Arathoon, Jamie ORCID logoORCID: https://orcid.org/0000-0003-3590-3966 (2021) Researching animal geographies through the use of walking methods. In: Hovorka, Alice, McCubbin, Sandra and Van Patter, Lauren, (eds.) A Research Agenda for Animal Geographies. Edward Elgar, pp. 101-114

Downloaded from: https://ray.yorksj.ac.uk/id/eprint/11623/

The version presented here may differ from the published version or version of record. If you intend to cite from the work you are advised to consult the publisher's version: https://doi.org/10.4337/9781788979993.00014

Research at York St John (RaY) is an institutional repository. It supports the principles of open access by making the research outputs of the University available in digital form. Copyright of the items stored in RaY reside with the authors and/or other copyright owners. Users may access full text items free of charge, and may download a copy for private study or non-commercial research. For further reuse terms, see licence terms governing individual outputs. Institutional Repository Policy Statement

# RaY

Research at the University of York St John

For more information please contact RaY at ray@yorksi.ac.uk

1

2

3 4

5

6 7

8

9

10

11

٨	hsi	tra	ct.
-	115	111	

Animal geographers have become increasingly interested in different methodological approaches to understanding animals' experiences and geographies. These interests arise from a need to mitigate and challenge anthropocentrism within animal geographies and help us develop methods to understand animals as individual beings (Urbanik, 2012). This chapter develops walking methods as one such approach to centre animals' experiences within geographical research. Walking methods contribute to new forms of knowledge production in animal geographies by: offering a means of exploring practices and experiences within space and place; centring the affective and sensuous nature of human-animal lifeworlds; and providing a flexibility and resourcefulness that can complement a wide range of other methods. This chapter concludes by addressing limitations, ethical considerations, and future directions

12 13

**Key words**: animal geographies, animals, lifeworlds, mobile methods, walking, walking methods

15

14

16 Jamie Arathoon ORCID iD: <a href="https://orcid.org/0000-0003-3590-3966">https://orcid.org/0000-0003-3590-3966</a>

in advancing walking methods in animal geographies.

17

## 18 **Short Biography:**

- 19 Jamie Arathoon is a funded Human Geography PhD student at the School of Geographical and Earth
- 20 Sciences, University of Glasgow. His PhD research explores the contexts in which care crosses species
- 21 boundaries between people with disabilities and their assistance animals. He has a wider interest in
- 22 animals geographies, disability geographies, health and wellbeing, more-than-human geographies, and
- pet theft.

24

25

#### **Acknowledgements:**

- Jamie would like to thank the editors, Lauren, Sandra, and Alice, for their support, insight, and helpful
- 27 comments throughout the writing project.

28

- 29 Abstract word count:
- 30 Draft word count (including ref list excluding everything above title):

31

# <a> Researching animal geographies through the use of walking methods <a>

<br/> <br/>b> 1. Introducing a walking-focused research agenda <br/> <br/> <br/>

32

33 34

35

36 37

38 39

40

41

42

43

44

45

46 47

48

49 50

51 52

53 54

55

56

57

58

59

60

61 62

63

64

65 66 Animal geographies research has thus far largely concentrated on the human side of the human-animal relationship, namely the animal spaces, rather than the animal side of the relationship, the beastly places (Philo and Wilbert, 2000; Buller, 2015; Gibbs, 2019). Many animal geographers have critiqued the anthropocentric nature of geography and aim to 'bring the animals back in' to geographical inquires (Wolch and Emel, 1995: p.636; Johnston 2008). One significant challenge in moving towards this goal has been developing a methodological framework 'that will allow us to move closer to the animals themselves as individual, subjective beings' (Urbanik, 2012: p.186). Methodological approaches to animal geographies so far have been anthropocentric as animal experiences often remain in the background. To move away from understanding animals through anthropocentric lens towards understanding animals' experiences on their own terms is of critical importance<sup>1</sup>. A plethora of ontological and epistemological shifts have preceded in animal geographies, recognising the array of different theoretical and methodological approaches that pay greater attention to the multi-species world in which we live. Animal geographers have championed a multitude of methods such as ethology (Chapter 6; Barua and Sinha, 2019), multispecies ethnography (Chapter 7; Kirksey and Helmreich, 2010), photovoice (Margulies, 2019), and visual ethnography (J. Lorimer, 2010; Bear et al 2017), that attempt to pay greater attention to animals' lived experiences. However, there has been little engagement with walking methods and their potential to bring animals' experiences to the forefront within animal geographies research<sup>2</sup>. Walking methods contribute to new forms of knowledge production in animal geographies by: offering a means of exploring practices and experiences within space and place; centring the affective and sensuous nature of human-animal lifeworlds; and providing a flexibility and resourcefulness that can complement a wide range of other methods. I therefore advance that there is a need to pay greater attention to walking methods as an approach to exploring multispecies lifeworlds within animal geographies.

