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Contextualizing climate justice activism: Knowledge, emotions, motivations, and actions among climate strikers in six cities

Martiskainen, M.^{1*}, Axon, S.², Sovacool, B.^{1,3}, Sareen, S.^{4,5}, Furszyfer Del Rio, D. D.⁶, Axon, K⁷

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* Corresponding Author, Science Policy Research Unit (SPRU), University of Sussex
Jubilee Building, Room 323, Falmer, East Sussex, BN1 9SL
Phone: +44 1273 876715, Email: m.martiskainen@sussex.ac.uk

¹ Science Policy Research Unit (SPRU), University of Sussex Business School, University of Sussex, United Kingdom

² Department of the Environment, Geography, and Marine Sciences, Southern Connecticut State University, United States of America

³ Center for Energy Technologies, Department of Business Development and Technology, Aarhus University, Denmark

⁴ Department of Geography, Centre for Climate and Energy Transformation, University of Bergen, Norway

⁵ Department of Media and Social Sciences, University of Stavanger, Norway

⁶ Centre for Environmental Policy (CEP), Imperial College London, United Kingdom

⁷ The Foote School, New Haven, United States of America

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None

Abstract

In August 2018, Swedish teenager Greta Thunberg started to strike from school on Fridays to protest against a lack of action on the climate crisis. Her actions sparked a historically large youth movement, leading to a series of school strikes across the world. Over the course of one week in September 2019, striking school children, students and other grassroots movements, such as Extinction Rebellion, called for everyone to participate in a global Climate Strike. This paper is based on comparative research with climate protesters in six cities: Brighton and London (United Kingdom), Montreal (Canada), New Haven and New York (USA), and Stavanger (Norway). Based on original interviews with 64 protesters, the study examines their knowledge, emotions, motivations, and actions in relation to climate change, including any lifestyle changes they have undertaken before or after their protests. Our findings show that protesters have varying degrees of knowledge about climate change, and have taken a

47 range of actions in their own lives to address climate change. They also manifest a wide
48 spectrum of emotions about climate change, and different motivations for taking part in
49 climate strikes. These features are under-studied and dynamically evolving at the present
50 conjuncture. On this basis, we call for expanded academic attention to human, emotional,
51 epistemic, and seemingly mundane aspects of climate protests, their structural tendencies
52 and relational expressions, and the implications for our ability to address underlying drivers.

53
54 **Keywords:** Fridays for Future; climate protests; climate strikes; social activism; Greta
55 Thunberg; social movements
56

57 1. Introduction

58 Striking and protests to raise awareness about climate change – prefaced by prior
59 protests such as those held in Copenhagen during the 2009 United Nations climate summit –
60 became truly global phenomena during 2018 and 2019. Their global sweep was inspired by
61 Swedish teenager Greta Thunberg, who started striking from school on Fridays in August
62 2018, to protest a lack of action in addressing the causes and impacts of climate change. This
63 sparked one of the largest youth movements in history, leading to school strikes, as well as
64 wider climate strikes, across the world (Fridays for Future, 2020).

65 In September 2019, an extraordinary number of people and organisations took part in
66 a Global Climate Strike. An estimated 7.6 million people participated in 185 countries,
67 involving 6,135 distinct events, 73 trade unions, 3,024 businesses, and 820 organisations (BBC
68 News, 2019; Global Climate Strike, 2019). This constituted one of the largest environmental
69 social movements to date. Schoolchildren and students participated alongside adults and
70 other activist leaders, facilitated by several grassroots organisations who promoted the strike
71 via their websites and social media channels (Earth Strike, 2020; Extinction Rebellion, 2020;
72 Fridays for Future, 2020; Global Climate Strike, 2019). These strikes took place in city centres,
73 university campuses and on village greens, with many organisations and corporations
74 allowing, and even encouraging, their employees to take part.

75 The main stated aim of this assemblage of strikes was to spread the message of a need
76 for urgent action on the climate crisis. As a consequence of the strikes, Jeff Bezos, the CEO of
77 online retailer Amazon, promised to make the company carbon neutral by 2040, and to meet
78 the goals of the Paris climate agreement (BBC News, 2019). He also ordered 100,000 electric
79 delivery vehicles, due to enter service in 2021 (BBC News, 2019). Technology company Google
80 announced that it would make a corporate purchase of renewable energy worth \$2 billion,
81 including millions of solar panels, and hundreds of wind turbines (The Guardian, 2019). This
82 pledge means Google will produce more electricity than entire countries such as Lithuania or
83 Uruguay. Ingka Group, which owns furniture giant Ikea, also announced it would invest in
84 solar and wind energy to beat its target to produce as much renewable energy as it uses by
85 2020 (Fast Company, 2019). In November 2019, Collins Dictionary named ‘climate strike’ its
86 word of the year (Collins Dictionary, 2019), while Oxford Dictionaries named ‘climate
87 emergency’ their word of the year (Oxford Dictionaries, 2019). Additionally, Time magazine
88 chose Greta Thunberg as their ‘Person of the Year’ (Time, 2019).

89 While climate strikes have been increasing in quantity and scale, generated traction,
90 and even some large commitments to address the drivers of climate change, climate strikers
91 themselves are relatively unknown in terms of their knowledge about climate change, their
92 emotive and motive aspects, and their efforts in relation to climate action. As Fisher (2019:

93 431) notes, “although we have some knowledge as to how adult activists mobilize to
94 participate in protest and social movements, research has yet to devote much attention to
95 understanding how well these findings apply to young people when they engage in activism...
96 Overall, the ways participants in #FridaysForFuture communicate, how they connect with
97 youth-led organizations, as well as how these organizations form and function, are not well
98 understood. To appreciate the social and political effects of this movement — how individuals
99 are participating now, what it will mean for them over their lives and the political outcomes
100 of their activism — research is greatly needed”.

101 In this study, we therefore ask: *What knowledge do activists have about climate*
102 *change? What emotions do they have with respect to climate change? What motivates them*
103 *to take part in a global climate strike? and What action(s) have these people taken, or plan to*
104 *take after their participation in the strike?* We address these questions through original
105 empirical qualitative research, conducted via interviews with climate strikers in six cities
106 across four countries: Brighton (UK), London (UK), New York (USA), New Haven (USA),
107 Montreal (Canada), and Stavanger (Norway). These strikes are all located in highly
108 industrialized countries, where per capita greenhouse gas emissions are considerably higher
109 than the global average. Our study therefore offers a rare and comparative overview,
110 combining conceptual reflection with empirical insights, and keeping scholarship adaptive to
111 the growing real-world realities of climate protests. We aim to provide insights into the
112 conjuncture of processes of global environmental change and patterns of climate activism in
113 terms of cognitive (knowledge), affective (emotions, motivations) and behavioural (actions)
114 aspects of climate protests.

115 While we focus on the climate strikes of 2019, we build on work in the *longue durée*,
116 notably the dynamics of increasing climate protests evident during and after the United
117 Nations Framework Convention for Climate Change (UNFCCC) Conference of Parties 15 (CoP
118 15) held in Copenhagen in 2009 (cf. Fisher, 2010). As Fisher (2010: 11) shows, “ironically and
119 counter-intuitively, the massive expansion of civil society participation at Copenhagen was
120 not only accompanied by civil society disenfranchisement, it actually contributed to it”. Our
121 findings allow us to unpack key implications from the 2019 climate strikers, reflecting on the
122 identity and effectiveness of the growing environmental movement. In part, we address the
123 research gap indicated by scholars like Fisher (2019) and Wolf and Moser (2011) by bringing
124 evidence on how climate protesters conceptualise the climate crisis; emotionally respond to
125 it; and behaviourally address it in terms of climate mitigation and/or adaptation.

126 Our paper is organised as follows: Section 2 presents our literature review of
127 environmental activism, climate justice, and public engagement. Section 3 outlines our
128 conceptual framework and qualitative case study method. Results are shown in Section 4 and
129 discussed further in Section 5. We conclude with Section 6 by making recommendations for
130 future research.

131

132 **2. Environmental activism and public engagement: A review of literature**

133 Sustained large-scale protests linked with the climate crisis are an unprecedented
134 phenomenon, even though environmental protesting is not new. We have seen protests of
135 comparable scale and intensity for other causes in the past too, including, for example, for
136 austerity politics, wars, gun violence, and political referendums (e.g., Hall, 2011; Klimke and
137 Sharloth, 2008). However, the drivers of protest movements, and the ways in which they
138 manifest, vary. In this section, we first unpack scholarship on the intersection of

139 environmental activism and climate justice, and then attend to work that focuses specifically
140 on public engagement with sustainability.

141

142 **2.1. Environmental activism and climate justice**

143 Previous literature on environmental activism and movements can illuminate
144 understandings of how protesters hope to catalyze and enact system change to address
145 climate change. A rich array of historical research on environmental movements and activism
146 highlights the evolution of concern over the impact of human action on ecosystems and the
147 natural world.

148 Almost 60 years ago, ground-breaking work by Rachel Carson brought the impact of
149 man-made pesticides to the public eye (Carson, 1962; see also Montrie, 2018). Since then,
150 activists and social movements have sought to raise awareness of, and halt, developments
151 with adverse environmental impacts (Jamison, 2010). These have included movements
152 against energy infrastructures, like nuclear plants (e.g., Buns, 2017; Kitschelt, 1986; Takao,
153 2019), fossil fuel plants (Ottinger, 2013), and even renewable energy projects (Watts, 2018).
154 Protesters have used by social mobilizing campaigns and legal processes to take on mining
155 companies that have threatened ecosystems (Bebbington et al., 2018). In countries like Brazil
156 and Borneo, protesters have sought to end illegal rainforest logging and intensive farming
157 (Dove, 2019; Wolford, 2008). Environmental activists in the UK have courted arrest for
158 disrupting fracking sites (Hilson, 2015). Much activism around climate change has focused on
159 specific campaigns such as keeping fossil fuels in the ground (Princen et al., 2015), divesting
160 from polluting projects (Blondeel, 2019), and countering fossil fuel infrastructure expansions
161 like pipelines and new explorations in ecologically valuable areas like the Arctic (Dale et al.,
162 2019). Other domains feature campaigns to reduce consumption (e.g., plastics) and promote
163 sustainable consumption (Middlemiss, 2018). Historically, and more generally, such activism
164 has constituted a driving force for change, so much so that the environmental movement that
165 came of age in the 1960s in Western countries has had an enduring influence on politics, with
166 environmental ministries now a formalised feature of these national governments (Rootes,
167 1999). The 1960s and 1970s saw the birth of multiple acts, regulations, and policies centred
168 on wilderness protection, waste management, clean air and water provision, land use
169 management, energy efficiency and conservation, and the protection of non-human species
170 and habitats. According to historian Robert Nash (1990: 45), it was during this time that
171 “environmentalism changed from a religion to a profession” and moved from a “blue-jean-
172 and-granola style of conservation evident at the time of the first Earth Day” (on 22 April 1970)
173 to a sophisticated and lasting social movement.

