



The power of visual methods for research, engagement and education

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Visual methods



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- Use images to help answer a research question
- Used alongside other methods
- Nuanced and deep insights
- Uses in engagement, education, and more.

Participatory video: connecting young people with greenspaces

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Participatory video

Brings people together to explore issues, voice concerns or just be creative

Lunch & Lunch (2006, p10)



14 young people (14-15 years old)

3 short films

How do they view greenspaces?



**Greenspaces
are boring**



**Greenspaces
are
dangerous**



Participatory video as a transformative engagement tool

Nature connectedness

Sense of agency



Connecting to greenspaces

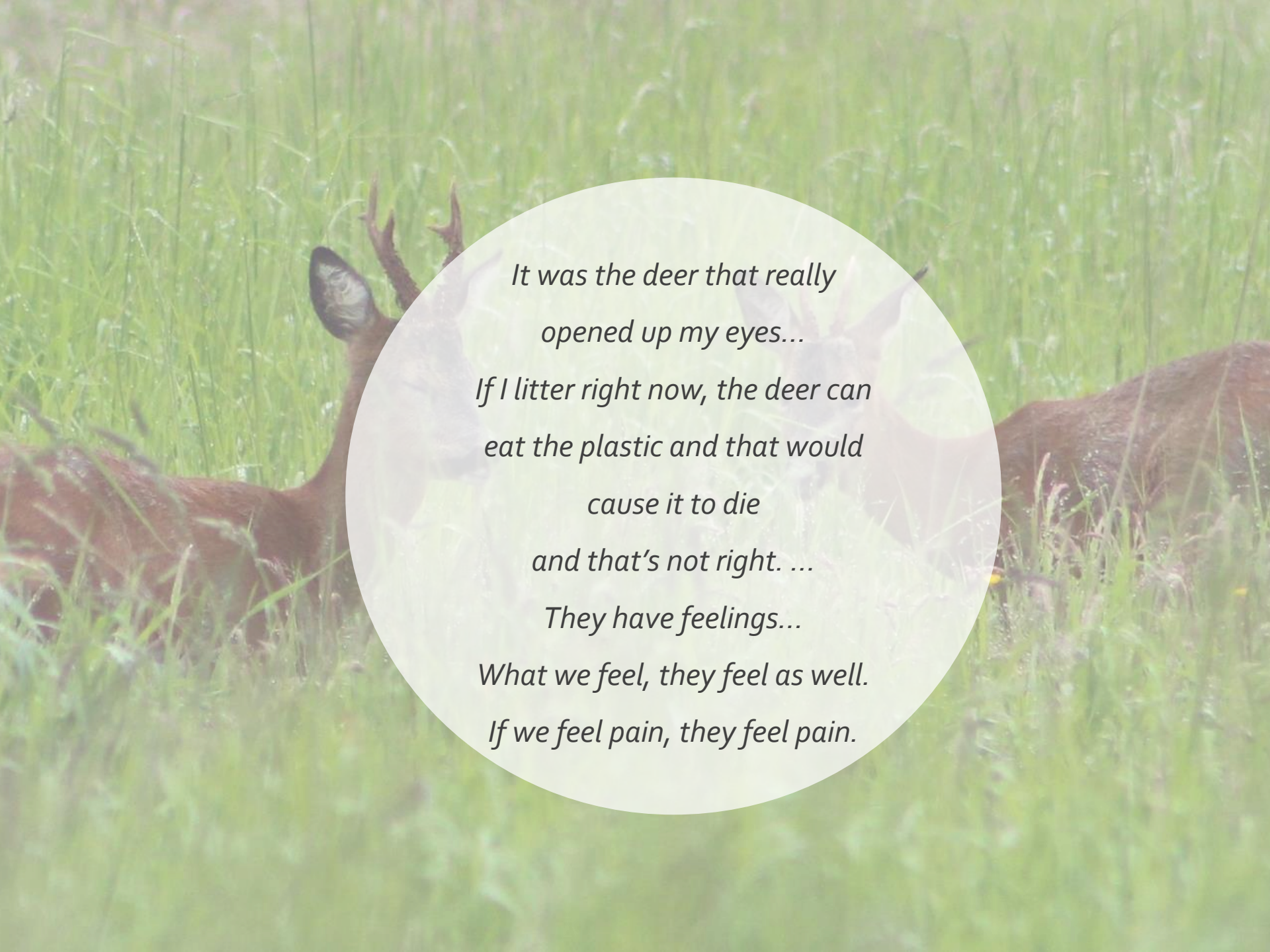
Appreciation of nature's beauty

Empathy towards wildlife

Behavioural changes (littering)

More active lifestyle

Mental health benefits



*It was the deer that really
opened up my eyes...*


*If I litter right now, the deer can
eat the plastic and that would
cause it to die*

