transition to EVs and AVs neither as unilaterally reinforcing nor as unilaterally weakening scripts of hegemonic masculinity. Rather, these shifts in masculinity need to be understood in light of the intertwined and mutually dependent systems of social categorization, in this case ethnicity, age and gender, so that evidence supporting the theory of intersectionality exposed by Weber (1998) and Garry (2011) is provided. Specifically, this study supports Levon et al.'s (2017) critique to the traditional conceptualization of "hegemonic masculinity" proposed by Connell (2005) attesting that the analysis of the structures of subordination between different articulations of masculinity with respect to one another (i.e. hegemony-subordination axe) and different types of men according to other criteria, such as ethnicity or age, (i.e. authorization-marginalization axe) cannot be analytically separated, since representations of masculinity also involve simultaneous representations of ethnicity and age.

Following these results, the study shows that Tesla constructs the transition to electric and automated automobility as promoting shifts in masculinity that, in the case of Caucasian men, are strictly structured along age-dependent scripts of hegemonic masculinity. Young white NF men are represented as constructing their mobility choices along normative scripts of masculinity by making sense of Tesla primarily as an EV. Endorsements of environmentalism are in fact reduced to discursive resources that seem to encourage, and possibly even justify, the sustainment of hegemonic enactments of what Redshaw (2018) defines as combustion masculinity. Specifically, Tesla's narrative transforms combustion driving into a more societally acceptable activity as its "zero-impact rhetoric" invalidates

pro-environmental critiques of automobility, allowing drivers to enact scripts of combustion masculinity without having to face societal criticism. Lastly, by avoiding any explicit thematization of non-environmental consequences of combustion driving, such as reduced safety on the road, Tesla may foster the idea that combustion driving is societally detrimental solely on an environmental level, and consequently that driving a zero-emissions EV is sufficient to remain “impact-less”. Consequently, Tesla’s representations of young white NF men do not construct environmentalism as “threatening” for hegemonic masculinities. Endorsements of environmentalism can in fact be utilized to sustain hegemonic scripts of masculinity, providing therefore evidence against the “green-feminine stereotype” thesis presented by Brough et al. (2016). Yet, by connecting discourses of environmentalism to enactments of combustion driving, Tesla arguably strives to counteract what some scholars have recognized as one of the negative stereotypes associated with EVs that are unrelated to discourses of environmentalism, namely that EVs symbolize slow moving lifestyles and restrict the freedom of the driver (Bennett & Vijaygopal, 2018; Egbue & Long, 2012; Graham-Rowe et al., 2012). In this sense, Tesla’s consumer stories seem to indicate that it is these non-environmental meanings attached EVs that might constitute EV adoption as what Ulrich and Tissier-Desbordes (2018) define as a ‘gender-threat’ for hegemonic masculinities, rather than an endorsement of environmentalism *per se*.

In contrast to their younger counterparts, Tesla portrays EV adoption as advancing non-hegemonic scripts of masculinity in older Caucasian men and Caucasian fathers, who, by making sense of their EV adoption as an act of intra- and intergenerational respect and care, display values that Franz-Balsen (2014) recognizes as non-hegemonic. Visually, they are depicted in connection with slow and careful styles of driving that contrast with what Redshaw (2018) defines as hegemonic enactments of combustion. At the same time, however, these drivers accomplish a normative narration of their mobility choices by making sense of Tesla primarily as a technologically advanced vehicle. Specifically, by focusing on the technological features and functionalities of the car, such as the touchscreen, the Tesla smartphone app and the software updates, they construct themselves as technology and innovation enthusiasts, a role that Kleif and Faulkner (2003) and Mellström (2004) recognize as evoking hegemonic scripts of masculinity. Consequently, Tesla’s representations of older white men and white fathers seem to indicate that AV adoption might reinforce hegemonic scripts of masculinity as long as the technological novelty and innovation that often characterizes these vehicles as futuristic is strategically foregrounded over the autopilot technology itself. In this way, not only do these owners manage to avoid the threat of “demasculinization” of driving posed by the autopilot, but they also perform what Weber and Kröger’s (2018) call a “regenderization” of automobility, as they transform their transport vehicles in technological devices that communicate their masculine passion for technology.

Lastly, the results indicate that Tesla’s consumer stories represents EV and AV adoption in

connection with similar gendered discourses in relation to Asian owners that, nonetheless, do not strictly follow age-dependent scripts of masculinity: neither scripts of combustion nor discourses of technology are significantly structured along an age-dependent divide for Asian men. In this way, older Asian men and Asian fathers are not excluded from scripts of combustion in the same way that young Asian men are not excluded from a full endorsement of discourses of technology. Hence, older Asian men and Asian father are represented as seamlessly connecting enactments of combustion with “nerdy” tech commentaries, while young NF Asian men often construct themselves as technology and innovation enthusiasts and do not always enact combustion. What results is an array of representations of masculinity that reveal a fluidity of discourses and gender scripts that is not represented as a discursive option available to Caucasian men. Arguably, the fluidity of discourses with which Asian owners embrace care, environmentalism, elaborate discourses of technology and the use of autopilot while demonstrating the aggressive power of acceleration typical of combustion symbolically resembles the harmony and balance between two opposing forces that Asian men seamlessly combine in line with the traditional Chinese ideal of a “Wen-Wu” masculinity, (Louie & Edwards, 1994), and that Western men recognize as incompatible. Crucially, if compared to this heterogeneity of representations, Tesla depictions of Caucasian owners as fitting into categorical representations that dictate a normative way for men to engage with their Tesla based on their age contrasts with the “openness of discourses and alternatives” that Maingueneau and O’Regan (2006) recognize as the ethical principle that should guide the critical judgment of critical discourse studies: “the point is to determine not whether different truths are good or bad, but whether putting a particular discourse or set of discourses into practice might lead to a silencing of ‘open’ alternatives [...]. That these alternatives should be open makes it possible for critical discourse studies theoretically to locate itself in opposition to discourses which are associated with the closure of knowledge” (Maingueneau & O’Regan, 2006, p. 234).