This chapter begins by discussing how walking methods have been theorised and practiced within geography. Walking methods emerged as part of the 'mobilities turn' as an approach to explore the increasingly mobile world around us and its fleeting and sensuous characteristics (Sheller and Urry, 2006). In more-than-human research contexts, walking methods allow for an exploration of practices within the places they occur, foregrounding the role place has on humans' and animals' social and cultural milieus and practices. This chapter will discuss further how walking methods can contribute to the field of animal geographies, particularly by addressing the key challenge of developing methods which centre animals' geographies. Despite the lack of applied examples of walking methods within

animal geographies, they provide a creative means of exploring the affective, embodied, fleeting, and sensuous characteristics of animals' experiences and human-animal relations. Walking methods can foreground animals' experiences within research, helping mitigate the challenge of representation and anthropocentrism that has troubled animal geographers. In addressing this gap in the scholarship, this chapter will discuss practicalities of walking methods, with a focus on video as a way of documenting walking research. Animal geographers have applied videographic research in various forms, arguing that video provides 'a means through which nonhumans might "speak for themselves" (Bear et al, 2017: p.225). The chapter then discusses ethical considerations when practising walking methods in research with animals. Animal geographers have long been concerned with ethical questions regarding how we: make animals visible within our discipline; understand our relationships with them; recognise animals as co-responding subjects; and place them morally within the world (Johnston, 2008; Buller, 2016). Finally, this chapter concludes by reflecting on limitations and future directions that researchers can take when adopting and developing walking methods beyond domestic animals' lifeworlds to incorporate a range of other non-domestic animals. Though I do not offer walking methods as a panacea for the complex methodological challenges animal geographers face, I advance it as one approach that might mitigate the overriding anthropocentrism that troubles researchers in the subdiscipline.

83

84

85

86

87 88

89

90

91 92

93

94

95

96

97

98

99

100

101102

67

68

69

70

71

72

73 74

75

76

77

78

79

80

81

82

#### <br/> <b > 2. Walking methods within geography <b >

Walking methods emerged as part of the wider 'mobilities turn' within the social sciences in the mid-2000s. The mobilities turn aimed to challenge how social science research had been vastly 'a-mobile' by developing mobile theories and mobile methods to explore a world that is constantly on the move (Sheller and Urry, 2006). Mobile methods have become common within geographical research since Sheller and Urry (2006) proposed an array of mobile methods that could be applied within geographical research, including walking methods. Walking methods involve walking a pre-designed (or occasionally unstructured) route with participants while talking to them and/or observing things of interest. Ideally routes will be co-designed with participants so that they are important to their everyday lives as this attachment will help produce an understanding of the participant's practices (Kusenbach, 2004). Walking methods, also termed 'go-alongs' (Carpiano, 2009) or 'walking-whilst-talking' (Anderson, 2004), are often considered extensions of interviews and observational research. Offering both the conversation from an interview and the observation of practices from participant observation, walking methods aim to research social-cultural practices within the spaces and places they occur. Place plays an important and overlooked role within research methodologies influencing not only power relations, positionality, and rapport, but also the production of knowledge (Elwood and Martin, 2000; Anderson, 2004). As Anderson (2004: p.254) contends 'conversations held whilst walking through a place have the potential to generate a collage of collaborative knowledge'. This is because walking methods allow researchers to 'observe spatial practices in situ' (Kusenbach, 2004: p.463) while

facilitating discussion about these practices. Observing practices within the places they occur allows the researcher to understand how places shape practices and how these practices then shape social and cultural doings and identities. Therefore, social constructions of knowledge can be enhanced through harnessing the inherently socio-spatial character of human knowledge through walking methods (Anderson, 2004).