174 Despite their importance, environmental social movements have been relatively
175 neglected within academic literature (compared to green political parties for instance), which
176 may have been due to the lack of well-portrayed connections to other motivations such as
177 social justice. Social movements exist in a complex protest space; their boundaries are not
178 always distinct and their mobilisation is often influenced by previous or contemporaneous
179 movements (Hadden, 2014). Rootes (1999) argues that an “environmental movement” is a
180 rather vague term, and one left strategically ambiguous in order to be inclusive. Yet Burns
181 and LeMoyne (2001) analyse what is likely to make a movement successful, and compare
182 environmental movements to this ideal type. It is clear from their analysis that the priorities
183 identified by environmental movements are often not of high concern for the broader
184 electoral base, yet they can be effectively co-opted when addressing issues of immediate
185 concern to political constituencies. Indeed, Schlosberg (2007) identifies the propensity of

186 environmental justice movements to solely refer to the distribution of environmental ills and
187 benefits as a weakness. Over the past decade, approaches that were initially seen as being on
188 the radical left politically have generated widespread interest. Concepts such as “degrowth”
189 (cf. Kallis, 2011) and “doughnut economics” (Raworth, 2017) have gained policy traction
190 beyond environmental movement circles, for instance with the European Commission.
191 Degrowth theorists argue that we need to reduce production and consumption, as
192 overconsumption causes many of the world’s environmental problems and social inequalities
193 (Kallis 2011). Doughnut economics, meanwhile, is based on an economic system that meets
194 all of the world’s needs without exhausting the planet (Raworth, 2017). In calling for a
195 mission-oriented approach to addressing climate change, Mazzucato (2018) for example,
196 indicates that an overtly narrow focus on redistribution by progressive groups allows wealth
197 creation – often based on ignoring negative environmental externalities – to fly under the
198 radar.

199 Recent research on environmental activism centres on “climate justice”: the
200 recognition that the impacts of climate change disproportionately impact the most
201 vulnerable, marginalised, and least resilient populations in society (Perkins, 2019). This
202 frames climate change as an ethical and a political matter (Caney, 2014), linking climate
203 justice with human rights and human-centric approaches to development that safeguards
204 the rights of the most vulnerable while sharing the burdens and benefits of climate change
205 equitably (Mary Robinson Foundation, 2019). Caney (2014) specifies two kinds of climate
206 justice. The first focuses on how the burden of addressing the problem should be shared
207 equitably among duty-bearers; defined as ‘*burden sharing justice*’. The second centres on the
208 imperative to prevent climate change and focuses on who should do what to ensure that a
209 catastrophe is averted; defined as ‘*harm avoidance justice*’. This second perspective is
210 concerned with potential victims and ascribes responsibilities to others to uphold threatened
211 entitlements (Caney, 2014).

212 Hadden (2014) identifies how the climate justice movement has increasingly
213 attempted to frame the climate crisis (as a symptom of a system destroying the planet and
214 communities) from the angles of capitalism, migration, gender, militarism, labour, class, and
215 food production. To broaden mobilisation, multiple groups have coalesced around a justice
216 framing for the climate issue, extending their advocacy also as a struggle for social, ecological
217 and gender justice (Hadden, 2014; Perez et al., 2015). Indeed, one of the main tenets of the
218 climate justice movement is that people of colour, women, and the world’s poorest bear a
219 disproportionate share of societal environmental problems (Rainey and Johnson, 2009).
220 Furthermore, these injustices are exacerbated by powerful agents acting in their self-interest.
221 These agents are able to exploit, and expose, vulnerable groups to environmental
222 degradation because they are powerless, less informed, and less organised to fight such
223 decision-making (Bullard, 1994; Rainey and Johnson, 2009).

224 Contemporary climate movements, such as Fridays for Future (Fridays for Future,
225 2020) and the Sunrise Movement — which originated as a social welfare organization on the
226 US East Coast in 2015 (Sunrise Movement, 2020) — have indicated that climate justice
227 features heavily in their motivations to strike and protest. It is also reflected in the names of
228 longer-running groups like the Climate Justice Network, which brings together academics,
229 policy makers, and activists (Climate Justice Network, 2020), and Climate Action Now, a
230 Canadian climate campaigning group (Climate Action Now, 2020). Moreover, ‘deep ecology’
231 perspectives are frequently present within current climate justice activism. They call for
232 radical measures to challenge the carbon-intensive consumption patterns in ‘developed’

233 countries, and instead, place eco-centric requirements before anthropocentric needs (Wall,
234 1994). Deep ecology is a movement which considers humans to be equal to other species,
235 requiring action and social reform so that humans and nature can live in harmony (Drengson
236 1995).

237 The above literature argues that widespread environmental and climate justice
238 movements in fact have three central arguments: 1) equity in the distribution of
239 environmental risks, 2) recognition of diverse participants and experiences in affected
240 communities, 3) and the importance of wider participation in the political processes that
241 shape environmental policy (Schlosberg, 2007). Calls for citizen assemblies by activist groups
242 such as Extinction Rebellion — which is a global movement that uses non-violent civil
243 disobedience to highlight the threat of climate change (Extinction Rebellion, 2020) — reflect
244 the need for participation in political processes (e.g. Schlosberg, 2007) to build consensus for
245 transformational change. Furthermore, Burns and LeMoyné (2001) advocate that
246 environmental movements remain attentive and responsive to other, overlapping causes, as
247 without this, more pragmatically astute movements may impose their own priorities, leaving
248 environmental concerns out as the central organising principle.

249

250 **2.2. Public engagement with sustainability initiatives and movements**

251 There is broad consensus that for environmental movements and climate justice
252 initiatives to succeed, public engagement is central (Heiskanen et al., 2010; Mulugeeta et al.,
253 2010; Sareen, 2020). Wolf and Moser (2011: 550) indicate that public engagement refers to a
254 “*personal state of connection*” with the issues of climate change and sustainability, rather
255 than engagement as part of a process in policy making. It therefore has three main
256 components: what people *know* (cognitive, i.e. knowledge/understanding), *feel* (affective, i.e.
257 emotions/motivations), and *do* (behavioural, i.e. actions/responses) with respect to
258 sustainability and climate change in their everyday lives (Whitmarsh et al., 2013; Axon, 2016).
259 These three facets are not related in mere linear fashion, but rather interact with each other
260 in complex ways; e.g., behavioural change can precede cognitive or affective change, and vice
261 versa (Whitmarsh and O’Neill, 2011). Therefore, it is not enough to simply know about climate
262 change in order to engage with it. Individuals also need to care about it, be motivated by it,
263 and be able to take action to address it (Lorenzoni et al., 2007), often with links to personal
264 underlying values (De Groot and Steg, 2007; De Groot and Steg, 2008; Steg et al., 2014).

265 Public engagement can be temporal and fluctuate: it needs to be facilitated in the
266 short-term and sustained for the long-term (Axon, 2016). Schussman and Soule (2005), for
267 instance, found that there are people, usually politically liberal and/or active in politics, who
268 take part in protests without being asked. But people who are asked to protest are more likely
269 to take part, with young people interested in politics, and students in particular, being more
270 likely to be asked to take part. Engagement can thus be responsive and sensitive to external
271 stimuli.

272 Public engagement in the form of local community-based sustainability initiatives is
273 oriented at challenging mainstream practices by providing viable alternatives to address the
274 challenges of ‘Peak Oil’ and climate change (Seyfang and Smith, 2007; Smith et al., 2014).
275 ‘Transition Towns’, for example, are community-led local networks that build environmental
276 sustainability and social resilience in the face of climate change. Totnes in the UK was one of
277 the first ones to be set up (Transition Town Totnes, 2020), and the movement has grown into
278 the Transition Network (Transition Network, 2020). ‘Peak oil’ is the theorised date when fossil
279 fuel exploration and production reach their peak, whereafter supplies decline (e.g. Sorrell et

280 al. 2010). Initiatives such as the Transition Town movement share multiple characteristics
281 with social movements in terms of their resistance to existing power structures, identity, and
282 societal goals (Pesch et al. 2018). As part of these initiatives, there are consistent efforts to
283 facilitate and sustain public engagement to reduce carbon-intensive practices through
284 awareness raising activities such as film showings, participatory events, group discussions,
285 educational resources, and local food production and consumption (Axon, 2020). These
286 activities seek to involve residents and members of sustainability initiatives to act creatively
287 and collectively, particularly in instances where individualistic approaches have previously
288 failed to alter unsustainable lifestyle practices (Mont et al., 2014; Verplanken and Roy, 2016).

289 With respect to environmental social movements, activism itself is a form of
290 behavioural engagement, and one that can be highly visible to others and shared across many
291 media platforms. Activism can employ diverse means of communication strategies,
292 techniques and public engagement approaches to involve as many protesters as possible, and
293 to gain the attention of those who are not striking or protesting. For example, in Spain, Portos
294 (2019) found that younger activists demonstrating against austerity differed from older
295 protesters: they strategically deployed a more grassroots approach, incorporated innovations
296 such as performances, and employed less formal organisational structures (e.g. by using
297 Internet-based digital tools).

298 However, the character of protest actions fluctuates over time and the volume of
299 sustained participation can wane (Hadden, 2014). While the number of people engaged in
300 protest activities is not necessarily growing year-on-year, there has been a dramatic increase
301 in the number of people claiming to have engaged in protests since the mid-1970s (Dalton et
302 al., 2010; Saunders et al., 2012). Participation in protests and social movements has been
303 explained to be the product of frustration, anger, and alienation from the political system
304 (Gurr, 1970). Even though the disaffection from democracy has been criticised, grievances
305 and emotions remain crucial for motivating individuals to participate in action on issues
306 underpinned by moral concerns (Saunders et al., 2012).

307 With respect to affective engagements with participation in sustainability-related
308 protests, anger and frustration are classified as “approach” emotions, and fear and worry as
309 “avoidance” emotions (Klandermans et al., 2008). Protesters who identify with a group they
310 consider powerful are more likely to experience approach emotions, and, consequently, more
311 likely to participate in protest actions (Saunders et al., 2012, see also Schussman and Soule,
312 2005). Conversely, those who consider a group to be weak are more likely to experience
313 avoidance emotions and not take action (Klandermans et al., 2008; Saunders et al., 2012).
314 Motivations to protest are not solely emotional, but also ideological or identity-based and
315 linked with the desire to express such views (Klandermans, 2004).

316 In contrast to many community-based sustainability initiatives, Rainey and Johnson
317 (2009) identify how women of colour have led the way in the environmental justice
318 movement; relying upon established community networks with civic and voluntary
319 organizations, religious institutions, and community-based groups, to build egalitarian
320 organizational models that promote equity and justice for at-risk, marginalized, and
321 disenfranchised communities. Fisher et al. (2018) find that participants hold intersectional
322 motivations across gender, race, and sexuality, but that the patterns of these overlapping
323 motivations are not particularly durable and differ among participants at every protest. This
324 is consistent with insights on the diverse temporalities of local sustainability initiatives
325 (Grandin and Sareen 2020).