In conclusion, it is important to mention that the results of the current study are affected by limitations that future research could draw upon to expand both social studies of automobility and feminist studies of technology. Firstly, some limitations derive from the restricted sample of videos that this research has analyzed. Although consumer stories have proven to be insightful texts for a symbolic interactionist study of meanings associated to car use, Tesla’s YouTube channel features several different types of video content (e.g. launch events, model guides, interviews with the company’s CEO) that might provide different insights into the gendered dimension of Tesla’s discourses. Of particular interest are those videos that Tesla categorizes as *model guides*, consisting of instructional videos that illustrate how-to visual guide for various functionalities and features of a specific Tesla model. *Model guides* arguably represent a relevant type of content for social studies of corporate representations of automobility because they might reveal the frames of meanings which Tesla uses to present and explain different functionalities of the vehicles. In particular, the salience of

this type of “instructional” videos is especially legitimized by the changes in behavior, driving habits and symbolic meanings of driving required by both EV and AV adoption: “when individuals face situations which require unfamiliar roles, they look to product meaning for assistance in fulfilling the new role” (Heffner et al., 2006, p. 11). Moreover, since several of the *model guides* focus specifically on the use of the autopilot and other technological features of the vehicle, future research could expand the body of feminist studies of corporate representations of AVs by presenting Tesla as a case study, allowing for a comparison with Manderscheid’s (2018) and Hildebrand and Sheller’s (2018) multimodal analyses of other brand’s concepts of AVs. Lastly, a further limitation derives from the fact that the sampled corpus exclusively includes videos that Tesla has uploaded to its YouTube channel, leaving out texts published on other platforms of communication. It should be in fact noted that Tesla’s official website features a “Consumer stories” section where Tesla owner can send their own “Tesla stories” in the form of a written blog post (pictures and videos are occasionally attached) which are then published on the webpage. Future research could analyze these texts or, alternatively, more traditional consumer-generated content, such as Tesla owners’ social media posts, to expand on the results that this study has exposed by obtaining clearer insights on the gendered meanings that drivers attach to their mobility patterns independently from the influence of professionally edited and scripted corporate representations.

Secondly, further limitations derive from the restrictions that have been set to the analysis. The main restriction in this sense derives from the conscious decision of not focusing on representations of femininity, which, arguably, could both shed light on further gendered meanings of EV and AV adoption that this research has overlooked and provide more nuance to representations of masculinity, since “masculinity and femininity are mutually informing discourses [...] [that] define each other” (Louie & Edwards, 1994, p. 135). Furthermore, preliminary data analysis has indicated that, although rare, Tesla’s representations of female drivers might reveal interesting gendered meanings. Additionally, while stressing the importance of intersectionality when studying gender and despite the fact that focus has been given to race and age, this study has inevitably overlooked different meanings of intersectionality that might provide further insight into how Tesla represents gender. In particular, considering the high pricing point of Tesla’s vehicles, analyzing how social class is represented could provide insightful results on how Tesla envisions its consumer base.

Thirdly, results regarding representations of Asian drivers should be taken with special caution, since the researcher is not familiar enough with the different Asian cultures that are represented in the sample to delve into in-depth analysis of gendered symbolism. The results could therefore be possibly limited by the interpretative danger that Lazar (2007) recognizes when white Western researchers produce knowledge claims about non-white communities. As previously highlighted in the results section following Louie and Edwards (1994), the results of this research run the risk to apply Western cultural images of hegemonic masculinity to the analysis of non-Western

mascinity, which would impose specifically Western standards of hegemony and subordinations to gendered scripts that have been developed under different historical and cultural circumstances.

Lastly, considering that this research has focused solely on the analysis of representations, future research could expand the project by focusing on consumer perceptions of Tesla's vehicle through interviews or focus groups with either Tesla owners, car enthusiasts or ordinary car drivers to obtain clearer insights on the gendered meanings that drivers attach to their mobility patterns independently from the influence of professionally edited and scripted corporate representations.

List of references

Ainsworth, S., & Hardy, C. (2004) Critical discourse analysis and identity: Why bother? *Critical Discourse Studies*, 1(2), 225-259, <https://doi.org/10.1080/1740590042000302085>

Andrews, M. (1999). The seductiveness of agelessness. *Ageing & Society*, 19, 301-318.
<https://doi.org/10.1017/S0144686X99007369>

Avery, J. (2012). Defending the markers of masculinity: Consumer resistance to brand gender-bending. *International Journal of Research in Marketing*, 29, 322-336.

Axsen, J., TyreeHageman, J., & Lentz, A. (2012). Lifestyle practices and pro-environmental technology. *Ecological Economics*, 82, 64–74. <https://doi.org/10.1016/j.ecolecon.2012.07.013>

Balkmar, D., & Mellström, U. (2018). Masculinity and autonomous vehicles: A degendered or resegregated future system of automobility? *Transfers*, 8(1), 44–63.
<https://doi.org/10.3167/TRANS.2018.080105>

Balkmar, D. (2012). *On men and cars: An ethnographic study of gendered, risky and dangerous relations*. Linköping: Linköping University Electronic Press.

Bateman, J. A. (2019) Towards critical multimodal discourse analysis: A response to Ledin and Machin. *Critical Discourse Studies*, 16(5), 531-539.
<https://doi.org/10.1080/17405904.2018.1550430>

Bennett, R., & Vijaygopal, R. (2018). Consumer attitudes towards electric vehicles: Effects of product user stereotypes and self-image congruence. *European Journal of Marketing*, 52(3–4), 499–527.
<https://doi.org/10.1108/EJM-09-2016-0538>

Brennen, B. S. (2017). *Qualitative research methods for media studies* (2nd edition). New York: Routledge.

Brough, A. R., Wilkie, J. E. B., Ma, J., Isaac, M. S., & Gal, D. (2016). Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption. *Journal of Consumer Research*, 43(4), 567–582. <https://doi.org/10.1093/jcr/ucw044>

Burgess, M., King, N., Harris, M., & Lewis, E. (2013). Electric vehicle drivers' reported interactions with the public: Driving stereotype change? *Transportation Research Part F: Traffic Psychology and Behaviour*, 17, 33-44. <https://doi.org/10.1016/j.trf.2012.09.003>

Cameron, D., & Panović, I. (2018). Multimodal discourse analysis. In D. Cameron & I. Panović (Eds.), *Working with written discourse* (pp- 97-111). London: Sage Publications.