'Go-alongs' are not the only walking methodological approaches one can use, others include walking group interviews (Inwood and Martin, 2008), observational walks (Pierce and Lawhon, 2015), walking diaries (Middleton, 2010), walking and mapping (Evans and Jones, 2011), sound/listening walks (Gallagher and Prior, 2014), and video walks (Pink, 2007; Brown and Banks, 2015). The utility and flexibility of walking methods to mix and combine with other methods provides diverse opportunities to modify and implement walking methods in accordance with specific research goals. For example, Pink (2007: p.40) uses walking methods and video 'as a phenomenological research method that attends to sensorial elements of human experience and place-making'. Pink walks with and video-records participants as they share their knowledge of a community garden. Walking and video allowed the researcher to delve into the personal, social, and cultural ways the participants construct the garden, showing how it is a place continually in process with present sensory embodied experiences while having the potential for new knowledges and place-making. This approach combining walking and video methods helps explore intimacies that otherwise might not have been represented through other approaches. The combination of walking methods with other methods allows for creative approaches, such as Pink's research, that take the strengths of multiple methods to create a more rigorous research methodology.

More generally the use of walking methods can be beneficial by allowing the research greater time to collect thoughts and reflect on the discussions and observations and what new lines of questioning may follow (Riley, 2010). Walking can help the researcher move the conversation on, or redirect the conversation, by literally walking to another point of interest (Riley, 2010), using the environment as a conversational aid. Whilst walking methods have a greater presence within human geography as a whole, within animal geographies less has been said about the role walking methods can play in exploring the intimate lifeworlds of humans and animals. The next section reviews some of the current animal geographies literature that makes use of walking methods and argues that walking methods can help mitigate some of the methodological challenges that animal geographers face.

133

134

135

136137

132

103

104

105

106107

108109

110

111

112

113

114

115116

117

118

119

120

121

122

123

124125

126127

128

129

130131

#### 

Despite the vast amount of work championing and practicing walking methods there has been limited application of walking methods within animal geographies. Walking methods are generally considered as a tool for exploring *human* experiences and place-making (see for example: Pink 2007; Büscher *et* 

al 2011), not animal experiences. Furthermore, when walking methods have been used within animal geographies, they are often subsumed under wider ethnographic approaches. For example, Ginn (2014) mentions walking interviews once under the wider 'show me your garden' methodology, and Brown and Dilley (2012) mention walking methods within a 'mobile video ethnographic approach' but do not discuss how walking affected the research. In such instances the potential strengths of walking methods to compliment other approaches tend to be overlooked, as they become neglected within wider methodologies. However, walking methods can play a very important role within animal geographies by focussing on animals' experiences and opening up encounters with animals.

138

139

140

141142

143144

145

146147

148

149

150151

152

153

154

155

156

157

158

159

160

161

162

163164

165

166

167

168169

170

171

172

173

Walking methods can be of use to animal geographers through their ability to engage with the affective, embodied, fleeting, and sensuous characteristics of human-animal lifeworlds. Hodgetts and J. Lorimer (2018) argue that affect acts as a shared concern bridging both animal geographies and mobility studies. This is through walking being regarded as an affective and sensuous cultural practice (H. Lorimer, 2011) with research focussing on the embodied practices, skills, and experiences of participants. While similarly, animal geographies have explored the affective and sensuous characteristics of pet-keeping (Charles, 2014), livestock herding (H. Lorimer, 2006), and encounters with wild animals (H. Lorimer, 2010). Walking can help foreground the experiences of highly mobile research subjects such as animals through engaging with the non-representational dimensions of human and animal life such as affect. Walking methods can provide distinct 'techniques for witnessing animals' affective experiences' (Hodgetts and J. Lorimer, 2018: p.8) such as 'learning by witnessing' (H. Lorimer, 2010: p.72) morethan-human lives in action. Through witnessing animal lives in action animals can express their agency without constant interference by humans (although these power dynamics are always present and uneven). One important example of this is through human-animal communication, as talk alone is inadequate for understanding the related doings of humans and animals (Laurier et al 2006). Instead, there is a need to focus on the intercorporeal ways humans and animals communicate through affective, fleeting and sensuous bodily engagements (Despret, 2004). We communicate with animals through a mixture of auditory, visual, and tactile engagements that walking methods can help illuminate. Walking methods open up the ability to sense this relationship as it occurs rather than just talking about it. Walking methods are valuable in their ability to explore expression of non-representational modes of communication that might through other means have been lost.