and that's not right. ...

They have feelings...

What we feel, they feel as well.

If we feel pain, they feel pain.

A group of people, including a woman in a purple hoodie and a woman in a blue jacket, are walking on a grassy field. A large white circular overlay is centered over the image, containing text.

*I never thought
in my whole entire life
that I would be able to make a video
with my friends or anything.*

*I really didn't think
we were going to go that big,
so I was so surprised and proud of
what we achieved.*


```
graph TD; A[Participatory video as a transformative engagement tool] --> B((Sense of agency)); A --> C((Connection to nature)); B --> D((Pro-environmental behaviour)); C --> D;
```

**Participatory video as
a transformative
engagement tool**

**Sense of
agency**

**Connection
to nature**

**Pro-
environmental
behaviour**



Engaging stakeholders whose voices are not usually heard

Future research:

Conservation conflicts

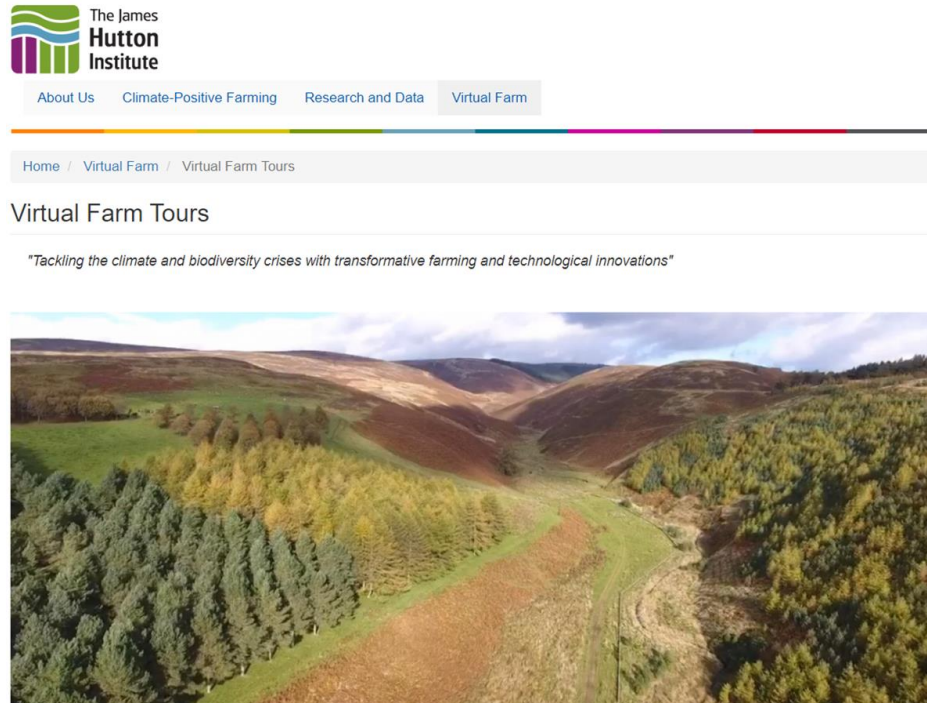
Just Green Transition

Eastwood, A., Juárez-Bourke, A., Herrett, S., & Hague, A. (2021). Connecting young people with greenspaces: The case for participatory video. *People and Nature*