Caple, H. (2019). Doing critical discourse studies with multimodality: A reply. *Critical Discourse Studies*, 16(5), 522-530. <https://doi.org/10.1080/17405904.2018.1556172>

Chouliaraki, L. (2006) Towards an analytics of mediation. *Critical Discourse Studies*, 3(2), 153-178.
<https://doi.org/10.1080/17405900600908095>

Collingwood, L. (2018). Autonomous trucks: An affront to masculinity? *Information and Communications Technology Law*, 27(2), 251–265.
<https://doi.org/10.1080/13600834.2018.1458456>

Committee of Advertising Practice (2020). *The BCAP code: The UK code of broadcast advertising*. Retrieved from <https://www.asa.org.uk/uploads/assets/846f25eb-f474-47c1-ab3ff571e3db5910/2828d080-b29f-4b6c-8de66fbc7a6cd1f8/BCAP-Code-full.pdf>

Connell, R. W. (2005). *Masculinities* (2nd edition). London: Polity Press.

du Gay, P. (1996). The production of subjects. In du Gay, P., *Consumption and identity at work* (pp. 40-50). London: Sage Publications.

Dant, T. (2004). The driver-car. *Theory, Culture and Society*, 21(4), 61-79.
<https://doi.org/10.1177/0263276404046061>

Davidson, D. J., & Freundenburg, W. R. (1996). Gender and environmental risk concerns: A review and analysis of available research. *Environment & Behavior*, 28(2), 302-339.
<https://doi.org/10.1177/0013916596283003>

Desrochers, J. E., Albert, G., Milfont, T. L., Kelly, B., & Arnocky, S. (2019). Does personality mediate the relationship between sex and environmentalism? *Personality and Individual Differences*, 147, 204–213. <https://doi.org/10.1016/j.paid.2019.04.026>

Dittmar, H. (1992). *The social psychology of material possessions: To have is to be*. New York: St. Martin's Press.

Duerringer, C. (2015). Be a man—buy a car! Articulating masculinity with consumerism in Man's Last Stand. *Southern Communication Journal*, 80(2), 137–152.
<https://doi.org/10.1080/1041794X.2015.1017654>

Egbue, O., & Long, S. (2012). Barriers to widespread adoption of electric vehicles: An analysis of consumer attitudes and perceptions. *Energy Policy*, 48, 717–729.
<https://doi.org/10.1016/j.enpol.2012.06.009>

Fairclough, N. (2001). Critical discourse analysis as a method in social scientific research. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 1-13). London: Sage Publications.

Fairclough, N. (1992). A social theory of discourse. In Fairclough, N., *Discourse and social change* (pp. 62-100). Cambridge: Polity Press.

Faulkner, W. (2001). The technology question in feminism: A view from feminist technology studies. *Women's Studies International Forum*, 24(1), 79-95. [https://doi.org/10.1016/S0277-5395\(00\)00166-7](https://doi.org/10.1016/S0277-5395(00)00166-7)

Franz-Balsen, A. (2014). Gender and (Un)Sustainability—Can Communication Solve a Conflict of Norms? *Sustainability*, 6(4), 1973–1991. <https://doi.org/10.3390/su6041973>

Gal, D., & Wilkie, J. (2010). Real Men Don't Eat Quiche. *Social Psychological and Personality Science*, 1(4), 291–301. <https://doi.org/10.1177/1948550610365003>

Garry, A. (2011). Intersectionality, metaphors, and the multiplicity of gender. *Hypatia*, 26(4), 825–850. <https://doi.org/10.1111/j.1527-2001.2011.01194.x>

Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Cambridge: Polity Press.

Gilbert, M. R. (1998). 'Race,' space, and power: The survival strategies of working poor women. *Annals of the Association of American Geographers*, 88(4), 595–621.

Gleeson, K. (Ed.). (2011). Polytextual thematic analysis for visual data – pinning down the analytic. In P. Reavey (Ed.), *Visual methods in psychology: Using and interpreting images in qualitative research* (pp. 314–329). New York, NY: Routledge.

Graham-Rowe, E., Gardner, B., Abraham, C., Skippon, S., Dittmar, H., Hutchins, R., & Stannard, J. (2012). Mainstream consumers driving plug-in battery-electric and plug-in hybrid electric cars: A qualitative analysis of responses and evaluations. *Transportation Research Part A: Policy and Practice*, 46(1), 140–153. <https://doi.org/10.1016/j.tra.2011.09.008>

Gullette, M. M. (1997). *Declining to decline: Cultural combat and the politics of the midlife*. Charlottesville, VA: University Press of Virginia.

Hanson, S. (2010). Gender and mobility: New approaches for informing sustainability. *Gender, Place and Culture*, 17(1), 5–23. <https://doi.org/10.1080/09663690903498225>

Harrison, C. (2008). Real men do wear mascara: Advertising discourse and masculine identity. *Critical Discourse Studies*, 5(1), 55–74. <https://doi.org/10.1080/17405900701768638>

Heffner, R. R., Kurani, K. S., & Turrentine, T. S. (2006). A Primer on Automobile Semiotics. *UC Davis: Institute of Transportation Studies*. Retrieved from <https://escholarship.org/uc/item/3sk436j6>

Heffner, R. R., Kurani, K. S., & Turrentine, T. S. (2007). Symbolism in California's early market for hybrid electric vehicles. *Transportation Research Part D: Transport and Environment*, 12(6), 396–413. <https://doi.org/10.1016/j.trd.2007.04.003>

Hennighausen, C., Hudders, L., Lange, B. P., & Fink, H. (2016). What If the Rival Drives a Porsche? *Evolutionary Psychology*, 14(4), 1–13. <https://doi.org/10.1177/1474704916678217>

Hidrue, M. K., Parsons, G. R., Kempton, W., & Gardner, M. P. (2011). Willingness to pay for electric vehicles and their attributes. *Resource and Energy Economics*, 33(3), 686–705. <https://doi.org/10.1016/j.reseneeco.2011.02.002>