Walking methods can be particularly useful if they are part of the practice that is being explored. Many scholars who are exploring walking often use walking methods to do so. As Dewsbury (2010) maintains, attending to the practice you are exploring by doing it will help the researcher understand its affective, performative, and sensuous nature to a greater degree. Brown and Dilley's (2012) examination of dogs and dog walkers and their response-ability and capacity to manage engagements with other humans and animals is an example of using both walking methods and video to explore the practice of walking. While Brown and Dilley (2012) are not directly involved with the walks, mini cams attached to the

human participants were able to capture the practice as it was being undertaken. They were able to show the corporeal spatialities of human-dog attunement and more-than-verbal communication which are vital to response-ability and capacity to respond in encounters with other animals and humans. Through this approach walking methods were able to account for 'the interbodily comportments, motions, gestures, timings, responses, glances, enrolment of objects, as well as vocal expressions' between human and animal (Brown and Dilley, 2012: p.39). Walking methods thus have the potential to enliven research and focus on animals' experiences by exploring these sensuous and affective engagements and by attending to the practice of walking.

Walking methods are also suited to exploring the fleeting encounters humans often have with animals. Gillon (2014) uses walking interviews to explore unexpected encounters within the home and garden with non-human animals. Walking with his participants through their gardens acted as a memory inducing prompt, allowing the participants to discuss encounters with uninvited animals such as ducks, kangaroos, and snakes, in the spaces they occurred. Moments of trouble, care, and co-habitation emerged from the narratives of inter-species encounters; however, due to the fleeting nature of encountering these animals, they never fully feature in the research as active agents or as research participants. In contrast, Ginn's (2014) 'show me your garden' methodology, mixing walking methods and observation, allowed more sticky and monstrous animals to become involved within a walkingbased approach. Ginn encountered slugs with experienced gardeners and was shown methods of detachment that gardeners use to often distance themselves from their slimy neighbours. Unlike Gillon's research, Ginn's features animals coming into the research and becoming active participants. This might be because of the differences in the embodied nature of animals like ducks, snakes, kangaroos, versus slugs. This builds on a key issue with using walking methods within animal geographies: it may privilege certain relationships with animals such as those with domestic animals like dogs. Geographers therefore need to open up walking methods to extend beyond the cute and cuddly to the monstrous, slimy, and wild. Ginn (2014: p.543) does this to an extent explaining how in his research 'the slug slid into view as the research unfolded' rather than being an initial concern. The encounter with slugs reshaped the research as 'gardens were scattered with the material evidence of slug defences, from companion planting, to protective containers, to pellets. . .' and the ubiquity of slugs throughout every garden made them easy to talk about (Ginn, 2014: p.534). Including a broader range of species within walking methods research is an important challenge that is further discussed in the last section of this chapter.

205

206

207208

174

175

176

177178

179

180

181

182

183

184

185

186 187

188

189

190

191

192

193

194

195

196

197

198

199200

201

202

203

204

#### <br/> <b> 4. Case study illustration: human-assistance-dog relationships <b>

To illustrate the potentials of walking methods in exploring the affective, embodied, fleeting, and sensuous lifeworlds of humans and animals I draw on my own empirical research with four participants

and their assistance dogs. This ethnographic research took place over a 3-month period, with participants choosing a range of methods to engage with, including interviews, walking interviews, and walking observations. Sketch maps, audio recordings, and video recordings were used to understand participants' relationships 'in action' (Arathoon, 2018). The route and duration of walking interviews and observations were controlled by the participants as they chose routes which they walk daily. The walking interviews became more observational and less conversational, as human and animal had to concentrate on one-another to navigate space safely. Observation, in this instance, allowed the researcher to focus on the embodied interactions between human and animal, rather than talk between humans, although follow-up interviews helped make sense of what was observed.

Using observational and interview walking methods to explore human-assistance-animal lifeworlds drew out the more-than-visual, more-than-verbal engagements that operate when visually impaired humans and their assistance animals walk together, such as agency, commands, hand gestures, pace, power dynamics, sounds, tactile engagement, and voice tones (Arathoon, 2018). Observing these engagements in action allow the nuances of the relationship to emerge. For instance, commands such as "find right" acted as a primary way to negotiate space. These commands are accompanied by hand gestures, specific vocal tones, and slight movements in the harness and lead. Hand gestures offer a visual queue to the command, while slight movements in harness and lead offer a tactile cue to "find right". These embodied engagements, some spoken, some quickly acted, operate to allow the joint movement of human and animal through space with the aim of becoming a multispecies team (Arathoon, 2018).

Within this research, walking methods represented an ideal means of exploring the affective, embodied, fleeting, and sensuous engagements, as they relied on the practice being explored to be undertaken in situ. The fleeting characteristics of embodied engagement between human and animal emerge while moving through space and the use of walking methods can be attentive to the multiple affective and sensuous engagements occurring.