326 Tapping into the expressed psyche and emotions of environmental protesters during
327 a climate strike can thus provide a window of empirical insight into an important subject with
328 relatively little research on it: drivers of public engagement with sustainability and their
329 embodied manifestation in the form of socio-political mobilisation.
330

331 **3. Research methods and conceptual approach**

332 To explore contemporary environmental and climate activism, our study is based on
333 original, comparative and multi-sited field research undertaken during two days of climate
334 strike action in September 2019.
335

336 **3.1. Case study selection**

337 We chose our case cities based on several factors. Our aim was to include small,
338 medium and large cities to gauge the level of public engagement amongst citizens from
339 potentially different size protests. We selected cities in highly industrialized countries that
340 have relatively high consumption and are thus responsible for both high consumption and
341 emissions patterns. We used historical emissions as a frame to outline the potential personal
342 responsibility of protesters. We made a conscious decision to not spread ourselves too thin
343 across a large set of uncertainties by adding one or two ‘developing’ country cities for
344 symbolic purposes (one or more additional studies of relatively comparable contexts,
345 followed by a comprehensive, large-scale study, would be a more appropriate approach to
346 ensure academic rigour). Furthermore, the selection criteria were also influenced by the
347 ability of the team of authors to conduct coherent fieldwork across selected cities on the
348 actual strike days. This was considered advantageous to gain insights into potential
349 differences across socio-cultural aspects of engagement with the climate strikes. The chosen
350 cities include (see also Figure 1):

351 **Brighton (UK):** The climate strike in Brighton took place on 20th September 2019 and
352 started on Hove Lawns located on the seafront of the coastal city. The strike action
353 commenced at 11:00 a.m. with speeches from local Green Party Member of Parliament
354 Caroline Lucas and Member of European Parliament Alexandra Phillips. Primary and
355 secondary school children, students, families, and adults of all ages took part and groups such
356 as Extinction Rebellion, Climate Action Now, Fridays for Future, vegan activists and political
357 parties were present. The striking crowd walked from the seafront through the main streets
358 of the city centre, which were closed off for traffic, onto The Level park where further
359 speeches by Extinction Rebellion and student climate protesters took place. Local police
360 estimated that 5,000 to 7,000 protesters participated in the climate strike (Brooke, 2019).

361 **London (UK):** The climate strike took place in Downing Street, central London, where
362 around 100,000 climate protesters concentrated outside the Houses of the Parliament on 20th
363 September 2019. The strike not only gathered pupils and parents, but also a large number of
364 environmental, social and political organizations, such as Earth Watch Institute, Animal
365 Rebellion, the Green Party and trade unions (e.g. Trades Union Congress). From 11:00 am
366 onwards, speakers such as the former Labour Party leader Jeremy Corbyn, journalist Owen
367 Jones and Green Party MP Caroline Lucas (who had earlier spoken at the Brighton protest)
368 addressed the crowds in Millbank. Complementary to this, a set of action took place around
369 London, where different local rallies supported the movement. Although these activities were
370 scheduled to finish at 3:00 p.m., people were encouraged to stay longer.

371 **Montreal (Canada):** The start of the protest was due to begin at the Sir George-
372 Étienne Carter monument in Mount Royal Park on 27th September 2019. However, numerous
373 groups started to protest on the way to the park along Sherbrooke Street and Park Avenue.
374 Protesters gathered in the street and park waiting to march through the city to see Greta
375 Thunberg speak on Boulevard Robert Bourassa. While waiting, numerous climate justice
376 groups such as Sunrise Movement and Extinction Rebellion formed a line waiting to march.
377 At Mount Royal Park, there were distinctive messages reflecting indigenous rights from
378 climate justice activists. The march slowly progressed through a number of arterial roads
379 before culminating at Boulevard Robert Bourassa to hear a few climate justice activists speak.
380 Overall, an estimated 500,000 people protested in Montreal, making it one of the largest
381 protests in Canadian history.

382 **New Haven (USA):** Organised by the New Haven Climate Movement, this climate
383 strike began at 4:00 p.m. on 20th September 2019 at a corner of the New Haven Green. The
384 organizers decided to start at this time to encourage more families and students to attend
385 after school. An estimated 400 people attended the strike. There was a mix of families,
386 students from local schools and universities, and older activists. As it reached 4:00 pm, the
387 crowds gathered and around 100 Yale University students and faculty came across the Green
388 chanting in solidarity with the local protesters. These students, protesting from 3:00 pm
389 onwards, had organised speeches and a walk from the university campus which led them to
390 the main strike. Many protesters dressed in black to pay respect to those who have died, are
391 dying, and will die due to the climate crisis. Tomb stones were erected and the first set of
392 speeches started around a casket. The protesters travelled around the four corners of the
393 Green with a speech at each corner from local organisations supporting the Green New Deal,
394 as well as student voices from local schools and universities. The strike culminated with
395 speeches, a song and a 'die-in' in front of the town hall that spilled out onto the road police
396 had cordoned off. The strike lasted for one and a half hours.

397 **New York City (USA):** Protesters gathered in Foley square to begin before officially
398 marching to Battery Park. During this time, protesters listened to numerous speeches by
399 activists while waiting for more people to join the march. Large groups that had been
400 organised by groups other than Fridays for Future, such as Extinction Rebellion and other
401 climate justice interest groups, gathered ahead of the official march time. There was a large
402 police presence attempting to maintain the protesters within Foley Square, yet the large
403 amount of people meant that roads around the square were blocked off. A significant number
404 of news outlets were reporting the protest, and both media and police helicopters were
405 monitoring the protests in the square and throughout the march. The march began and
406 progressed along Broadway (main road through Manhattan) to Battery Park, gathering more
407 protesters along the way. At Battery Park, climate activists spoke with the main focus of the
408 New York protest being on Greta Thunberg's speech. Following this, the majority of protesters
409 dispersed, while some remained for further activities. Overall, over 315,000 people protested
410 on 20th September 2019 in New York City.

411 **Stavanger (Norway):** The climate strike in Stavanger was hosted by Kunsthall
412 Stavanger on 20th September 2019. This is an urban art centre that was closed during the day
413 in support of the global climate strike, and then opened in the evening to host a T-shirt
414 printing workshop at 5:00 pm with two pre-fixed slogans conducted by an artist, who
415 subsequently gave a talk at 7:00 pm titled 'Plenary Futures' about sustainable visual design.
416 Thus, the protest was not a demonstration in a public area, but rather a reflective event with
417 public sign-posting in support of the global climate strike. Participants had ample opportunity

418 to share their views with each other over refreshments and pre-planned activities, as well as
 419 during an intimate conversational setting following the talk. With an estimated 20
 420 participants, the Stavanger strike was smaller than the other climate strikes included in this
 421 study. However, it was the only one held in what is Norway's fourth-largest city and known
 422 as the country's 'oil capital'.
 423
 424

Figure 1: Landscapes of climate protests and strikes in six cities



a. Brighton



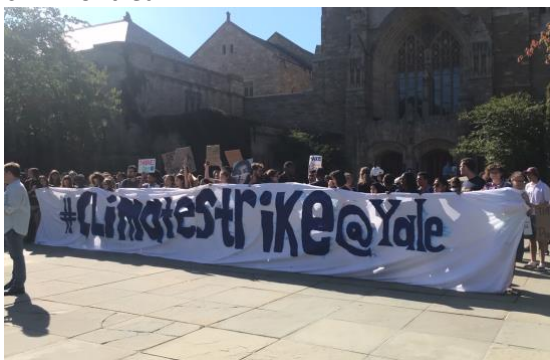
b. London



c. Montreal



d. New York



e. New Haven



d. Stavanger

425 Image source: Authors

426

427 3.2. Conceptual framework

428 As a conceptual framework to help guide and structure our analysis, we synthesize
 429 from the literature on climate and environmental activism and public engagement (see
 430 Section 2), as well as from psychology, geography, and science and technology studies. This
 431 collective literature suggests that strikes or protests involve three main components: 1)
 432 cognitive (knowledge); 2) affective (emotions/motivations); and 3) behavioural

433 (actions/forms of engagement) (Whitmarsh and O'Neill, 2011; Wolf and Moser, 2011; Axon,
434 2016). Furthermore, this literature indicates that public engagement is not static but fluid,
435 and subject to change as a matter of life-course and contextual changes (Axon, 2020).

436 Affective responses are often considered to display positive, ambivalent, or negative
437 emotions that seem to reflect a continuum towards how individuals feel about (addressing)
438 climate change and sustainability initiatives (Axon, 2016). On behavioural action, we also
439 reflect on the work by De Groot and Steg (2007; 2008) and Steg et al. (2014) who identify
440 different values underlying our behaviour. *Altruistic* values are rooted in helping others;
441 *biospheric* values are about helping the earth; *egoistic* values are about making oneself better
442 off; and *hedonic* values are about enhancing one's own happiness.

443 Consideration of emotion within social science research has often been seen as a
444 "fuzzy" issue with limited applicability; yet, an emerging research area outlines that the
445 emotional dimensions of sustainability and climate change are integral to sustainable
446 transformations (Brown et al., 2019). Behavioural engagements are equally important, as
447 they may reflect the willingness to participate in, and the ability to undertake, sustainable
448 lifestyles (Axon, 2017).

449

450 **3.3. Data collection**

451 We conducted 64 interviews with protesters on Friday, 20th September 2019, in
452 Brighton, London, New Haven, New York and Stavanger (six interviews were conducted over
453 the phone during the weekend following the strike) and on Friday, 27th September 2019, in
454 Montreal. Before data collection commenced, an ethical approval for the research was given
455 by the University of [removed for blind review] Social Sciences & Arts Cross-Schools Research
456 Ethics Committee. Interviewees were approached by an onsite researcher on the strike day,
457 and were chosen based on their willingness to spend ten to twenty minutes on the interview
458 and to sign a consent form after being sufficiently informed about the purpose of the study.
459 There was an effort to ensure diverse representation in our coverage of climate protesters
460 across factors such as age, race, and gender. Furthermore, randomness in terms of multiple
461 locations and timings of interviews across a range of city protests ensured a high likelihood
462 of being able to collect and highlight diverse responses through the study.

463 The interviews were complemented by field observations in each context in order to
464 gain a richly contextualised sense of the grounding for responses of particular protesters. Our
465 aim was to collect evidence to formulate a picture of the protesters' knowledge, emotions,
466 motivations, and actions in relation to climate change, and their key messages on the strike
467 day. To do so, we asked protesters six questions in relation to: motivations to take action on
468 the strike day; their knowledge about climate change; their emotions about climate change;
469 any lifestyle changes the person had made; their history of participation in previous climate
470 action; and what they were intending to do in the future. We also asked participants what
471 the message on their banner or placard was (if they did not have a banner, we asked what
472 the message on their banner would have been if they had one). Most interviews were
473 conducted during the strike action, and many were 'mobile interviews' (e.g. Sheller and Urry,
474 2006; Finlay and Bowman, 2017) with researchers walking and talking with the protesters.
475 This way protesters were not held back for too long for them to fully take action, and it also
476 helped build rapport. This study required an efficient approach to interviewing in order to
477 accommodate for issues such as weather conditions, moving crowds and noise from other
478 protesters. Our interview questions were thus based on a structured interview approach
479 where we did not ask follow-up questions.