Hildebrand, J. M., & Sheller, M. (2018). Media ecologies of autonomous automobility: Gendered and racial dimensions of future concept cars. *Transfers*, 8(1), 64–85. <https://doi.org/10.3167/TRANS.2018.080106>

Hoen, A., & Koetse, M. J. (2014). A choice experiment on alternative fuel vehicle preferences of private car owners in the Netherlands. *Transportation Research Part A: Policy and Practice*, 61, 199-215. <https://doi.org/10.1016/j.tra.2014.01.008>

Hohenberger, C., Spörrle, M., & Welpe, I. M. (2016). How and why do men and women differ in their willingness to use automated cars? The influence of emotions across different age groups. *Transportation Research Part A: Policy and Practice*, 94, 374–385. <https://doi.org/10.1016/j.tra.2016.09.022>

Horn, R.E. (1999). Information design: Emergence of a new profession. In R. Jacobson (Ed.), *Information design* (pp. 15–33). Cambridge, MA: MIT Press.

Hultman, M. (2013). The making of an environmental hero: A history of ecomodern masculinity, fuel cells and Arnold Schwarzenegger. *Environmental Humanities*, 2(1), 79–99. <https://doi.org/10.1215/22011919-3610360>

Hwang, J., & Choi, J. (2017). An investigation of passengers' psychological benefits from green brands in an environmentally friendly airline context: The moderating role of gender. *Sustainability*, 10(1). <https://doi.org/10.3390/su10010080>

Jones, R. H. (2012). Multimodal discourse analysis. In C. A. Chapelle (Ed), *The encyclopedia of applied linguistics*, (pp. 1-4). <https://doi.org/10.1002/9781405198431.wbeal0813>

Kahn, M. E. (2007). Do greens drive Hummers or hybrids? Environmental ideology as a determinant of consumer choice. *Journal of Environmental Economics and Management*, 54(2), 129–145. <https://doi.org/10.1016/j.jeem.2007.05.001>

Kleif, T., & Faulkner, W. (2003). “I’m no athlete [but] I can make this thing dance!”—men’s pleasures in technology. *Science, Technology and Human Values*, 28(2), 296-325. <https://doi.org/10.1177/0162243902250908>

Kress, G. & van Leeuwen, T. (2006). *Reading images: the grammar of visual design* (2nd edition). London: Routledge.

Kyriakidis, M., Happee, R., & de Winter, J. C. F. (2015). Public opinion on automated driving: Results of an international questionnaire among 5000 respondents. *Transportation Research Part F*, 32, 127-140. <http://dx.doi.org/10.1016/j.trf.2015.04.014>

Laurier, E., & Dant, T. (2011). What we do whilst driving: Towards the driverless car. In Grieco, M., & Urry, J. (Eds.), *Mobilities: New Perspectives on Transport and Society*. Farnham: Ashgate.

Lazar, M. M. (2007). Feminist critical discourse analysis: Articulating a feminist discourse praxis. *Critical Discourse Studies*, 4(2), 141-164. <https://doi.org/10.1080/17405900701464816>

Ledin, P., & Machin, D. (2019). Doing critical discourse studies with multimodality: From metafunctions to materiality. *Critical Discourse Studies*, 16(5), 497-513. <https://doi.org/10.1080/17405904.2018.1468789>

Levon, E., Milani, T. M., & Kitis, E. D. (2017) The topography of masculine normativities in South Africa. *Critical Discourse Studies*, 14(5), 514-531,
<https://doi.org/10.1080/17405904.2017.1342678>

Law, J., & Singleton, V. (2000). Performing technology's stories: On social constructivism, performance and performativity. *Technology & Culture*, 41(4), 765-775.
<https://doi.org/10.1353/tech.2000.0167>

Levy, S. J. (1959). Symbols for sale. *Harvard Business Review*, 37(4), 117-124.

Louie, K., & Edwards, L. (1994). Chinese masculinity: Theorising 'Wen' and 'Wu'. *East Asian History*, 8, 135-148.

Machin, D., & Mayr, A. (2012). *How to do critical discourse analysis: a multimodal introduction*. London: Sage.

Mackay R. R. (2017). Real women: Objectivity versus situatedness in critical discourse studies. *Critical Discourse Studies*, 14(5), 548-568. <https://doi.org/10.1080/17405904.2017.1320297>

Manderscheid, K. (2018). From the auto-mobile to the driven subject? Discursive assertions of mobility futures. *Transfers*, 8(1), 24-43. <https://doi.org/10.3167/TRANS.2018.080104>

Maingueneau, D., & O'regan, J. P. (2006). Is discourse analysis critical? And This risky order of discourse. *Critical Discourse Studies*, 3(2), 229-235.
<https://doi.org/10.1080/17405900600908145>

Mellström, U. (2004). Machines and masculine subjectivities: Technology as an integral part of men's life experiences. *Men and Masculinities*, 6(4). <https://doi.org/10.1177/1097184X03260960>

Mohamed, M., Higgins, C., Ferguson, M., & Kanaroglou, P. (2016). Identifying and characterizing potential electric vehicle adopters in Canada: A two-stage modelling approach. *Transport Policy*, 52, 100–112. <https://doi.org/10.1016/j.tranpol.2016.07.006>

Morsing, M., Schultz, M., & Nielsen, K. U. (2008). The 'Catch 22' of communicating CSR: Findings from a Danish study. *Journal of Marketing Communications*, 14(2), 97-111.
<https://doi.org/10.1080/13527260701856608>

Norris, S. (2004). *Analyzing multimodal interaction: A methodological framework*. London, England: Routledge.