#### <br/> <b > 5. Practicalities, documentation, and the technological fix <b >

Having discussed walking methods through both theoretical and empirical examples, it is important to highlight some of the practicalities when doing walking methods, how to document walking methods, and the role of technologies such as video in doing so. Walking methods require a lot of thought and planning, with some considerations of particular relevance for animal geographers. Critical to undertaking walking as a method is thinking about 'the rhythm and style of the walk, the walk route terrain and distance, and the fitness and embodied dispositions of the walker' (Macpherson, 2016: p.425). These factors will have different impacts upon the research and those involved. If the route is too long the research may become boring, dull, and the participants may become disinterested. On the

other hand, if the route is too short the research may not go into enough depth into the practices and conversations the researcher is trying to explore. Walking interviews can last anywhere from a matter of a few minutes to hours (Kusenbach, 2004), thus aligning the route with the data collection aims is imperative. The route is also important as it will help facilitate the discussion while shaping the practices that the researcher aims to explore. It is necessary then to link the route to the aims of the research.

A further point of consideration is the practicalities of documenting walking research. Due to its mobile nature, note-taking during the walk is not always useful for three reasons: disrupting the research; climatic conditions; and limited ability to explore affective and sensuous engagements through notetaking. While note-taking and sketching is often employed during and after data collection, there is a need to go beyond the written word to understand 'our self-evidently more-than-human, more-than-textual, multi-sensual world' (H. Lorimer, 2005: p.83). Walking methods open up an array of media-directed documentation approaches that are better at capturing multi-sensual and fleeting experiences (J. Lorimer, 2010). Some animal geographers have argued that video can document fleeting engagements and human-animal encounters instead of relying solely on human articulation after the encounter has occurred (J. Lorimer, 2010; Bear *et al* 2017). Therefore, through video documentation animals can be brought into the research and 'speak for themselves' (Bear *et al* 2017: p.225) thus centring animals within the research (Gibbs, 2019).

However, when video is engaged, it is important to consider the camera's gaze: who should record and document the research? Who should the camera be focussed on? The camera's gaze is not an exact representation of reality, rather the researcher choses who should record and what should be recorded (Rose, 2016). This is important in animal geographies research where unique challenges and questions of power can emerge. For example, there are beings too small, or too far away, to be captured by camera but who may otherwise be sensed within the research situation. How do we involve these animals within the research? Other challenges may emerge, for example, Brown and Dilley (2012) use headcam footage from dog walkers but discuss the difficulty of interpreting headcam footage without further discussion from participants. With headcam footage the human becomes less of a focus as occasionally only arms, legs, and voices are heard from the participant and the video is much more focused on animals and other humans. This should not be taken as solely a limitation, as discussion with participants about the videos allows the participant's insights to be heard, adding greater reflexivity to the research. There are also possibilities to be considered concerning whether animals could wear cameras to focus on their point of view and experiences. It is important therefore to consider how the research may be recorded and the implications this choice may have.

#### <br/> <b> 6. Ethical considerations when researching with animals <b>

Having touched briefly on the practicalities of undertaking walking methods, this section outlines some ethical concerns when conducting research with animal participants. Of particular importance is how we make animals visible within human geography and how we recognise them as co-responding subjects (Johnston, 2008; Urbanik, 2012; Buller, 2015, 2016). The concern here is one of anthropocentrism: viewing animals solely through human terms. Anthropocentrism is an issue animal geographers have been grappling with since the inception of the subdiscipline, and one which still occupies a prominent place, especially within methodological agendas.

By using walking methods researchers can begin to challenge anthropocentrism as animals can become actively involved in the research rather than remaining as passive objects represented through human experiences. Through walking methods, particularly those incorporating video, geographers can help move animals from the periphery of the research to the centre offering a way in which 'nonhumans might "speak for themselves" (Bear et al, 2017: p.225). For example, Brown and Banks (2015) use a combination of walking and video recording to show how dogs become actively engaged within their research through expressions of agency. Expressions of agency permeated through the research as dogs performed their alternative ways of knowing and making sense of the world, through tactile, olfactory, and kinaesthetic engagements with their surroundings (Brown and Banks, 2015). These acts of understanding the world along with more subtle modes of engagement such as shifting power dynamics when walking (Arathoon, 2018) position animals' experiences more prominently within the research. Agency of the animal is therefore a factor in recognising animals as co-responding subjects and in showing how animals' lifeworlds warrant attention. However, through tracing the agency of animals, Brown and Banks (2015) argue that it is still difficult to escape anthropocentrism as humans wear the cameras so have more of a chance than animals to control how they make themselves and animals visible within the research. Animals' experiences still remain largely in the control of humans, but walking methods go some way, compare to interview/text-based research, in mitigating anthropocentrism by opening up space to focus on animals' experiences.