Virtual reality

Example: Agroforestry at Glensaugh

[Virtual Farm Tours | Glensaugh Farm \(hutton.ac.uk\)](https://hutton.ac.uk/virtual-farm-tours)



The screenshot shows the website for 'Virtual Farm Tours' at Glensaugh Farm. The header includes the James Hutton Institute logo and navigation links: 'About Us', 'Climate-Positive Farming', 'Research and Data', and 'Virtual Farm'. Below the header is a breadcrumb trail: 'Home / Virtual Farm / Virtual Farm Tours'. The main heading is 'Virtual Farm Tours' with a tagline: '*Tackling the climate and biodiversity crises with transformative farming and technological innovations*'. The main image is a landscape photograph showing a valley with a mix of green fields, brown hills, and rows of trees, illustrating agroforestry.

- Facilitate discussion and decision making
- Illustrate an idea or approach
- Able to experience without being there, at one's own pace
- Embed different items into the tour, make it into a game



Glensaugh Agroforestry



Plot 5a

Plot 4c

Plot 4b

Plot 4d

Plot 4a

Plot 3

Plot 2

Glensaugh Plot Map

Drone
Footage



Agroforestry
Summary





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<i>Site number</i>	<i>Tree Species</i>	<i>Weather conditions</i>	<i>Light level lux</i>	<i>Comments</i>
2	Scots Pine 400t/ha	Windy dry patches of blue sky	1100	Grass under foot, soft ground cattle have left hoof marks, some needles left on trees high up in the canopy,



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Scots Pine

Pinus Sylvestris



The Scots pine – or *Pinus sylvestris* – is Scotland's national tree. It is a native of the once extensive Caledonian pine forests and is the only timber-producing conifer native to Scotland. It's known as a pioneer species, due to its ability to regenerate and thrive in poor soils. You can find the Scots pine further afield too - it's extensively planted in Europe and beyond. Scots pine timber is known as 'red deal' and is strong and easy to work with. It may not be naturally durable but it takes preservatives well.

Facts and stats

- **Lifespan:** 300 years
- **Height:** It matures up to 36 metres, losing its lower branches as it ages.
- **Leaves:** Its twisted blue-green needles are found in pairs and are around 4–7cm long.
- **Seeds:** It has brown egg-shaped cones, in clusters of two to four that point backwards along the stem, with a small sharp prickle on each scale. The Scots pine also has pointed hanging cones with woody scales.
- **Bark:** The upper bark is an orange-red, while the lower bark is deeply fissured.
- **Insect species it supports:** 172
- **Native to:** Northern Europe and Asia, Spain and Asia Minor
- **Uses:** In the past it was used for ships' masts, as a source of turpentine, resin and tar, and for charcoal. Today Scots pine timber is used for building, pit-props, furniture, chipboard, boxes, fences, telegraph poles and paper pulp.



Site
num

2





<i>Site number</i>	<i>Tree Species</i>	<i>Weather conditions</i>	<i>Light level lux</i>	<i>Comments</i>
4d	Sycamore 100t/ha	Overcast	1300	Grass under foot, small number of fallen leaves, gentle slope, higher altitude than some plots, cattle grazing. Canopy from adjacent trees not touching, light penetrates ground level