O'Halloran, K. L., Tan, S., Smith, B. A. & Podlasov, A. (2011). Multimodal analysis within an interactive software environment: Critical discourse perspectives. *Critical Discourse Studies*, 8(2), 109-125. <https://doi.org/10.1080/17405904.2011.558687>

Pease, B. (2019). Recreating men's relationship with nature: Toward a profeminist environmentalism. *Men and Masculinities*, 22(1), 113-123. <https://doi.org/10.1177/1097184X18805566>

Pflugfelder, E. H. (2018). Autonomous vehicles and gender: A commentary. *Transfers*, 8(1), 104-111.
<https://doi.org/10.3167/TRANS.2018.080108>

Redshaw, S. (2018). Combustion, hydraulic, and other forms of masculinity: An essay exploring dominant values and representations of the driver in driverless technology. *Transfers*, 8(1), 86–103. <https://doi.org/10.3167/TRANS.2018.080107>

Rezvani, Z., Jansson, J., & Bodin, J. (2015). Advances in consumer electric vehicle adoption research: A review and research agenda. *Transportation Research Part D: Transport and Environment*, 34, 122–136. <https://doi.org/10.1016/j.trd.2014.10.010>

Roderick, I. (2018). Multimodal critical discourse analysis as ethical praxis. *Critical Discourse Studies*, 15(2), 154–168, <https://doi.org/10.1080/17405904.2017.1418401>

Schenk, C. T., & Holman, R. H. (1980). A sociological approach to brand choice: The concept of situational self-image. *Advances in Consumer Research*, 7, 610–614.

Schoettle, B., & Sivak, M. (2014). *A survey of public opinion about autonomous and self-driving vehicles in the U.S., the U.K., and Australia* (Report No. UMTRI-2014-21). Retrieved from The University of Michigan, Transportation Research Institute website: <http://deepblue.lib.umich.edu/bitstream/handle/2027.42/108384/103024.pdf>

Scholz, S., & Heilmann, A. (2019). *Caring masculinities? Männlichkeiten in der Transformation kapitalistischer Wachstumsgesellschaften* [Masculinities in the transformation of capitalist growth societies]. Munich: Oekom.

Schuitema, G., Anable, J., Skippon, S., & Kinnear, N. (2013). The role of instrumental, hedonic and symbolic attributes in the intention to adopt electric vehicles. *Transportation Research Part A: Policy and Practice*, 48, 39–49. <https://doi.org/10.1016/j.tra.2012.10.004>

Shin, P. C., Hallett, D., Chipman, M. L., Tator, C., & Granton, J. T. (2005). Unsafe driving in North American automobile commercials. *Journal of Public Health*, 27(4), 318–325. <https://doi.org/10.1093/pubmed/fdi049>

Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9(3), 287–300. <https://www.jstor.org/stable/2488624>

Skippon, S., & Garwood, M. (2011). Responses to battery electric vehicles: UK consumer attitudes and attributions of symbolic meaning following direct experience to reduce psychological distance. *Transportation Research Part D: Transport and Environment*, 16(7), 525–531. <https://doi.org/10.1016/j.trd.2011.05.005>

Sobal, J. (2005). Men, meat, and marriage: Models of masculinity. *Food and Foodways*, 13, 135–158. <https://doi.org/10.1080/07409710590915409>

Sovacool, B. K., & Axsen, J. (2018). Functional, symbolic and societal frames for automobility: Implications for sustainability transitions. *Transportation Research Part A: Policy and Practice*, 118, 730–746. <https://doi.org/10.1016/j.tra.2018.10.008>

Sovacool, B. K., Kester, J., Zarazua de Rubens, G., & Noel, L. (2018). Expert perceptions of low-carbon transitions: Investigating the challenges of electricity decarbonisation in the Nordic region. *Energy*, 148, 1162-1172. <https://doi.org/10.1016/j.energy.2018.01.151>

Steg, L. (2005). Car use: Lust and must. Instrumental, symbolic and affective motives for car use. *Transportation Research Part A: Policy and Practice*, 39(2), 147–162. <https://doi.org/10.1016/j.tra.2004.07.001>

Swim, J. K., & Geiger, N. (2019). The gendered nature of stereotypes about climate change opinion groups. *Group Processes & Intergroup Relations*, 21(3), 438-456. <https://doi.org/10.1177/1368430217747406>

Tesla (2017, September 8). The 8 Keg SUV [Video file]. Retrieved from https://www.youtube.com/watch?v=QK_jjuj43jk

Tesla (2018). *Impact Report*. Retrieved from https://www.tesla.com/ns_videos/tesla-impact-report-2019.pdf

Ulrich, I., & Tissier-Desbordes, E. (2018). “A feminine brand? Never!” Brands as gender threats for “resistant” masculinities. *Qualitative Market Research: An International Journal*, 21(3), 274-295. <https://doi.org/10.1108/QMR-10-2016-0092>

van Oost, E. (2003). Materialized gender: How shavers configure the users’ femininity and masculinity. In Oudshoorn, N., & Pinch, T. (Eds.), *How Users Matter: The co-construction of users and technology*. Cambridge: The MIT Press.

Vassileva, I., & Campillo, J. (2017). Adoption barriers for electric vehicles: Experiences from early adopters in Sweden. *Energy*, 120, 632–641. <https://doi.org/10.1016/j.energy.2016.11.119>

Wagner, I. (March 3, 2020a). Tesla's revenue from FY 2017 to FY 2019, by region [Graph]. In *Statista*. Retrieved from <https://www.statista.com/statistics/314759/revenue-of-tesla-by-region/>

Wagner, I. (March 6, 2020b). Battery-electric vehicle sales worldwide between January and June 2019, by brand [Graph]. In *Statista*. Retrieved from <https://www.statista.com/statistics/666130/global-sales-of-electric-vehicles-ytd-by-brand/>

Wajcman, J. (1991). Technology as masculine culture. In Wajcman, J., *Feminism Confronts Technology* (pp. 137-161). Cambridge: Polity Press.

Wajcman, J. (2000). Reflections on gender and technology studies: In what state is the art? *Social Studies of Science*, 30(3), 447–464.

Watson, L., Lavack, A. M., Rudin-Brown, C., Burns, P., & Mintz, J. H. (2010). Message content in Canadian automotive advertising: A role for regulation? *Canadian Public Policy*, 36(1). <https://doi.org/10.3138/cpp.36.suppl.s49>

Weber, L. (1998). A conceptual framework for understanding race, class, gender, and sexuality. *Psychology of Women Quarterly*, 22(1), 13-32. <https://doi.org/10.1111/j.1471-6402.1998.tb00139.x>

Weber, J., & Kröger, F. (2018). Introduction. *Transfers*, 8(1), 15-23.