303

304

305 306

307

308

309310

311

277

278279

280

281

282

283

284

285

286

287288

289

290291

292

293

294

295

296297

298

299

300

301 302

### 

Walking methods are a useful technique for exploring animals' geographies. Walking methods can produce socio-spatial knowledge by grounding explorations in space and place. Their flexibility and resourcefulness can be adapted to compliment a wide range of other methods, offering new modes of engagement and exploration. The affective, embodied, fleeting, and sensuous characteristics that compromise both human-animal relations and walking practices make walking methods an excellent tool of methodological enquiry into animal geographies. Furthermore, walking methods can provide an

approach to mitigate the dominant anthropocentrism within animal geographies as animals move from the periphery to the centre of the research.

312

313

314315

316

317

318319

320 321

322

323

324

325

326

327

328

329

330

331

332333

334

335

336337

338

339340

341

342

343

344

345

Walking methods are a valuable component of an extended repertoire of mobile methodologies aimed at considering animals' spatial experiences and lifeworlds. With this in mind two recommendations stem from this consideration of walking methods and their potential within research in animal geographies. First, it is important to thoroughly report the ways in which walking methods are used within animal geographies research and their impact on empirical work. Walking methods have been used in many approaches and are often subsumed under wider (often visual) ethnographic approaches. This has left little understanding in how walking impacted the research. Instead, animal geographers who use walking methods should consider how the practice of walking has impacted their research process, findings, and conclusions. Doing this will help in moving towards a better understanding of how walking methods can help explore the lifeworlds of humans and animals.

Secondly, it is important to develop ways in which walking methods, or by extension, mobile methods, can be pushed in radically different contexts to go beyond exploring human relations with domestic animals and to develop a greater understanding of the lifeworlds of other aquatic, avian, micro-biotic, stationary, subterranean, and wild, animals. Doing so requires a wider engagement with mobile methods but one that keeps in mind walking methods core concerns to explore practices and experiences in situ and to capture the affective, embodied, fleeting, and sensuous characteristics of animal lifeworlds. The feasibility to expand and develop walking and mobile methods into other worldly realms can emerge from engaging with these key concerns and with other methods and forms of data in creative ways, as one of walking methods greatest strengths is its ability to be used with, and compliment, a range of other methods. For example, tracking methods have begun to emerge for avian animals. Kirksey et al's (2018) multi-species ethnographic work on cockatoos in Sydney relies on residents to upload sightings of cockatoos and their interactions with them to a Smartphone app and Facebook page. This creates an interactive profile of the cockatoos' mobilities and their spatial interactions with humans. Kirksey et al (2018) also combined this ethnographic and digital work with ethological methods by exploring animal behaviour through basic ethological methods such as audio recording, observation, photography, and an ethogram (a list of cockatoo behaviours). This ethological approach helped attune the researchers to the lifeworlds of the cockatoos through affective and sensuous engagement with the cockatoos themselves. This approach combines the in-situ nature of both sighting and siting cockatoos, within a wider ethological approach and with a mixture of different (digital, qualitative, and spatial) data. It shows how the key concerns of walking methods, in this case to explore practices and experiences insitu and affective and sensuous engagement, can be taken forward into a project with a range of different methods and data to explore avian animals' lifeworlds.

Future research centring the concerns of in-situ exploration and affective, embodied, fleeting, and sensuous engagement could potentially result in development of 'diving/underwater' methods combining technologies such as diving equipment and video cameras to explore the lifeworlds of aquatic animals. A variety of diving methods used to survey coral reefs and fish populations are already being undertaken in the marine sciences (Caldwell *et al*, 2016) and can offer a potential collaborative engagement with geographers aiming to explore aquatic animals' lifeworlds. Similarly, the adoption of camera traps and telemetry along with a wider engagement with ecology and walking methods could potentially be another exploratory way into exploring the affective and fleeting characteristics of other-than-domestic animals. These types of examples offer a glimpse into how walking methods, along with other methods and forms of technology, could be used together to explore animals' lifeworlds and mobilities.