480 The majority of the interviews conducted on the strike days lasted between 5-12
 481 minutes, were digitally recorded, and transcribed verbatim. All respondents were given an
 482 opportunity to maintain anonymity, and transcripts were given a unique identifier (e.g. in
 483 Brighton BR-P1; London LO-P1; Montreal MO-P1; New Haven NH-P1; New York NYC-P1;
 484 Stavanger ST-P1). We also asked to take photos of respondents' banners and in most
 485 instances, respondents gave permission for the research team to use their picture for this
 486 research.

487
 488

Table 1: Location of interviews and number of respondents

City and country	Number of respondents	Estimated number of people taking part in the protests	Respondent identifiers
Brighton, UK	11	5,000 - 7,000	BR-P1 – BR-P11
London, UK	13	100,000	LO-P1 – LO-P13
Montreal, Canada	10	500,000	MO-P1 – MO-P10
New Haven, USA	8	400	NH-P1 – NH-P8
New York, USA	12	315,000	NYC-P1 – NYC-P12
Stavanger, Norway	10	20	ST-P1 – ST-P10
Total	64		

489 Source: Authors

490

491 **3.4. Data analysis**

492 With our conceptual framework and data in place, the authors first read each other's
 493 transcripts to ensure an overview of the data, which we then revisited through each author's
 494 individual city case in order to create stronger links across the whole analysis. We then
 495 undertook analysis of our data following approaches in thematic qualitative analysis (Braun
 496 and Clarke, 2006; Savin-Baden and Howell Major, 2013). We initially coded interview
 497 transcripts individually, using a growing set of codes which were shared amongst the
 498 authoring team as each author completed coding. Based on this preliminary coding, we then
 499 generated tables in Microsoft Excel spreadsheets that included all codes identified in data
 500 from all six cities. We then combined and assembled codes under emerging themes, to
 501 organise our data into a common thematic structure. This yielded a total of 132 codes, which
 502 were regrouped into 57 themes under our six main interview topics (see Table 2 below).

503

504 *Table 2: Codes and themes from data analysis*

Conceptual dimension	Interview question topic	Number of codes	Number of themes
Cognitive	Knowledge about climate change	16	8
Affective	Motivations to strike	24	8
Affective	Emotions about climate change	37	12
Behavioural	Action in terms of lifestyle changes	28	16
Behavioural	Past climate change action	2	2
Behavioural	Future climate change action	25	11
	Total	132	57

505 Source: Authors

506

507 The interview data analysis was supplemented by iterative discussions and reflections
508 both via remote video conferencing and through written correspondence amongst the
509 authors to inform individual and collective analyses throughout this period.

510

511 **3.5. Study limitations**

512 We would like to acknowledge that our research approach has some limitations.
513 Firstly, we designed our study so as to not collect socio-demographic details of our
514 interviewees. This decision was made based on ethical and practical considerations.
515 Protesting can be a sensitive issue and we did not want to intrude too much into personal
516 circumstances. Nor did we want to “scare off” possible respondents or to have our interviews
517 last an unduly long amount of time (given our respondents were actively in the middle of a
518 strike or protest). Furthermore, the reality of interviewing during live protests meant that we
519 had a limited time afforded by the circumstances for most interviews. Methodologically, we
520 aimed to ensure a diverse set of respondents, but cannot meaningfully claim
521 representativeness in our sample, given that the size of some protests was in the order of
522 300,000 people. Hence, we did not aim to make a quantitative, statistically representative
523 study (e.g., a survey), but sought to examine the qualitative notions of randomly selected
524 climate protesters (e.g., qualitative interviews). We would, however, welcome further
525 research testing of our findings with a larger sample size or with more quantitative methods.

526

527 **4. Results: The cognitive, affective, and behavioural dynamics of climate strikes**

528 We present the results from our analysis within the three categories of our conceptual
529 framework (e.g., cognitive, affective, and behavioural). For each category, we offer a headline
530 summary of findings, and include tables that include various themes that emerged through
531 coding. For each such theme, we indicate how many instances occurred across our 64
532 interviews (with percentages included in our data tables), and feature particularly relevant or
533 revelatory quotes, specifying which cities these are sourced from.

534

535 **4.1. Cognitive: Knowledge about climate change**

536 Within the cognitive category, i.e. protesters’ *knowledge* about climate change, we
537 identified a total of eight themes, all centring on the level of knowledge protesters had about
538 climate change and where they received their information from.

539 The level of knowledge protesters had about climate change ranged from respondents
540 not knowing anything (N=3), to those wanting to know more (N=2), those saying it was
541 difficult to avoid knowing about it (N=4), and those saying they knew too much (N=2). The
542 majority of respondents (N=21) said that they knew quite a lot about climate change, while
543 almost an equal number said that they knew a little bit about climate change (N=20). ST-P9
544 in Stavanger illustrated their high level of knowledge by saying: “*I think I know a lot about
545 climate change, I am an economist and I work on the economy of energy transitions. I also
546 worked a lot on public communication about climate change*”, while MO-P6 in Montreal
547 represented the other end of the knowledge spectrum: “*I don’t know enough and that’s the
548 problem*”.

549 In terms of information sources, the most important were the protesters’ own
550 background or job (N=13) and reports produced by scientists (N=10), indicating potentially a
551 high level of education and access to information amongst protesters. NH-P5 in New Haven

552 said how their own studies in environmental science had provided them knowledge about
 553 climate change:

554
 555 *“I studied environmental science so I know what impact it will have on ecosystems worldwide*
 556 *and what it will do to our food, whether that’s how it’ll impact the most marginalised communities*
 557 *and indigenous communities around the country more than it would the privileged people.” (NH-P5)*
 558

559 Eight respondents mentioned media and TV as information sources, but while many
 560 said they had read about climate change from the media, others also doubted how much
 561 correct information there is in the media about climate change, as explained by MO-03 in
 562 Montreal: *“Actually I learned in my probability and statistics class that the way that [climate*
 563 *change is] being presented to the public that actually makes us in denial or it alters the way*
 564 *that we perceive climate change.”* For others, seeing physical changes in nature (N=6) was the
 565 main source of information about climate change, as illustrated by MO-P4: *“I did get to go to*
 566 *the Arctic in 2013 and seeing the changes and talking to people about how lives have changes*
 567 *was really eye-opening for me.”* Other sources of information included being part of a social
 568 movement and knowing about climate change that way (N=2) or the ‘Greta effect’ and
 569 following what Greta Thunberg was saying on climate change (N=1).

570 Table 3 shares some illustrative quotes for each of the eight themes in this category.

571

572 Table 3: Cognitive knowledge about climate change

Theme	Respondent	Illustrative quote	Total N*
Level of knowledge	ST-P9 Stavanger	<i>I think I know a lot about climate change, I am an economist and I work on the economy of energy transitions. I also worked a lot on public communication about climate change.</i>	52 (81%)
	LO-P4 London	<i>I don’t know, some people say it’s just a temporary thing. I don’t really know.</i>	
	BR-P2 Brighton	<i>I feel like actually I know too much to know we’re in a really grave situation and it’s quite hard to hold that knowledge. When I think about it, it’s an emotional response because of knowing how much we’re hurting the Earth and how much our action is causing devastation to the planet and what that’s going to do to our human species.</i>	
	MO-P1 Montreal	<i>To be honest, I should probably know more and I should probably do more research about it.</i>	
	MO-P6 Montreal	<i>I don’t know enough and that’s the problem.</i>	
	BR-P7 Brighton	<i>It’s difficult to avoid anything about the climate crisis.</i>	
Pre-existing background or job	NH-P5 New Haven	<i>I studied environmental science so I know what impact it will have on ecosystems worldwide and what it will do to our food, whether that’s how it’ll impact the most marginalised communities and indigenous communities around the country more than it would the privileged people.</i>	13 (20%)
	LO-P3 London	<i>I work for an organization called the Environmental Investigation Agency, since at my work we have very holistic approach, I have learnt and campaigned about different issues, like forest campaigns, reforestation campaigns and anti-pollution campaigns.</i>	
Science reports	LO-P2 London	<i>I read all the IPCC reports, all the UN reports and all the big science reports that come out.</i>	10 (15%)

Media & TV	NYC-P9 New York	<i>Just what I read in the papers and try to educate myself about it.</i>	8 (12%)
	BR-03 Brighton	<i>To be honest with you, I actually don't know a lot of the statistics and probably have as much knowledge as a lot of people that are obviously into it. But I know enough to know that it is actually a serious thing and just being unaware because of how the lack of media that actually goes into showing climate change and talking about it.</i>	
	MO-03 Montreal	<i>Well actually I learned in my probability and statistics class that the way that that's being presented to the public that actually makes us in denial or it alters the way that we perceive climate change.</i>	
Seeing physical changes in nature	LO-P1 London	<i>I know that is definitely happening no matter what other people say about it. We can see so much about it with the weather and how climate is changing around the world. Catastrophes are happening all over the place.</i>	6 (9%)
	MO-P4 Montreal	<i>I did get to go to the Arctic in 2013 and seeing the changes and talking to people about how lives have changes was really eye-opening for me.</i>	
	BR-P5 Brighton	<i>I know what I see around me, and I see the degradation of nature everywhere around me.</i>	
	NYC-P11 New York	<i>I've noticed that the temperature is getting warmer, the highs and lows of temperatures – like during the winter, we have these really hot days and then we'll have these freezing days. It's become unstable.</i>	
Social movements	BR-P8 Brighton	<i>I've worked for 20 years in the environmental movement and we're very aware that we need a mass people powered movement to actually shift things much more radically, policy and public opinion and also people's culture, their attitudes and perceptions, their mind-sets.</i>	2 (3%)
Greta Thunberg effect	LO-P9 London	<i>All I know is from Greta.</i>	1 (1%)
Others	LO-P6 London	<i>I know that the climate crisis is definitely man-made, and the Earth is trying to self-correct.</i>	4 (6%)

573 *Sums may exceed 100% due to independent rounding.

574

575 While our questions prompted respondents to state how well-informed they were or
576 not about climate change, their responses included reflections on not only knowledge sources
577 about climate change, but also why they think that the climate crisis is perpetuated. So even
578 though protesters saw themselves as more or less adequately informed about the facts of
579 climate change, they also identified some of the structural factors that were causing the crisis
580 and contributing to the way it was being handled, including issues such as the influence of
581 global neo-liberal economics and inadequate media coverage.

582

583 **4.2. Affective: Emotions about climate change and motivations to strike**

584 Responses in the affective category included *emotions*, how protesters felt about
585 climate change, and *motivations*, i.e. their reasons to take part in the climate strikes.