<https://doi.org/10.3167/TRANS.2018.080103>

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender and Society*, 1(2), 125-151.

Wodak, R., & Meyer, M. (2009). Critical discourse analysis: History, agenda, theory and methodology. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (pp. 1–33). London: Sage

Worth, L. T., Smith, J., & Mackie, D. M. (1992). Gender Schematicity and preference for gender-typed products. *Psychology & Marketing*, 9(1), 17-30.

Zhang, Y., Yu, Y., & Zou, B. (2011). Analyzing public awareness and acceptance of alternative fuel vehicles in China: The case of EV. *Energy Policy*, 39(11), 7015–7024.

<https://doi.org/10.1016/j.enpol.2011.07.055>

Appendix A: Coding scheme

Thematic Family	Selective Code	Axial Code(s)	Definition
EVs	Absolute Adoption		The owner states that they would never go back to oil-based mobility.
	Cleaner		The owner describes electric mobility as less harmful for the environment than oil-based mobility.
	Cleaner	Zero Emissions	The owner describes electric mobility as less harmful for the environment specifically because of EVs' zero-emissions, or this is visually represented through text on the screen.
	Electric Movement		The owner explicitly states that owning an EV makes them part of the "electric movement".
	Future of Transport		The owner describes electric mobility as the future of transportation.
	Responsibility	Future	The owner describes the EV adoption as a responsibility for the future.
Femininity	Age	20s; 30s; 40s-50s; 60s	The codes indicate the age of the female owner.
	Ethnicity	Asian; Caucasian	The codes indicate the ethnicity of the female owner.
	Caring	Environmentalism	The female owner states that it is important for her to take care of the environment.
	Caring	Family	The female owner states that it is important for her to take care of her family, or she is symbolically represented carrying out actions of care in relation to members of her family (e.g. kissing children).
	Hybrid	Combustion	The female owner describes her driving experience in line with the symbolical meanings of combustion power resulting in noisy, invasive, and powerful driving patters that are traditionally associated with masculinity, or the video visually represents this type of driving accentuating the car's speed and acceleration.
	Hybrid	Tech Enthusiast	The female owner describes herself as a technology enthusiast, which has

			traditionally been recognized as a normative script of masculinity.
	Mother		The female owner describes herself as a mother.
	Priority	Safety	The female owner describes safety as the most important characteristic that she considers when assessing a car.
ICEs	Negative	Loud	Internal combustion engine vehicles (ICEs) are described as loud.
Masculinity	Age	20s; 30s; 40s-50s; 60s	The codes indicate the age of the male owner.
	Ethnicity	Asian; Caucasian	The codes indicate the ethnicity of the male owner.
	Caring	Environmentalism	The male owner states that it is important for him to take care of the environment.
	Caring	Children	The male owner states that it is important for him to take care of his children, or he is symbolically represented carrying out actions of care in relation to his children (e.g. kissing children).
	Caring	Future Generations	The male owner states that it is important for him to not harm future generations.
	Changed after Tesla	Adventurous	The male owner describes that buying a Tesla brought changes into his life: specifically, he became more adventurous.
	Changed after Tesla	Car Enthusiast	The male owner describes that buying Tesla brought changes into his life: specifically, he became a car enthusiast.
	Community of Owners		The male owner states that he is part of a community of Tesla owners, or the video visually represents the owner as participating in activities with other Tesla owners (e.g. Tesla gatherings).
	Father		The male owner describes himself as a father.
	Feeling	Free	The male owner verbally connects a sense of freedom to the experience of driving a Tesla.

	Hybrid	Non-combustion Driving	The male driver expresses hybrid gendered scripts of masculinity by verbally rejecting normative scripts of combustion masculinity (e.g. mentioning the dangers of fast driving) or he is visually represented in connection with slow and cautious styles of driving (e.g. slow speed).
	Normative	Car Enthusiast	The male owner describes himself in terms of normative gendered scripts of masculinity, specifically he describes himself as a car enthusiast.
	Normative	Combustion	The male owner describes his driving experience in line with the symbolical meanings of combustion power resulting in noisy, invasive, and powerful driving patterns, or the video visually represents this type of driving accentuating the car's speed and acceleration.
	Normative	Innovation Enthusiast	The male owner describes himself in terms of normative gendered scripts of masculinity, specifically he describes himself as an innovation enthusiast.
	Normative	Technology Enthusiast	The male owner describes himself in terms of normative gendered scripts of masculinity, specifically he describes himself as a technology enthusiast.
	Priority	Design	The male owner describes a vehicle's design as the most important characteristic that he considers when assessing a car.
	Priority	Energy Use	The male owner describes a vehicle's energy consumption as the most important characteristic that he considers when assessing a car.
	Priority	Performance	The male owner describes a vehicle's performance (e.g. speed, acceleration) as the most important characteristic that he considers when assessing a car.
	Priority	Safety	The male owner describes safety as the most important characteristic that he considers when assessing a car.
Ownership	Couple		The ownership of the Tesla is attribute to a couple: the couple presents itself as a collective owner of the vehicle.
	Family		The ownership of the Tesla is attribute to a family: the family presents itself as a

			collective owner of the vehicle.
Tesla AV	Positive	Easier to drive	The owner describes Tesla's autopilot as a technology that makes the action of driving easier.
	Positive	Fun	The owner explicitly describes Tesla's autopilot as a technology that transforms the action of driving into a fun activity (e.g. "autopilot is fun").
	Positive	Relaxing	The owner describes Tesla's autopilot as a technology that helps them relax during the action of driving.
	Positive	Safe	The owner describes Tesla's autopilot as a safe technology or that enhances the safety of driving.
	Tech Gadget		The owner categorizes Tesla's autopilot as one of the many technological features of the vehicle and literally describes it "a technological gadget".
Tesla EV	Charging	Fast	The owner describes Tesla as an EV in relation to the activity of charging, which is described as a fast process.
	Charging	Simple	The owner describes Tesla as an EV in relation to the activity of charging, which is described as a simple, non-complicated process.
	Charging	Supercharger Network	The owner describes Tesla as an EV in relation to the activity of charging at one of the stations of the Tesla Supercharger Network, or the activity is visually represented in the video.
	Charging	Uncomplicated Routine	The owner describes Tesla as an EV in relation to the activity of charging, which is described as an uncomplicated routine.
	Charging	Cheaper	The owner describes Tesla as an EV in relation to the activity of charging, which is described as cheaper than tanking gas.
	Extended Range		The owner describes Tesla as an EV and specifically as capable of driving an extended range of km with a single battery charge, or this is visually represented