#### **<b> Notes <b>**

- 1. I adopt the use of the apostrophe within animals' experiences rather than animal's experiences, after Hodgetts and Lorimer (2018: p.1) who 'foreground a distinction between considerations of how animals have been spaced by humans, and animals' own lived geographies and experiences'.
- 2. I use the term 'walking methods' throughout to denote that there is not just one approach that uses walking methods but a multitude of approaches. In text later I refer to some of the array of approaches which uses walking as a methodological tool.

#### <br/><b> References <b>

- Anderson, J. (2004), 'Talking whilst walking: a geographical archaeology of knowledge', *Area*, **36** (3),
- 369 254-261.
- Arathoon, J. (2018), 'More-than-visual geographies: encountering human-assistance-dog relationships',
- *Unpublished Masters Thesis*, School of Geographical and Earth Sciences, University of Glasgow.
- Barau, M. and A. Sinha. (2019), 'Animating the urban: an ethological and geographical conversation',
- *Social and Cultural Geography*, 20(8), pp.1160-1180.
- Bear, C., K. Wilkinson, and L. Holloway. (2017), 'Visualizing human-animal-technology relations:
- Field notes, still photography, and digital video on the robotic dairy farm', Society and Animals, 25 (3),
- 376 225-256.

- Brown, K. and E. Banks. (2015), 'Close encounters: Using mobile video ethnography to understand
- 378 human-animal relations', in C. Bates (eds.), Video methods: Social science research in motion, London,
- 379 UK, and New York, NY, USA: Routledge, pp.95-120.
- Brown, K. and R. Dilley. (2012), 'Ways of knowing for 'response-ability' in more-than-human
- encounters: the roles of anticipatory knowledge in outdoor access with dogs', *Area*, 44 (1), 37-45.
- Buller, H. (2015), 'Animal geographies II: Methods', *Progress in Human Geography*, **39** (3), 374-384.
- Buller, H. (2016), 'Animal geographies: III: Ethics', *Progress in Human Geography*, **40** (3), 422-430.
- Büscher, K., J. Urry, and K. Witchger. (2011), 'Introduction: mobile methods', in Büscher, K., J. Urry,
- and K. Witchger (eds.), Mobile methods, Abingdon, UK, and New York, NY, USA: Routledge, pp.1-
- 386 19.
- Caldwell, Z., Zgliczynski, B., Williams, G. and Sandin, S. (2016), 'Reef fish survey techniques:
- assessing the potential for standardizing methodologies', PLoS One, 11(4), e0153066.
- Carpiano, R. (2009), 'Come take a walk with me: The "go-along" interview as a novel method for
- studying the implications of place for health and well-being', *Health and Place*, **15** (1), 263-272.
- Charles, N. (2014), "Animals just love you as you are": Experiencing kinship across the species barrier,
- 392 *Sociology*, **48** (4), 715-730.
- Despret, V. (2004) 'The body we care for: figures of anthropo-zoo-genesis', Body and Society, 10 (2-
- 394 3), 111-134.
- 395 Dewsbury, J-D. (2010), 'Performative, non-representational, and affect-based research: seven
- injunctions', in, DeLyser, D., S. Herbert, S. Aikten, M. Crang and L. McDowell. (eds.), The Sage
- 397 Handbook of Qualitative Geography, London, UK, and Thousand Oaks, CA, USA: Sage, pp.321-334.
- 398 Elwood, S. and D. Martin. (2000), "Placing" interviews: location and scales of power in qualitative
- research', *Professional Geographer*, **52** (4), 649-657.
- 400 Evans, J. and P. Jones. (2011), 'The walking interview: methodology, mobility and place', Applied
- 401 *Geography*, **31** (2), 849-858.
- Gallagher, M. and J. Prior. (2014), 'Sonic geographies: Exploring phonographic methods', *Progress in*
- 403 *Human Geography*, **38** (2), 267-284.
- 404 Gibbs, L. (2019), 'Animal geographies I: Hearing the cry and extending beyond', *Progress in Human*
- 405 *Geography*, early view available <a href="https://doi.org/10.1177%2F0309132519863483">https://doi.org/10.1177%2F0309132519863483</a>
- 406 Gillon, C. (2014), 'Amenity migrants, animals and ambivalent natures: More-than-human encounters
- at home in the rural residential estate', *Journal of Rural Studies*, **36** (1), 262-272.