586 With our question on *emotions*, we wanted to explore what types of emotions people
587 who were protesting had on the actual strike day. Emotional responses towards climate
588 change were diverse, yet there were multiple descriptions that comprised over a dozen
589 themes related to affective dimensions. Two of the most often mentioned emotion themes
590 were respondents on one extreme feeling fear (N=23), but at the other end being hopeful

591 (N=23). Fear featured in many protesters' thoughts, with respondents saying that they felt for
 592 example afraid (N=10), scared (N=5), and threatened (N=5) by climate change. ST-P5 raised
 593 this specifically in relation to the future existence of humanity:

594
 595 *"I feel fear. That the whole system will collapse, millions if not billions will die in the process. I*
 596 *don't know if there will be a future or not. Research shows that there will be disaster. But it seems to*
 597 *be going faster than predictions which are already dire."* (ST-5P)
 598

599 Other emotions focused solely on more negative aspects, including being
 600 disempowered (N=15), anxiety (N=14), concern (N=14), anger (N=11) and despair (N=10).
 601 Protester NH-03 in New Haven summed some of these up in this manner:

602
 603 *"I get all hyped up. I'm mad! I get very angry because there is a lot going on in our government*
 604 *and in society today that is not okay and we as Americans are just idly sitting by and letting it happen.*
 605 *And so, you know, we're okay to get up and vote but we're not okay to speak for anything else, right?*
 606 *So that's what we need to do."* (NH-P3)
 607

608 Despite the gloom that the majority of respondents said they felt over climate change,
 609 there was also a great deal of hope (N=23). For instance, respondents said that they felt
 610 hopeful and/or comforted by taking action in the strike (N=10) and many said that they dealt
 611 with climate change by taking action which made them feel better. NH-P4 in New Haven had
 612 hope about the possibility that future generations may find a solution to the climate crisis:
 613 *"Really positive, no, it's the pits. I put off having a child for a long time because I was very*
 614 *worried about the future. We only recently had a child. We had a child with hopes that maybe*
 615 *he would help this situation someday."*

616 Table 5 outlines themes within the emotions' category.

617
 618 Table 4: Emotions about climate change

Theme	Respondent	Illustrative quote	Total N*
Fear	LO-P3 London	<i>I feel terrified, I think this issue is pretty serious.</i>	23 (35%)
	ST-P5 Stavanger	<i>I feel fear. That the whole system will collapse, millions if not billions will die in the process. I don't know if there will be a future or not. Research shows that there will be disaster. But it seems to be going faster than predictions which are already dire.</i>	
	BR-P3 Brighton	<i>I'm pretty sure within 11 years we can reach the point of no return, I think things like that just terrified me. What about myself, and my kids, and everyone else? I think it is well, if not the biggest issue.</i>	
	LO-P7 London	<i>For emotions, I am honestly scared. But not for me. The idea of 11 years is scary. By 2030, it will be too late to stay within 1.5 Degrees. My daughter will be 14 years old then. Our home won't be inhabitable, and after that, she cannot raise her children in a habitable planet, this feels incredibly scary and uncertain.</i>	

Hopeful	NH-P4 New Haven	<i>Really positive, no, it's the pits. I put off having a child for a long time because I was very worried about the future. We only recently had a child. We had a child with hopes that maybe he would help this situation someday.</i>	23 (35%)
	NYC-P8 New York	<i>I know the situation is bad. It's probably worse than what the scientists are saying, and it makes me feel eager to start doing something about it.</i>	
Disempowered	BR-P4 Brighton	<i>I feel angry, despair, disempowerment.</i>	15 (23%)
	LO-P3 London	<i>At the moment, people and even businesses are doing more than governments. But that is only because governments are letting us down very badly. So, our say is that governments need to take action.</i>	
Anxiety	BR	<i>It's for the first time in my life, I would say, I sometimes wake up at night and I lie there and I feel anxious about the immediate future and the long term.</i>	14 (21%)
Concern	ST-P2 Stavanger	<i>Makes me feel worried, also a bit sad, because there is just so much human stupidity, like Trump in America, deniers need so much proof now. There's no planet B.</i>	14 (21%)
	BR-P7 Brighton	<i>I feel deeply worried, and deeply worried in a way which I have not been politically before.</i>	
	NYC-P11 New York	<i>It worries me, what I really prefer, is that people stop calling it climate change. It sounds kind of benign. Instead of calling it what it really is, climate destabilisation.</i>	
Anger	NH-P3 New Haven	<i>I get all hyped up. I'm mad! I get very angry because there is a lot going on in our government and in society today that is not okay and we as Americans are just idly sitting by and letting it happen. And so, you know, we're okay to get up and vote but we're not okay to speak for anything else, right? So that's what we need to do.</i>	11 (17%)
Sadness	LO-P13 London	<i>I feel urgent, it is a matter of urgency. Today is uplifting, but it's sad as we need to act now or the future is doomed. It is so sad to sit and think about that, but amazing though to see so many people caring today.</i>	10 (15%)
	MO-P4 Montreal	<i>Pretty sad. Most days, if there is a lot of climate news, I probably feel pretty terrible hearing about glaciers melting and the hottest year on record year after year and those sorts of statistics really get me down. But I try not to stay depressed. I try to act on it, email my politicians and really sort of keep at it.</i>	
Despair	NYC-P3 New York	<i>I'm devastated but I also try to tell myself and these young kids, who are carrying this burden and this pain and sorrow and fear, that the anecdote to despair is action. That's how I treat myself and that's a message I try to spread out there.</i>	9 (14%)
Loss of hope	LO-P4 London	<i>I think we are pretty fucked. I think it is pretty severe at this point. I also work with refugees and it is going to get worse and worse. Everything is going to turn worse.</i>	5 (7%)
No emotions	MO-P5 Montreal	<i>Not entirely surprised. It makes sense. We're assholes.</i>	4 (6%)
Strong	LO-P11 London	<i>Despite that, despite the fear, I feel strong. There is power in coming together today.</i>	3 (4%)
Others	NYC-P4 New York	<i>I'm a speaker on environmental policies and also chemicals and pollution so I know what's going on. It makes me feel like I have to speak</i>	5 (7%)

		<i>and get it out there to others. So, I need to share that information, which is what I do.</i>	
--	--	--	--

619 *Sums may exceed 100% due to independent rounding.

620

621 While concern for the future was a ubiquitous response among strikers across the six
622 cities, there were differences between how strikers affectively responded to the climate
623 crisis. Within North American cities, strikers were more likely to identify that they were
624 “terrified” or felt “threatened” (N=10) whereas British strikers were more likely to indicate
625 that they were “hopeful” (N=6) about taking action. Interestingly, the majority of those who
626 identified a lack of action underpinning their affective engagement with climate crisis were
627 more likely to be from the USA. This may reflect the lack of action and political leadership the
628 Trump Administration has taken to address climate change and repealing pro-environmental
629 legislation. Our results indicate that while protesters predominantly had negative feelings
630 such as fear, anxiety and despair at the impacts that correspond with the climate crisis,
631 responses to address climate change and collective action provided protesters with hope for
632 the future.

633 Responses in relation to protesters *motivations* for participating in the climate strike
634 fell under eight broad themes relating to: concern for the planet, environment and climate;
635 wanting to influence public opinion and policy; concern for family and future generations;
636 being part of a protest movement; solidarity; anti-capitalism; security; and other related
637 factors such as protesters coming for related events and deciding to stay for the strike.

638 Concern for the planet, environment and climate was the most often mentioned
639 (N=60) theme that had motivated most participants to take strike action. For example, this
640 was explained very clearly by NYC-P9 in New York: *“We want action taken for the planet. We
641 need to transform our society as soon as possible.”* Wanting to influence public opinion and
642 policy was the second most mentioned motivation (N=48), which was especially prevalent
643 amongst protesters in Brighton. BR-P2 explained this in more detail:

644

645 *“Regardless all the actions we do to benefit the environment, we are just a drop in the ocean
646 compared to the change that needs to be happening. Change that needs to be happening on a
647 worldwide level with government investing in reducing carbon emissions and re-wilding. We believe
648 it's really important for large-scale change to happen amongst government... The more people come
649 out to strike today and to show there is an appetite for change, the more there is a drive for politicians
650 to make changes.”* (BR-P2)

651

652 Concern for family and future generations featured strongly in several protesters’
653 minds (N=26). Respondent BR-P4 in Brighton highlighted: *“I'm concerned about the future.
654 I've got two children and I worry about the impact of climate change on their life, my life, and
655 on everyone's lives.”* Many parents had come to the strikes with their children, showing
656 genuine concern for their future through their banner messages (see Figure 1). Protesters
657 also extended solidarity to the youth climate strikers as well as to those who may be
658 vulnerable or living in, e.g., indigenous communities (N=14), as LO-P11 indicated: *“We are
659 very focused on climate justice, we are very aware of the Global South, we stand with solidarity
660 with all mothers around the world.”* Figure 2 shows many strikers in our six cities.

661

662

663

664

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 666
 667
 668
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 670

Figure 2: Climate strikers in London, Brighton, New York, and Montreal



671 Image source: Authors

672

673 Being part of a protest movement was important to many (N=20), even though for
 674 some it was only about impressing a girlfriend (LO-P12) and doing something for the sake of
 675 it: “I don’t think climate change is the most important thing, which people would disagree with
 676 quite a lot. So, I’m not really here because of that. It’s more of a novelty thing, you know, get
 677 stoned and go to a protest, cross it off the bucket list”. (MO-P5). For many others, however,
 678 taking part in the strike was about being able to feel like they were participating in much
 679 needed change, rather than just sitting back and letting climate change happen (e.g. BR-P3).
 680 Less often mentioned motivations included anti-capitalism (N=7), and national/global
 681 security issues (N=3). Table 4 illustrates themes relating to motivations in more detail.