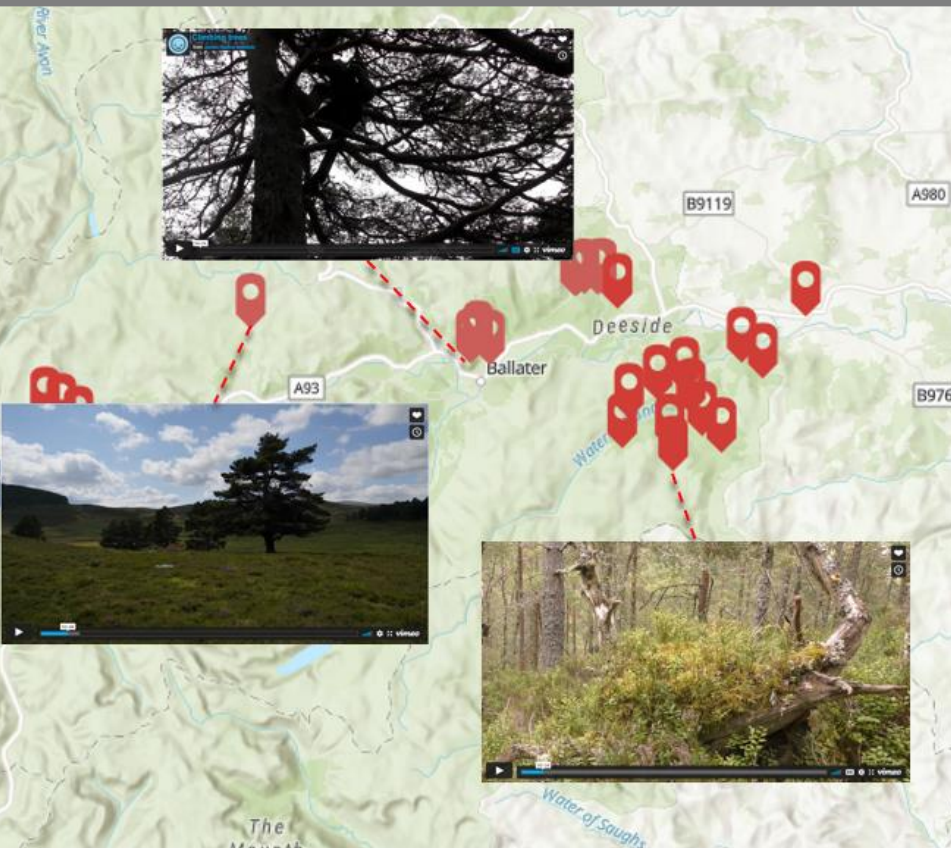
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Touch table

- Good 'people magnet'
- Prompt for discussion, e.g. illustrate and share different knowledges
- Help people reflect about an issue or their relationship with a place



Other visual methods



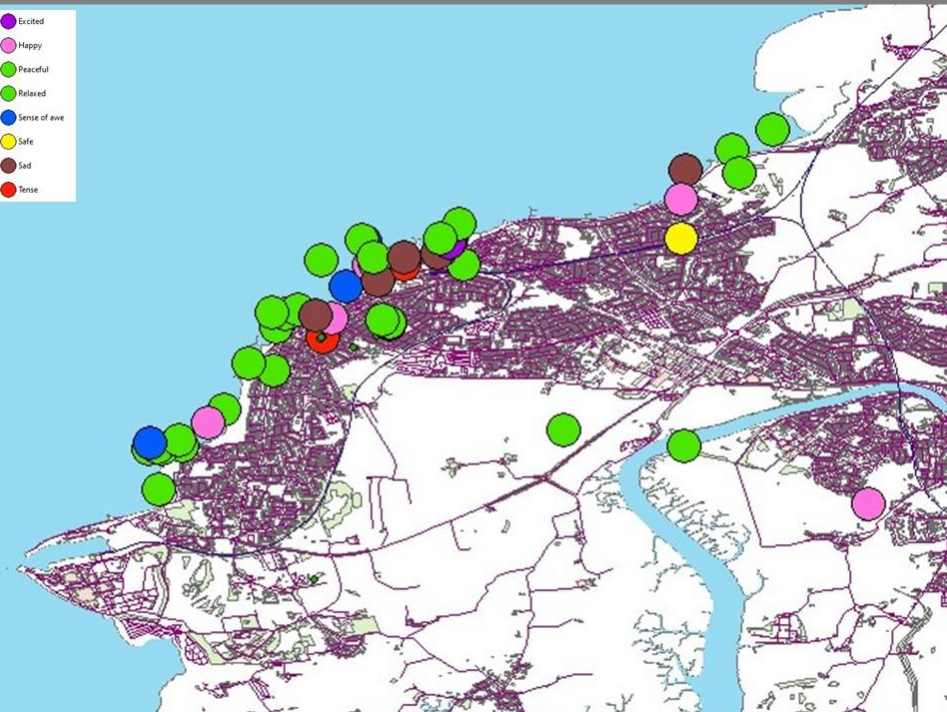
- Story-mapping
 - [RESAS RD 1.4.3 \(UnderStories\)](#)
 - [RESAS RD1.4.1 \(Glentroot Storymap\)](#)
 - RESAS D4.1
- Digital Stories
 - [EU H2020 AgriLink](#)
- Visualising data
 - [3D GIS](#)
 - [Virtual Landscape Theatre](#)
- Photovoice
 - RESAS C6-1
- Feeling Mapping
 - RESAS C6-1