- 408 Ginn, F. (2014), 'Stick lives: Slugs, detachment and more-than-human ethics in the garden',
- 409 Transactions of the Institute of British Geographers, **39** (4), 532-544.
- 410 Hodgetts, T. and J. Lorimer. (2018), 'Animals' mobilities', *Progress in Human Geography*, early view
- 411 available https://doi.org/10.1177%2F0309132518817829
- Inwood, J. and D. Martin. (2008), 'Whitewash: White privilege and racialized landscapes at the
- 413 University of Georgia', *Social and Cultural Geography*, **9** (4), 373-395.
- Johnston, C. (2008), 'Beyond the clearing: towards a dwelt animal geography', Progress in Human
- 415 *Geography*, **32** (5), 633-649.
- Kirksey, E., Munro, P., van Doren, T., Emery, D., Kreller, A., Kwok, J., Lau, K., Miller, M., Morris,
- 417 K., Newson, S., Olejniczak, E., Ow, A., Tuckson, K., Sannen, S. and Martin, J. (2018) 'Feeding the
- 418 flock: wild cockatoos and their Facebook friends', Environment and Planning E: Nature and Space, 1
- 419 (4), 602-620.
- 420 Kirksey, S. and S. Helmreich. (2010), 'The emergence of multispecies ethnography', Cultural
- 421 *Anthropology*, **25** (4).
- Kusenbach, M. (2004), 'Street phenomenology: the go-along as ethnographic research tool',
- 423 Ethnography, 4 (3), 455-485.
- Laurier, E., R. Maze and J. Lundin. (2006), 'Putting the dog back in the park: animal and human mind-
- 425 in-action', *Mind, Culture, and Activity*, **13** (1), 2-24.
- 426 Lorimer, H. (2005), 'Cultural geography: the busyness of being 'more-than-representational', *Progress*
- 427 in Human Geography, **29** (1), 83-94.
- Lorimer, H. (2006), 'Herding memories of humans and animals', Environment and Planning D: Society
- 429 and Space, **24** (3), 497-519.
- Lorimer, H. (2010), 'Forces of nature, forms of life: calibrating ethology and phenomenology', in
- 431 Anderson, B. and Harrison, P. (eds.), Taking-place: non-representational theories and geography,
- Farnham, UK, and Burlington, VT, USA: Ashgate, pp.55-78.
- Lorimer, H. (2011), 'Walking: new forms and spaces for studies of pedestrianism', in Creswell, T. and
- 434 Merriman, P. (eds.), Geographies of mobilities: practices, spaces, subjects, Farnham, UK, and
- Burlington, VT, USA: Ashgate, pp.31-46.
- Lorimer, J. (2010), 'Moving image methodologies for more-than-human geographies', cultural
- 437 *geographies*, **17** (2), 237-258.

- 438 Macpherson, H. (2016), 'Walking methods in landscape research: moving bodies, spaces of disclosure
- 439 and rapport', *Landscape Research*, **41** (4), 425-432.
- Margulies, J. (2019), 'On coming into animal presence with photovoice', *Environment and Planning E:*
- 441 *Nature and Space*, early view available https://doi.org/10.1177/2514848619853060
- Middleton, J. (2010), 'Sense and the city: Exploring the embodies geographies of urban walking', Social
- 443 and Cultural Geography, **11** (6), 575-596.
- Philo, C. and C. Wilbert. (2000), 'Introduction', in Chris Philo and Chris Wilbert (eds.), Animal spaces
- and beastly places, London, UK, and New York, NY, USA: Routledge, pp.1-37.
- Pierce, J. and M. Lawhon. (2015), 'Walking as method: Toward methodological forthrightness and
- comparability in urban geographical research', *Professional Geographer*, **67** (4), 655-662.
- 448 Pink, S. (2007), 'Walking with video', Visual Studies, 22 (3), 240-252.
- Riley, M. (2010), 'Emplacing the research encounter: Exploring farm life histories', *Qualitative Inquiry*,
- **16** (8), 651-662.
- Rose, G. (2016), Visual methodologies: an introduction to researching with visual materials, 4<sup>th</sup> Edition,
- London, UK, and Thousand Oaks, CA, USA: Sage.
- Sheller, M. and Urry, J. (2006), 'The new mobilities paradigm', *Environment and Planning A*, **38** (2),
- 454 207-226.
- 455 Urbanik, J. (2012), Placing animals: an introduction to the geography of human-animal relations,
- 456 Plymouth, UK, and Lanham, MD, USA: Rowman and Littlefield Publishers.
- Wolch, J. and J. Emel. (1995), 'Bringing the animals back in', Environment and Planning D: Society
- 458 and Space, **13** (6), 632-636.