			through text appearing on the screen.
	Silent		The owner describes Tesla as an EV in relation to the fact that, thanks to its electric engine, the vehicle is silent in comparison to ICEs.
Tesla	Design	Aggressive; Elegant, Futuristic; Sexy	The owner describes Tesla in terms of its design and outer looks, which are specifically described as aggressive, elegant, futuristic, or sexy.
	Family Car	Enjoyable; Safe; Spacious	The owner describes Tesla as a family car, specifically in relation to the fact that is enjoyable, safe, or spacious enough to drive with the family on a Tesla.
	First time	Unforgettable	The owner describes the first time they have driven a Tesla as unforgettable.
	Fun to drive		The owner describes Tesla as a vehicle that is fun to drive.
	Popular		The owner describes Tesla as a vehicle that is popular (e.g. emphasis on the fact that more and more drivers are buying a Tesla)
	Sports Car		The owner explicitly describes Tesla as a “sports car”.
Tesla´s Technology	Automation		The owner describes Tesla´s technology in terms of the vehicle´s automated functions (e.g. automated opening and closing of doors), or they are shown interacting with it them
	Extension of Owner		The owner literally describes that Tesla as an extension of the owner in correlation with discourses of Tesla´s technology (e.g. stating that through the Tesla app the vehicle becomes an “extension of the owner”).
	Fun		The owner describes Tesla´s technology (e.g. touchscreen) as a fun to interact with.
	Futuristic		The owner describes Tesla´s technology as a technology that they imagined only vehicles of the future would feature.
	Internet of Things	Tesla App	The owner describes Tesla as vehicle that is connected to other digital devices (e.g. smartphone), or they are shown interacting with the vehicle through the

			smartphone app,
	Safe		The owner describes Tesla´s technology as enhancing the vehicle´s safety.
	Simple to use		The owner describes Tesla´s technology (e.g. touchscreen) as simple to use.
	Touchscreen	Agenda; Maps; Apps; Control Panel	The owner describes that they use Tesla´s touchscreen to consult their agenda, maps, utilize other apps (e.g. Spotify) or as a control panel (e.g. driving style settings). Alternatively, they are shown interacting on the touchscreen with app for the agenda, maps, other apps (e.g. Spotify) or as a control panel (e.g. driving style settings).
	Touchscreen	Children	The owner describes Tesla´s touchscreen as a tool that their children interact with, or children are shown interacting with the touchscreen.
	Updates	Novelty	The owner describes Tesla in terms of the car´s capability to receive software updates software updates and narrates these as providing new and innovative functionalities.
	Updates	Safety	The owner describes Tesla in terms of the car´s capability to receive software updates and narrates these as enhancing the safety of the vehicle.

Appendix B: Tables of frequencies

Table 1: Frequencies with which different type of owners are represented in the corpus.

Type of owner	Number of different owners	Number of videos they appear in
Men	57	45
Caucasian Men	37	33
- Young Caucasian NF men	5	11
- Older Caucasian men & Caucasian fathers	32	26
Asian Men	20	16
- Young Asian NF men	8	6
- Older Asian men & Asian fathers	12	13
Women	14	16

Table 2: Frequencies with which owners of different ethnicity are represented singularly or together with other owners in the corpus.

Ethnicity of owner	Videos featuring one owner	Videos featuring multiple owners
Caucasian	25	7
Asian	3	13

Table 3: Frequencies with which different type of men are represented in the corpus in relation to different discourses.

Type of owner	Environmentalism	Discourses of Technology	Autopilot
Total of Caucasian men	20	12	2
- Young Caucasian NF men	2	1	0
- Older Caucasian men & Caucasian fathers	18	11	2

<i>Total of Asian Men</i>	11	10	6
- Young Asian NF men	4	5	3
- Older Asian men & Asian fathers	7	5	3

Appendix C: List of analyzed sources

Tesla (2013, September 19). New Year's Resolution [Video file]. Retrieved from

<https://www.youtube.com/watch?v=PyGjPc6tdZo>

Tesla (2013, September 19). Paving the Way for Model S in Texas [Video file]. Retrieved from

<https://www.youtube.com/watch?v=7Ud8IkmjGS8>

Tesla (2013, December 19). Winter Driving Redefined [Video file]. Retrieved from

<https://www.youtube.com/watch?v=TelUR5Bg9zE>

Tesla (2015, June 12). 1.200 km. €0 spent on gas. Watch Model S drivers cross Germany using

#Superchargers only. [Video file]. Retrieved from

https://www.youtube.com/watch?v=ptEIXp_gVDg

Tesla (2015, July 29). Customer video: From Oslo to Amsterdam during the European Supercharger

Rally. [Video file]. Retrieved from <https://www.youtube.com/watch?v=kpi89-gwGZQ>

Tesla (2016, January 25). Tesla in Hong Kong [Video file]. Retrieved from

<https://www.youtube.com/watch?v=STr-rwYJu9c>

Tesla (2016, February 27). Electric Mail | Tesla Customer Stories [Video file]. Retrieved from

<https://www.youtube.com/watch?v=6s14n9PXZx4>

Tesla (2016, February 27). Future Driven | Tesla Customer Stories [Video file]. Retrieved from

<https://www.youtube.com/watch?v=QRVia4VZqls>

Tesla (2016, February 27). Generations | Tesla Customer Stories [Video file]. Retrieved from

https://www.youtube.com/watch?v=tRc6lEL_3Oo

Tesla (2016, February 27). Safety First | Tesla Customer Stories [Video file]. Retrieved from