682

683 Table 5: Motivations to strike

Theme	Respondent	Illustrative quote	Total N*
Concern for the planet, environment and climate	LO-P9 London	<i>I am striking today because in 10 years’ time we begin an irreversible chain reaction that ends human existence as we know it, unless we do something about it.</i>	60 (93%)
	NYC-P9 New York	<i>We want action taken for the planet. We need to transform our society as soon as possible.</i>	
	ST-P7 Stavanger	<i>I think all the days about why don’t we do another way with our lives. That is why I paddled to Norway from Germany.</i>	
To influence public opinion and policy	LO-P3 London	<i>We are striking to stand up against climate change, trying to get governments to start implementing policies. They are {governments} letting us down very badly, so we are here, today, to demand action from them, trying to make a difference, trying to improve our future, trying to be heard.</i>	48 (75%)
Concern for family and future generations	MO-P3 Montreal	<i>I’m concerned about my future. I’m not sure that I’m going to have one and I don’t think that the governments we currently have in place are doing enough about it so I’m not going to school.</i>	26 (40%)
	BR-P4 Brighton	<i>I’m concerned about the future. I’ve got two children and I worry about the impact of climate change on their life, my life, and on everyone’s lives.</i>	

Be part of a protest movement	MO-P5 Montreal	<i>Honestly, it's a shitty answer. I don't think climate change is the most important thing, which people would disagree with quite a lot. So, I'm not really here because of that. It's more of a novelty thing, you know, get stoned and go to a protest, cross it off the bucket list. I think I have postponed doing a lot so I made this sign.</i>	20 (31%)
	BR-P3 Brighton	<i>I want to be able to feel like I'm participating in the change and try to make a difference with everyone else. I don't want to just sit back and watch climate change happening.</i>	
Solidarity	LO-P11 London	<i>We are very focused on climate justice, we are very aware of the Global South, we stand with solidarity with all mothers around the world.</i>	14 (21%)
	NYC-P4 New York	<i>I am striking today in support of my son and beliefs and the climate crisis and what's going on. But primarily to be here with him and allow him a place where he can have his voice be heard.</i>	
	NYC-P9 New York	<i>I'm here with my daughter and a whole bunch of her high school friends supporting the youth movement. It's going to be their generation that's going to deal with the inevitability of the planet dying and I'm just here to support them.</i>	
	ST-P4 Stavanger	<i>So, I think it's a good idea, something has to be done fast, so anything, so just getting people together or doing anything we can do is good, and this is I think the only event in Stavanger, unfortunately.</i>	
Anti-capitalism	MO-P10 Montreal	<i>Worst of all is that there are companies that profit from destroying the planet and destroying our home. I really do think that we have to stop capitalism before it is too late and we don't have a future. That's really worrying because it threatens our way of life.</i>	5 (7%)
	BR-P7 Brighton	<i>I'm angry, like Greta, at capitalism. At aggressive industrialisation, at aggressive outsourcing of work to developing countries.</i>	
Security	NH-P1 New Haven	<i>I think climate change is the largest threat to our national security and I think it's about time we stand up and demand that our politicians and our adults do what they are supposed to do which is protect us.</i>	3 (4%)
	NYC- P3 New York	<i>I'm a US military veteran and my understanding, when I go out to speak publicly, I take it from a front that we are now in the age of consequences where it's a global and national security issue that affects all parts of the globe. From a US standpoint, our own US national security. So, its effects migration. Migration is going to continue. Scarcity of food, scarcity of water. It will accelerate to instability and violence. So, I'm here to create peace.</i>	
Others	LO-P12 London	<i>Honestly, I am striking to get laid. I am here for my girlfriend. It's nothing special.</i>	6 (9%)

684 *Sums may exceed 100% due to independent rounding.

685

686 Overall, motivations for climate strike participation amongst our participants were not
687 solely about environmental concerns or climate change in and of itself. They also included
688 wanting to influence those with power to make structural and systemic changes to
689 unsustainable societies, and concerns that individuals had over the impacts that a climate
690 breakdown may have on immediate family members, on those living further afield, and on
691 human existence as a whole.

692

693 **4.3. Behavioural: Past and future climate change action**

694 Under the behavioural category, we report results on climate *action* along three lines:
695 participation in climate protests, lifestyle changes, and intended future action. This distinction

696 recognises that action by climate protesters can mean many things, hence we posed
697 questions specifically on these matters.

698 In terms of participation, we asked respondents whether they had taken climate
699 action before or not. 34 respondents had participated in previous climate action, while for 28
700 respondents it was their first climate strike (two respondents omitted this question). For
701 example, MO-P3 in Montreal said how their previous action had motivated them to take
702 action again: *“Yes I have. I went to a climate march in Berlin. It was a chance march but I was
703 really glad that I was there and it motivated me to come to this one.” (MO-P3)*. Many
704 respondents also said that they had joined groups such as Extinction Rebellion and had taken
705 part in their previous climate protests. What was clearly evident from our data was the spread
706 in terms of how long people have been involved in climate action. There were many “climate
707 veterans” amongst our respondents, but also many recently activated, as explained by LO-P3
708 in London: *“I have been a climate change campaigner for 12 years and I have seen it
709 escalating.” (LO-P3)*.

710

711 *Table 6: Participation in climate strikes*

Theme	Respondent	Illustrative quote	Total N*
Has participated previously	MO-P3 Montreal	<i>Yes, I have. I went to a climate march in Berlin. It was a chance march but I was really glad that I was there and it motivated me to come to this one.</i>	34 (53%)
	LO-R8 London	<i>This is the third climate strike she is been on [her daughter]. But this is the first time a strike is meant to be for kids.</i>	
Has not participated previously	MO-P1 Montreal	<i>This is probably the first biggest one, protesting today is probably the biggest one that I’m doing. I’m so happy to be here because it’s such an interesting energy.</i>	28 (43%)

712 *Sums may exceed 100% due to independent rounding.

713

714 As per the category of action, these were divided into changes that respondents had
715 made in their lifestyle due to climate change and any future action they were planning on
716 taking.

717 In terms of changes to lifestyle, out of the 16 themes that emerged, people had most
718 often made changes to their modes of transport (N=42) and diet (N=36). As for transport,
719 many mentioned having reduced or given up flying (N=16), while others had swapped their
720 cars for cycling (N=12) or public transport (N=11). LO-P10 in London was one of those who
721 had reduced flying for example: *“Nearly everyone from our group is not flying, and in 2020
722 we have pledged not to fly at all”* and NH-P5 in New Haven had given up their car: *“I stopped
723 using a car and I’m planning on using only boat transportation”*. A few respondents (N=3) also
724 mentioned using an electric vehicle.

725 As for diets, most respondents mentioning diet had reduced meat consumption and
726 adopted either a vegetarian or vegan diet. Many protesters had also followed a vegetarian
727 diet for some time, as LO-P9 in London showed: *“I was vegetarian beforehand, before I was
728 woke, I thank fuck I am a veggie, but to be honest I did that before climate change”*.

729 After transport and diet, most responses to lifestyle changes centred on
730 recycling/reusing (N=21) and reducing consumption (N=20), as highlighted by NYC-P6 in New
731 York: *“I’m doing a lot in the reduce, reuse and recycle area. We do not need a lot of things.”*.
732 Seventeen respondents said that they had not had to change their lifestyles much as they had

733 already been living a green or sustainable lifestyle. Energy in the home was another
 734 mentioned lifestyle change (N=11), with people saying they had sustainable energy systems
 735 in the home (e.g. ST-P8) or that they used renewable energy suppliers (e.g. NYC-P7). Also,
 736 reducing water was mentioned by a few respondents (N=3). Eight people said they had
 737 started composting. One of the most radical changes were people changing their working
 738 patterns, either by reducing working hours or undertaking more volunteer work. For example,
 739 ST-P3 in Stavanger talked about this as follows: “Changes in my life are in my work, everything
 740 I talked about I tried to implement, to consciously find strategies to move beyond neoliberal
 741 principles, and based on respect for people around us and for our planet”.

742 Other lifestyle changes included thinking about fashion and clothing and reducing the
 743 number of clothing people buy (e.g. LO-P7). Respondents also mentioned that they had
 744 started to shop locally (N=6) to support the local economy and local jobs, or were in general
 745 supporting more sustainable consumption (N=4). Some had decided to take more climate
 746 action (N=2), pressure corporations (N=2) and study (N=1). Only three respondents said that
 747 they had not undertaken any lifestyle changes to tackle climate change.

748 Additionally, there were spatial differences between lifestyle changes. North
 749 American strikers were more likely to indicate that they would reduce personal car use or
 750 take public transport (81% of total responses). This is a surprising finding given the reliance
 751 on private car ownership in the U.S. and Canada alongside a continued lack of public transport
 752 infrastructural investment in these countries. However, it should be noted that these strikes
 753 took place in cities with relatively respectable public transport networks in place. With
 754 respect to other transport changes, British and Norwegian respondents were more likely to
 755 state that they would reduce flying (80% of responses). The full list of lifestyle changes is in
 756 Table 7 below.

757

758 *Table 7: Changes to lifestyle*

Theme	Respondent	Illustrative quote	Total N*
Transport	LO-P10 London	<i>Yes, we are. Nearly everyone from our group is not flying, and in 2020 we have pledged not to fly at all.</i>	42 (65%)
	NH-P5 New Haven	<i>Yes, I stopped using a car and I'm planning on using only boat transportation.</i>	
	BR-P3 Brighton	<i>We got rid of our car in September. We don't have a car anymore. if we do ever need a car, we just use hire cars and that will probably be a less polluting vehicle then if we'd bought a slightly older, second-hand vehicle.</i>	
	NYC-P10 New York	<i>I don't own a car, I'm hardly ever in a car and I haven't owned a car since 1981. I bicycle everywhere. I just did a 650-mile bike trip in upstate New York for my vacation so that I could have the longest possible carbon footprint, I camped on that. So, I try to live as carbon neutral as I can.</i>	
Food / diet	LO-P9 London	<i>I was vegetarian beforehand, before I was woke, I thank fuck I am a veggie, but to be honest I did that before climate change.</i>	36 (56%)
Recycling / reusing	NYC-P6 New York	<i>I'm doing a lot in the reduce, reuse and recycle area. We do not need a lot of things.</i>	21 (32%)
Reduce consumption	MO-P6 Montreal	<i>I've been trying to reduce my waste, not zero waste by any means but I'm trying to reduce it. That one is really important to me.</i>	20 (31%)
Already 'green' living	LO-P5 London	<i>Radical is probably not the right word. I am a fan of how small changes build up over time. So, if you were to take how I behaved 10 years ago to how I</i>	17 (26%)

		<i>behave now, you would probably say it is radical, I think it is much easier to do lots of small things to reduce our carbon footprint than radical changes overnight.</i>	
Energy	ST-P8 Stavanger	<i>We have a very sustainable energy system for the house.</i>	11 (17%)
	NYC-P7 New York	<i>My utility bill for gas and electricity is now with ClearChoice Energy [Utility Company] and there's hopefully 99% wind power just for electricity and 1% thermal power. So, I'm really trying.</i>	
Compost	MO-P1 Montreal	<i>Last year I was trying to compost in our apartment so we would put our compost in a bucket. I think you have to pay for compost in Montreal but we would just be to the university.</i>	8 (12%)
Changes to work	NH-P4 New Haven	<i>I make a lot of art out of garbage that I collect from parks and beaches and I turn them into sculptures. So, I try to all around think about how I gather by materials.</i>	7 (10%)
	ST-P3 Stavanger	<i>Changes in my life are in my work, everything I talked about I tried to implement, to consciously find strategies to move beyond neoliberal principles, and based on respect for people around us and for our planet. When it comes to production I try to produce sustainably when it comes to design, to not compromise on some fundamentals, to apply a way of thinking that is complex.</i>	
Fashion / clothing	LO-P7 London	<i>Yes, I am a performer mainly, so the customs are a big part of my life and I made a vow last year to not buy a single piece of new clothing and I haven't. I can only buy recycle and second hand.</i>	6 (9%)
Support local economy	LO-P2 London	<i>I buy almost most of our food from the farmers market or get it from local producers so hardly any packaging.</i>	6 (9%)
Sustainable consumption	BR-P2 Brighton	<i>We have reusable nappies, have a vegan diet, we compost, we have an organic veg box. We're scaling up, doing what we can do. But we know that that is a drop in the ocean compared to the change that needs to be happening.</i>	4 (6%)
	LO-P13 London	<i>I make my lifestyle as sustainable as I can.</i>	
Water	MO-R9 Montreal	<i>In my house we don't use as much water or energy.</i>	3 (4%)
No action	LO-P6 London	<i>I haven't done any changes, I have just been trying to do the right things.</i>	3 (4%)
Climate action	NYC-P7 New York	<i>I try to understand more about this issue and demonstrate like I am doing here today.</i>	2 (3%)
Pressure corporations / people	NYC-P11 New York	<i>I also talk politics as much as I can to people around me to convince them to vote.</i>	2 (3%)
Study	NYC-P1 New York City	<i>My lifestyle changes have mostly been in terms of what I've decided to study and what I've decided to work in. So, all the jobs I've had have been in some way related to my interest in sustainability and my studies have been related to that. So, there's been a mix of radical changes.</i>	1 (1%)

759 *Sums may exceed 100% due to independent rounding.