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Applications of visual methods

- Data collection and analysis
- Dissemination
- Education and training
- Aiding decision-making



Thank you!

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Scottish Government
Riaghaltas na h-Alba
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SEFARI 



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Science connecting land and people

Selected journal articles

Touch table

Conniff, A., Colley, K., & Irvine, K. N. (2017). Exploring landscape engagement through a participatory touch table approach. *Social Sciences*, 6(4), 118. <https://doi.org/10.3390/socsci6040118>

Participatory video

Eastwood, A., Juárez-Bourke, A., Herrett, S., & Hague, A. (2021). Connecting young people with greenspaces: The case for participatory video. *People and Nature*, 00, 1– 11. <https://doi.org/10.1002/pan3.10236>

3D GIS and Virtual Reality

Miller, D.R.; Ode Sang, A.; Brown, I.; Munoz-Rojas, J.; Wang, C.; Donaldson-Selby, G. (2020) Landscape modelling and stakeholder engagement: Participatory approaches and landscape visualisation. In: *Sang, N. (ed.). Modelling Nature-Based Solutions Integrating Computational and Participatory Scenario Modelling for Environmental Management and Planning. Cambridge University Press, Chapter 1, pp19-55. <https://doi.org/10.1017/9781108553827.002>*

Wang, C., Gimona, A., Miller, D., Wilkinson, M., Ovando, P., Wilkins, B., & Jiang, Y. (2022). Bringing more exploration and interaction to scenario modelling and data visualisation through 3D GIS and Virtual Reality. 30th Annual Geographical Information Science Research UK (GISRUK), Liverpool, United Kingdom. <https://doi.org/10.5281/zenodo.6514226>

Mobile video ethnography

Brown, K.M. (In press) Doing multispecies ethnography with mobile video: Exploring animal-human contact zones., In: Colombino, A. & Steinkrüger, J. (eds.). *Methods in Human-Animal Studies: The question(s) of the Animal(s) in Practice.* Routledge Human-Animal Studies Series, Routledge, London.

Brown, K. M., & Lackova, P. (2020). Mobile video methods and wearable cameras. In *The Routledge international handbook of ethnographic film and video* (pp. 237-246).

Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9780429196997-27/mobile-video-methods-wearable-cameras-katrina-brown-petra-lackova>

Brown, K. M.; Banks, E. (2014) Close encounters: using mobile video ethnography to understand human-animal relations., In: *Bates, C. (ed.). Video Methods: Social Science Research in Motion. Routledge, London, Chapter 5, pp95-120. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315832739-10/close-encounters-using-mobile-video-ethnography-understand-human-animal-relations-katrina-brown-esther-banks>*

Brown, K.M.; Spinney, J. (2010) Catching a glimpse: the value of video in evoking, understanding and representing the practice of cycling., In: *Fincham, B., McGuinness, M. & Murray, L. (eds.). Mobile Methodologies. Polity, Cambridge, pp130-151. https://doi.org/10.1057/9780230281172_10*

Brown, K.M.; Dilley, R.; Marshall, K. (2008) Using a head-mounted video camera to understand social worlds and experiences., *Sociological Research Online*, 13, 6. <https://doi.org/10.5153/sro.1818>