<https://www.youtube.com/watch?v=naxbzoME6V4>

Tesla (2016, May 13). Zero Emission Road Trip – East China [Video file]. Retrieved from

<https://www.youtube.com/watch?v=u4Hvsi-WDpE>

Tesla (2016, August 3). Electric Road Trip Across Europe [Video file]. Retrieved from

<https://www.youtube.com/watch?v=R9zvbKdrIqA>

Tesla (2016, August 10). Fully Charged | Tesla Customer Stories [Video file]. Retrieved from

<https://www.youtube.com/watch?v=voOvrNEahDA>

Tesla (2016, September 6). Tesla Japan | Charging [Video file]. Retrieved from

<https://www.youtube.com/watch?v=sqAqRXCmZL8>

Tesla (2016, September 6). Tesla Japan | Distance [Video file]. Retrieved from

https://www.youtube.com/watch?v=g4_9AzKHII4

Tesla (2016, September 6). Tesla Japan | Future [Video file]. Retrieved from

<https://www.youtube.com/watch?v=rBDUnKt-wtI>

Tesla (2016, September 6). Tesla Japan | Joy of Driving [Video file]. Retrieved from

https://www.youtube.com/watch?v=d1YV-RO_zE

Tesla (2016, September 6). Tesla Japan | Life with Tesla [Video file]. Retrieved from

https://www.youtube.com/watch?v=FAzGVm_FTdI

Tesla (2016, September 6). Tesla Japan | Owner Stories [Video file]. Retrieved from

https://www.youtube.com/watch?v=k_-OsprwSJY

Tesla (2016, September 22). Better Over Time [Video file]. Retrieved from

https://www.youtube.com/watch?v=YO8SL_6y1EE

Tesla (2016, November 7). Driven by Sustainability [Video file]. Retrieved from

<https://www.youtube.com/watch?v=EEVUkFKthAk>

Tesla (2016, December 21). A Clean Future [Video file]. Retrieved from

<https://www.youtube.com/watch?v=v27iBE5qs5c>

Tesla (2017, July 6). Leave the City Behind [Video file]. Retrieved from

<https://www.youtube.com/watch?v=p2FpQVrTB8k>

Tesla (2017, July 7). Charge Anywhere [Video file]. Retrieved from

<https://www.youtube.com/watch?v=qq-r9iOl858>

Tesla (2017, July 13). See the World from a Different Perspective [Video file]. Retrieved from

<https://www.youtube.com/watch?v=9gTzZaoKKs>

Tesla (2017, July 10). This is LUDICROUS [Video file]. Retrieved from

<https://www.youtube.com/watch?v=Oj4ruxBTv-k>

Tesla (2017, July 17). Range for Rural Living [Video file]. Retrieved from

<https://www.youtube.com/watch?v=h8Y5guP6L9E>

Tesla (2017, July 21). Drive Electric This Summer [Video file]. Retrieved from

<https://www.youtube.com/watch?v=x-Uu7k19xzk>

Tesla (2017, July 24). Perform Under Pressure [Video file]. Retrieved from

<https://www.youtube.com/watch?v=y7wYsqN3Fzo>

Tesla (2017, July 25). Tesla Meets Taiwan [Video file]. Retrieved from

https://www.youtube.com/watch?v=Sx1b22N_I3o

Tesla (2017, August 4). The Greatest Drive [Video file]. Retrieved from

<https://www.youtube.com/watch?v=OHLxKBVjvU4>

Tesla (2017, August 8). Family Safety [Video file]. Retrieved from

<https://www.youtube.com/watch?v=fOXoGcR6IdM>

Tesla (2017, September 8). The 8 Keg SUV [Video file]. Retrieved from

https://www.youtube.com/watch?v=OK_jjuj43jk

Tesla (2017, September 9). The Electric Family [Video file]. Retrieved from

<https://www.youtube.com/watch?v=He7NPWU6qAU>

Tesla (2017, September 13). Drive to Believe – Australia and New Zealand [Video file]. Retrieved

from https://www.youtube.com/watch?v=0W6c_oNsKjg

Tesla (2017, September 13). Tesla in China [Video file]. Retrieved from

<https://www.youtube.com/watch?v=P0VxLJWt1iA>

Tesla (2018, January 26). Sweet Ride [Video file]. Retrieved from

<https://www.youtube.com/watch?v=-bfzVHdynGc>

Tesla (2018, February 13). Greatest Drive – Great Ocean Road, Australia [Video file]. Retrieved from

<https://www.youtube.com/watch?v=-bfzVHdynGc>

Tesla (2018, February 22). Greatest Drive – Muriwai Beach, New Zealand [Video file]. Retrieved

from <https://www.youtube.com/watch?v=RqTeM8gzbQM>

Tesla (2018, March 30). Greatest Drive – Sydney – Byron Bay, New South Wales [Video file].

Retrieved from https://www.youtube.com/watch?v=n_G5-Lo5ZpE

Tesla (2018, May 30). Where Change Begins [Video file]. Retrieved from

<https://www.youtube.com/watch?v=yPh1sXdXhTw>

Tesla (2018, November 6). Living with a Tesla in Hong Kong [Video file]. Retrieved from

<https://www.youtube.com/watch?v=QnUKR4bstuM>

Tesla (2018, November 28). Tesla Taxi Brothers [Video file]. Retrieved from

<https://www.youtube.com/watch?v=1puUwqhoHKU>

Tesla (2018, December 8). Model 3 Surprise [Video file]. Retrieved from

https://www.youtube.com/watch?v=e_Wnwb_cC3g

Tesla (2019, January 22). Tesla in Korea [Video file]. Retrieved from

<https://www.youtube.com/watch?v=TB98fz22k2k>

Tesla (2019, January 24). Camping with Model S [Video file]. Retrieved from

<https://www.youtube.com/watch?v=76tvChUpOCQ>

Tesla (2019, February 19). A Model S Family in Korea [Video file]. Retrieved from

<https://www.youtube.com/watch?v=7bq4Gp4-IBg>

Tesla (2019, March 25). Family Ski Trip [Video file]. Retrieved from

<https://www.youtube.com/watch?v=jJM-ZKzFn7A>