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761 In addition to lifestyles changes that people had already undertaken, we also asked
762 what future action they were considering taking to address climate change and these
763 responses fell under 11 themes. The majority of our respondents were keen to take action
764 with the top three including more climate action (N=32), demanding action (N=29) and
765 political activism (N=19). Those considering more climate action were especially keen to take
766 part in more strike action and demonstrations. In terms of demanding action from others, LO-
767 P10 in London for example explained how their plan included to focus this on large polluters
768 like oil companies:

769
770 *“Next Monday we are doing a climate rhyme protest, standing outside Shell at 8:00, we will*
771 *bring two giant pushchairs, taller than a man, but they will be empty to symbolize the uncertainty of*
772 *our future. We have worked on nursery rhymes we will chant, to focus on the villainy fossil fuel*
773 *industry.” (LO-P10)*
774

775 In similar vein, one protester in Stavanger (ST-P9) specifically aimed to demand
776 change from within industry. Five respondents said that they were going to use social media
777 as their next action, as indicated by MO-P4 in Montreal: *“I help to harass by elected officials.*
778 *Send them gentle emails, poke them on Twitter and Instagram and just remind them that this*
779 *isn’t a PR campaign. This is here for them to act.”*

780 As for political activism, protesters in Brighton for example said that they had been
781 working with both local and national politicians (e.g. BR-P6 and BR-P7), while in the USA there
782 was a clear focus on the forthcoming 2020 presidential elections. For example, NH-P6 in New
783 Haven said that they were continuing to organise *“around a left-wing message, particularly*
784 *around Bernie Sanders electorally.”*, and NYC-P10 in New York echoed participation in political
785 action: *“I decided this year, in comparison to 2016 that I want to get involved early in the*
786 *elections so I’m working really hard to support Elizabeth Warren for the democratic*
787 *nomination and to get rid of Mitch McConnell.”*

788 Many protesters (N=15) responded with details of immediate action following the
789 strikes, and these ranged from enjoying the rest of the day to having lunch, going home and
790 having a nap. Many (N=12) also mentioned again that their future action involved taking some
791 of the lifestyle changes examined in Table 6 above.

792 Several of the protesters (N=14) were keen to raise awareness of climate change by
793 talking to others. Education was mentioned by ten respondents, either by educating
794 themselves more on climate change or arranging this for others, as exemplified by NYC-P5 in
795 New York: *I’m starting a climate club at my son’s school and I think that education is key,*
796 *continually educating our kids.”*

797 There were also a small number of protesters (N=7) who said that they were not going
798 to take future action, while some respondents did not know whether they were going to take
799 any (N=4). MO-P5 in Montreal illustrated this point: *“Are you serious? Fuck. Okay, smoke the*
800 *rest of this joint, pop a Xanax, drink a beer and go to bed.”*

801 Overall, North Americans were more likely to indicate that future actions were
802 focused around education (70% of responses) while respondents from all cities indicated that
803 demanding more change was vital. Interestingly, the majority who indicated further political
804 engagement/activism and working with local MPs were more likely to be US climate strikers
805 (71% of responses). This may be related to the spatial distinction indicated earlier around the
806 lack of action at the federal level in the US. However, British respondents were more likely to
807 suggest that participating in future climate action and/or another strike was central to next

808 behavioural engagements (40% of responses). Table 8 below outlines the key themes on
 809 future climate action.

810
 811

Table 8: Intended future climate action after the strike

Theme	Respondent	Illustrative quote	Total N*
Climate action	NH-P1 New Haven	<i>I am intending to keep up with 'Fridays for Future' and Future Coalition and other strike organisations to see what I can do to continue to help.</i>	32 (50%)
Demand action	LO-P10 London	<i>Next Monday we are doing a climate rhyme protest, standing outside Shell at 800, we will bring two giant pushchairs, taller than a man, but they will be empty to symbolize the uncertainty of our future. We have worked on nursery rhymes we will chant, to focus on the villainy fossil fuel industry.</i>	29 (45%)
Political activism	NH-P6 New Haven	<i>Continue organising around a left-wing message, particularly around Bernie Sanders electorally.</i>	19 (29%)
	NYC-P10 New York	<i>I decided this year, in comparison to 2016 that I want to get involved early in the elections so I'm working really hard to support Elizabeth Warren for the democratic nomination and to get rid of Mitch McConnell. You know, I really feel like we have to address it on all fronts.</i>	
	NYC-P9 New York	<i>Pray that our elections go well in America. And that Mitch McConnell and Trump go out because otherwise it's freaking hopeless, it's terrifying!</i>	
Immediate action after strike	LO-P6 London	<i>I am planning to enjoy this beautiful day. And enjoy it because there is still beauty in our world and I am planning to enjoy it.</i>	15 (23%)
Raise awareness	LO-P10 London	<i>We really try to turn our fear into action, we find comfort in acting, we find comfort in having the community, we have 4000 followers on Instagram and Facebook, and we find comfort in likeminded people willing to take action.</i>	14 (21%)
Lifestyle changes	BR-P11 Brighton	<i>I'm trying to be more sustainable and have the least impact I can.</i>	12 (18%)
Education	NH-P3 New Haven	<i>Really just keep myself more educated on what's going on.</i>	10 (15%)
	NYC-P5 New York	<i>I'm starting a climate club at my son's school and I think that education is key, continually educating our kids.</i>	
No action	MO-P5 Montreal	<i>Are you serious? Fuck. Okay, smoke the rest of this joint, pop a Xanax, drink a beer and go to bed.</i>	7 (10%)
Social media	MO-P4 Montreal	<i>I help to harass by elected officials. Send them gentle emails, poke them on twitter and Instagram and just remind them that this isn't a PR campaign. This is here for them to act.</i>	5 (7%)
Don't know	MO-P10 Montreal	<i>I don't know, man. I think I just need to eat, relax and continue to resist and fight.</i>	4 (6%)

Pressure industry	ST-P9 Stavanger	<i>I would like to go into the industry to try and influence things from the hub of the system. From the outside, I think it is hard to change things.</i>	1 (1%)
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812 *Sums may exceed 100% due to independent rounding.

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814 Our data show that climate strikers included almost in equal numbers both new
815 comers and those who had participated in climate action before. It was clear that climate
816 action in 2019 had spread extensively, as witnessed by some of the more long-term activists.
817 In addition to striking and demonstrating, the majority of the protesters were also committed
818 to other action—both by having already made lifestyles changes, like reducing flying or car
819 use and changing to vegetarian diets, and by intending to take future action like keeping
820 climate action going, demanding change from others, and getting involved in political
821 activism, education and awareness raising.

822

823 **5. Discussion: Patterns of variation, opportunism, and values in climate activism**

824 In this section, we discuss our findings around three core themes of variation,
825 opportunism, and values. These emerged inductively during our data analysis, and were
826 created recursively as we coded our results. They constitute key insights into “the social and
827 political effects of this movement — how individuals are participating now, what it will mean
828 for them over their lives and the political outcomes of their activism” (Fisher, 2019: 431). We
829 reflect on how climate strikers experience and communicate their concerns and on what
830 constituencies they attempt to connect with. Thus, we discuss both the drivers of public
831 engagement with sustainability as well as the embodied manifestation of socio-political
832 mobilisation in the form of climate strikers.

833

834 **5.1. Patterns of variation**

835 Our results on the cognitive, affective, and behavioural dynamics (e.g. Whitmarsh and
836 O’Neill, 2011; Wolf and Moser, 2011; Axon, 2016) of climate strikes indicate that climate
837 strikers are not confined to a particular type of person. Rather, there is a large spectrum in
838 terms of how equipped people are in terms of knowledge about climate change, what
839 emotions they feel about the climate crisis, what motivates them to take action, and what
840 types of action they have taken, are currently taking, or considering to take.








841 Most protesters felt that they knew at least something about climate change and why
842 it requires urgent action. They encompassed varied groups with diverse motivations, both
843 across the urban contexts of the somewhat similar cities we studied, as well as among same-
844 city protesters. While many expressed emotions of being afraid, angry or frustrated about
845 climate change, hardly any accounts of how people cope with these emotions emerged that
846 point to systemic efforts by formal institutions to help people deal with their ‘climate anxiety’
847 or “climate rage”. Instead, many said that taking action such as being part of climate strikes
848 made them feel hopeful and comforted that they were doing something and not just letting
849 things happen to them, future generations and the planet as a whole. For example, Morris et
850 al. (2019) have suggested using narratives and stories as means of better engaging people in
851 climate change, while Tschötschel et al. (2020) have found that reporting about climate
852 change does not (yet) have global unity, but rather that stories are discussed at the national
853 scale.

854 Many of our respondents were keen to make lifestyle changes, and many had already
 855 taken action to do so. But there were also many who found that structural and systemic
 856 factors were limiting their ability to bring about meaningful and major changes (e.g., having
 857 to fly to visit family or not being able to afford alternatives). Instead, many were trying to
 858 make smaller differences that they found feasible (e.g., recycling, sorting waste and reducing
 859 consumption). Some protesters mentioned symbolically potent changes (e.g., reducing meat
 860 and choosing a vegetarian diet, consciously limiting travel, or sourcing cleaner energy), while
 861 others said they were willing to try to do more (e.g. stopping air and car travel, living in smaller
 862 housing, or changing working patterns).

863 From this variation, a sub-culture of identities overlapping with the strikes emerged,
 864 and we identified seven categories of different types of climate protesters (see Figure 3).
 865 *Frontline protesters* were really concerned about climate change, trying to catalyse systemic
 866 change. They were often the most knowledgeable about climate change and had dedicated
 867 time and effort to take previous climate action. *Responsible protesters* were those making
 868 doable changes in own life often at some cost to oneself. *Inactivated or latent protesters* were
 869 starting to get involved but were not quite sure of the extent to which this would impact their
 870 own life and actions. *Disengaged protesters* were there for a friend or other social interest
 871 rather than for the protest itself, and might not have seen it as a meaningful mode of
 872 engagement even if they acknowledged that climate change is a problem. *Opportunistic*
 873 *protesters* were concerned about ways that involvement in protest can productively overlap
 874 with other personal interests, such as getting jobs or a better social media profile. *Parallel*
 875 *protesters* were active in addressing climate change in their professional life and were present
 876 at the protest mainly to show solidarity or out of interest rather than as their main form of
 877 engagement. Finally, *sceptical protesters* were not really convinced that protesting makes
 878 sense, but they were there by chance or for the spectacle. These are intersecting and
 879 dynamic, not discrete, categories.

880

881 *Figure 3: Towards a typology of climate protesters*

	Frontline protesters	Focused on catalyzing transformative climate action across society
	Responsible protesters	Dedicated to making lifestyle changes to cut personal carbon footprints
	Latent protesters	Previously inactivated protestors more ambivalent or unsure of future climate actions
	Disengaged protesters	There only for others such as a friend, family member or partner
	Opportunistic protesters	Present to capture other social benefits to striking e.g. social media fame or glamour
	Parallel protesters	Protesting to show solidarity with others or to validate their professional expertise
	Sceptical protesters	Wary of climate change but there to enjoy the fun or spectacle of the strike

882
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Source: Authors

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While it may seem self-evident to say that there is enormous variation in the cognitive, affective, and behavioural aspects of climate protest, we argue that our multi-sited and place-based insight into the *patterns* of such variation is novel and generative for future research. Understanding protester identities as frontline, responsible, inactivated/latent, opportunistic, disengaged, parallel and/or sceptical can inform analyses of the modalities of participation, and in turn what – if any – constituencies their climate activism is likely to generate. In a world where social media analytics harvest and deploy big data to shape public opinion (e.g. Cambridge Analytica in the USA 2016 elections) (cf. Sareen et al. 2020), these identities demonstrably matter.

5.2. Opportunism

Although the strikes were clearly framed around climate change, we also observed, often directly, the use of climate change and the strikes as a platform to advance other interests. At the London strike, for example, three of the more liberal and progressive political parties — the Liberal Democrats, Labour, and the Green Party — used the strike to critique and attack each other (and other political parties), each of them setting up booths and distributing pamphlets and flyers. Somewhat ironically, or fortuitously (depending on perspective), other social groups were there to critique the political parties, especially those identifying as “Socialists” or “Marxists”. Other groups sought to use the spotlight to raise awareness about a slew of important but non-climate issues, such as one group of strikers marching for human rights in Oman, two other groups against “war”, and more than a few against UK Prime Minister Boris Johnson (“More Forest, Less Boris” was seen on a placard) or US President Donald Trump.

Relatedly, the strikes are opportunistic in a second sense: not everyone has the capacity to strike. This begs the question of access and who can access a strike. On the one hand, access is physically easy for those in, or close to, a city, given that the global climate strike took place in so many cities including some smaller ones, and events were free to attend. On the other hand, not everyone can afford to strike and take time off work, which means that representation biases are inherent to such forms of social mobilization. Our data show that some respondents were able to take the day off work or leave their university to attend a strike, yet we are unable to ascertain the number of individuals who wanted to strike but were unable to.

Connected on this theme, a third type of opportunism was on display: using the strike not only as a way to protest or raise awareness, but as an opportunity to have *fun*. For example, at the London climate strike there was a sit-in, a cook-off, a choir singing climate change songs and a breast-feeding for climate session. We even observed a transgender protester talking about hot dates, alongside non-human protesters (notably, dogs) protesting next to people, as shown in Figure 4. This type of opportunism can in some cases be read as a conscious strategy to link caring for the climate with other positive experiences rather than simply a gloom-and-doom narrative, and as self-care by protesters who are taking time off to strike for the climate in perhaps quite busy schedules. Thus, the “fun” type of opportunism can range from trivial and care-free to considered, strategic, and care-related.

931 Figure 4: Opportunism and fun at the London climate strike



a. A canine protester



b. The "Raised Voices" choir



c. A silent sit-in near Parliament



d. The "Music Strike for Climate"

932 Image source: Authors

933

934 Vitally, this insight into the opportunistic aspects of climate protest brings to the fore
935 the risk of structural exclusion in representation due to socio-spatial and other characteristics
936 (cf. Hall et al., 2011). We are reminded of Fisher's argument from a decade ago that "the
937 massive expansion of civil society participation at Copenhagen was not only accompanied by
938 civil society disenfranchisement, it actually contributed to it" (Fisher, 2010: 11). Our findings
939 reveal some similar risks at the present moment for these distinct reasons: climate activism
940 has swelled and is not as much at risk of being shunned, but rather of becoming normalised
941 as a phenomenon that reflects entrenched societal practices. On the one hand, this is a
942 positive development in that it can broaden political constituencies for the environmental
943 movement (e.g., enrolling those who join for the fun); on the other hand, it can dilute the
944 core of the movement and enhance inequitable practices (e.g. excluding the climate concerns
945 of those who live in censorial societies).

946

947 5.3. Values

948 In terms of examining the fundamental values behind why people strike (or indeed do
949 what they do), previous work from environmental psychology and sociology on general
950 values, or on goals in life worth achieving, is revealing (De Groot and Steg, 2007; De Groot
951 and Steg, 2008; Steg et al., 2014). This body of work suggests that most behaviour, especially
952 in the domain of pro-environmental intentions and actions such as striking or protesting, cuts

953 across four fundamental types of values. The first two categories of values are not even about
954 helping individuals or notions of self. *Altruistic values*, such as equality, equity, peace, justice,
955 and helpfulness, are rooted in helping others. Here, an example would be the mothers we
956 spoke with who were striking on behalf of their children; a young woman doing so specifically
957 to convince men (e.g., taking an active stance against patriarchy); or those striking in solidarity
958 for vulnerable populations or future generations threatened by climate change. *Biospheric*
959 *values*, such as respecting the earth, unity with nature, environmental protection, and
960 preventing pollution, are about helping the earth. Here, we see strikers acting on behalf of
961 and in solidarity with forests, animals, non-human others and the biosphere itself.

962 By contrast, the other two categories of values are about self-enhancement. *Egoistic*
963 *values* such as social power, wealth, authority, influence, and ambition, are about making
964 oneself better off. We spoke with many young adults, for example, who stated that they were
965 striking in order to preserve their own future. *Hedonic values* such as pleasure, enjoying life,
966 and gratification for oneself, are about enhancing one's own comfort or happiness. Here, a
967 notable example is a young man we met who was striking for his girlfriend (hoping to impress
968 her with romantic intent for later in the day, or in his own words, to "get laid").
969

970 **6. Conclusion and future research directions**

971 Our study which examined climate strikers in six different cities in four different
972 countries in September 2019 found perhaps unsurprisingly large variation across climate
973 strikers, and that people are driven to protest by a range of values. Yet being explicitly aware
974 of the patterns within this variety in motivations and values seems like a crucial element to
975 any informed discourse about phenomena such as climate strike action, which we even
976 approached as attached to specific behavioural aspects such as past and future actions
977 regarding climate action. As predicted by our framework, motivations to strike cut across
978 cognitive, affective, and behavioural dimensions.

979 In terms of cognitive knowledge, a surprising number of our strikers were not very
980 aware about climate change; with some even stated that they had no knowledge and were
981 merely striking to impress others (such as a romantic partner) or to give a friend company.
982 Equally interestingly, stated sources of credible information about climate change ranged
983 from documentaries and films (a fairly credible source) to blogs and tabloids (less credible) as
984 well as scientific reports (more credible).

985 In terms of affective emotions, the range connected with climate change was
986 shockingly large, running the whole gamut from positive feelings of hope and strength to
987 negative ones of fear, despair, and anxiety. Motivations to strike were diverse as well,
988 spanning reasons such as doing it for the children or family; for solidarity with youth more
989 generally, future generations, and vulnerable groups; or even impressing partners.

990 In terms of behaviour and actions, strikers mentioned a range of incremental actions
991 (for instance, recycling and switching to more efficient lightbulbs are increasingly discussed
992 responses in public discourse) but also impressively higher-impact actions such as reducing
993 energy, car, and water consumption, not eating (imported) red meats, flying less,
994 sustainability swaps, and giving up shopping. Despite this diversity of sources of knowledge,
995 emotions, motivations, and actions, we do not see sufficient awareness of this in current
996 discussions and academic discourse on climate strikes and climate strikers.

997 The questions we pose for future research to address are thus: Do the cognitive,
998 affective and behavioural aspects we witnessed in the cities of Brighton, London, Montreal,

999 New York, New Haven and Stavanger also hold true in other contexts? What do the patterns
1000 we identify at the present moment of climate protests imply for the identity and effectiveness
1001 of the growing environmental movement? We would encourage further research in this
1002 regard in cities especially in the Global South or those that are less industrialised. We also
1003 need further research on who is, and is not, able to take part in climate change action and
1004 how issues such as class or education may come into play. Furthermore, while climate change
1005 is spurring people to take action, further research on the longer-term impacts of that action
1006 would be welcome, to see whether behavioural changes such as reducing flying, switching to
1007 public transport and eating less meat (e.g. Kim et al., 2020 have started to explore the climate
1008 impacts of diets) have longevity and impact (cf. Grandin and Sareen, 2020).

1009 Indeed, it may be the case that extant scholarship does not anticipate the utter
1010 diversity of knowledge, emotions, motivations and modes of engagement of protest that the
1011 current climate change movement is bringing forward. Groups such as transgender people,
1012 retired grandparents, career-switching professionals, and even non-humans such as canines,
1013 to name a few, are part of this expressive and emotive space; they are perhaps drawn to it
1014 for distinct reasons, and constitutive of it in ways that must necessarily be understood if we
1015 are to characterise these movements in truly intersectional ways. Participation in climate
1016 protests is an act of temporal place-making as transient protest in a specific place attempts
1017 to disrupt the status quo to raise awareness among those not striking. Yet, participation is
1018 also an act of identity formation with more enduring temporality in the minds of individual
1019 protesters that embodies specific behavioural engagement within climate action and is
1020 reinforced in public space with other like-minded individuals and groups.

1021 The climate strikes encapsulate both a dynamic moment of flux coupled with a
1022 concurrent encrusting of emergent identities. The nature of these changes to climate agency
1023 and structure in how various publics relate with, shape and are reflexively shaped by
1024 engagement with climate protest, will to some extent determine future societal appetite for
1025 ambitious climate action. In this regard, we hope that our study is a useful starting point,
1026 rather than an endpoint, to more dynamic, reflective, and socially important research on the
1027 future of climate protests.

1028

1029 **7. References**

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