

Fig. 2.1 for Question 2



Fig. 2.1

Fig. 3.1 for Question 3

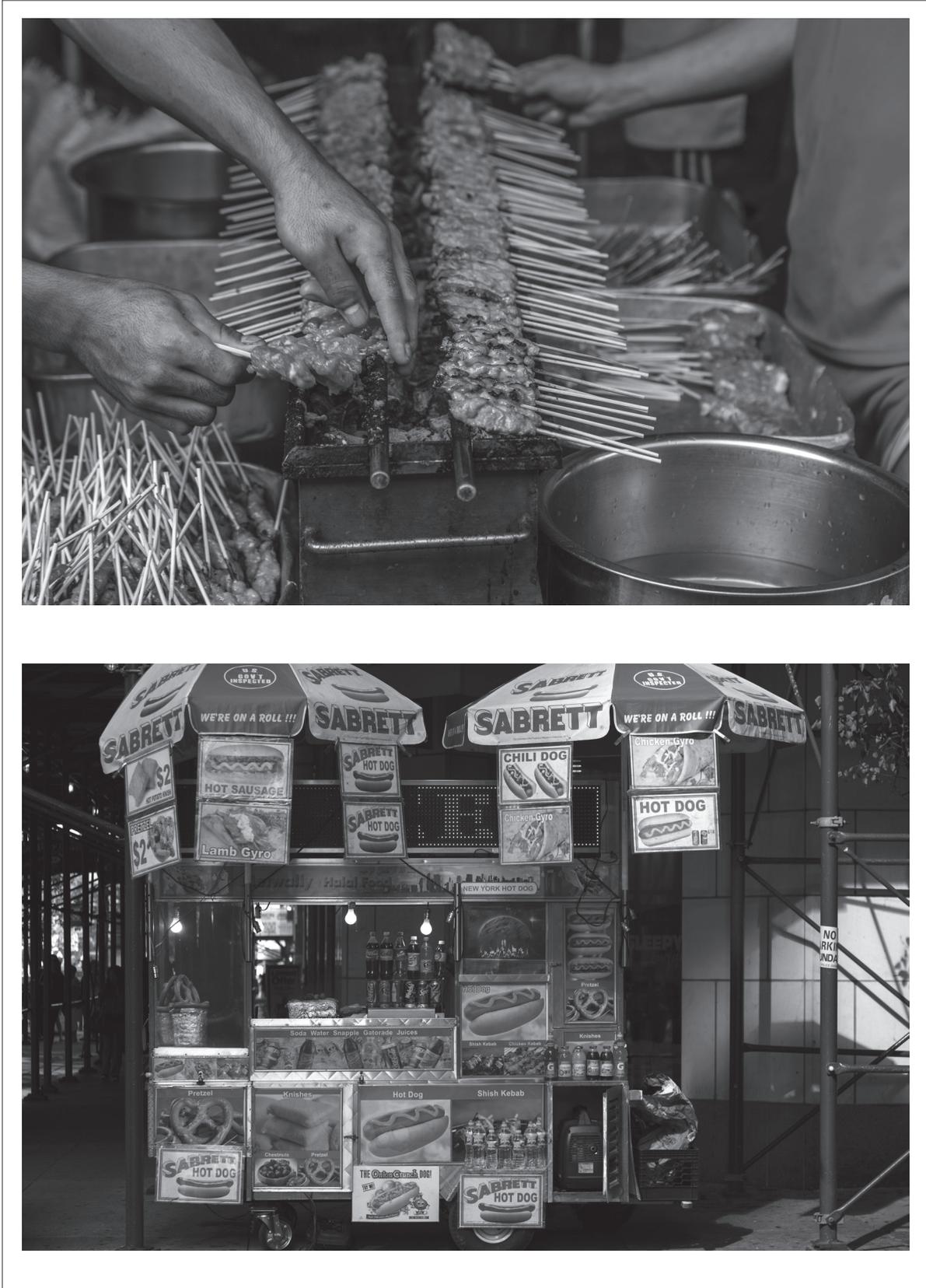


Fig. 3.1

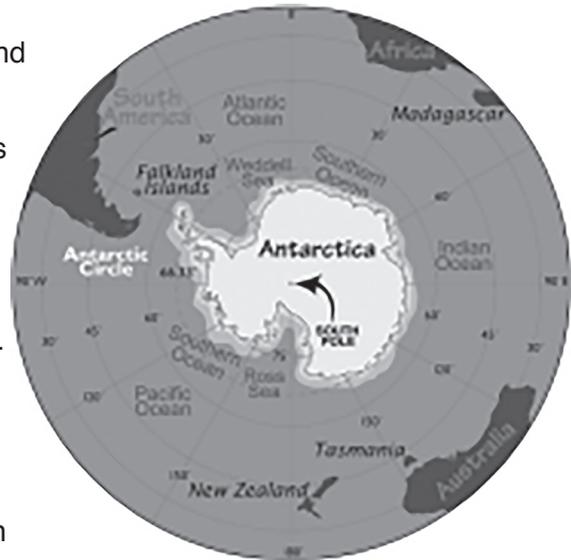
Fig. 4.1 for Question 4

Antarctica doesn't have any residents. Everyone who goes is a visitor for a short time. There are two groups of visitors who can have an impact on Antarctica: tourists and those who go as part of a national Antarctic programme. 'Landed' means those who set foot on the continent or an island in Antarctica whether they arrived by ship or by air. Landed tourists typically spend between 6–30 days in Antarctica. 'Total visitors' refers to tourists who went to Antarctica whether they set foot on the continent or not.

Tourist Numbers for Antarctica

Year	Visitors who landed 000s	Total visitors 000s	Year	Visitors who landed 000s	Total visitors 000s
2002	13 571	17 543	2009	21 622	36 875
2003	19 771	27 537	2010	19 455	33 824
2004	22 926	27 950	2011	22 122	26 509
2005	25 191	29 823	2012	25 284	34 354
2006	29 576	37 552	2013	27 735	37 405
2007	33 054	46 069	2014	36 702	47 000
2008	27 206	37 858	2015	46 030	55 000

Tourists greatly outnumber the national programme personnel – 55 000 tourists against 5000 personnel – and this has led to calls for tourist numbers to be limited. Very large ships (500+ passengers) do not go to Antarctica now. They used to account for large numbers of tourists. They tended not to make any landings and only made short visits which were part of much longer cruises. These large ships were a great concern. While tourists may only spend a short time on landings, it is considered to have a high impact. Tourists want to visit the most picturesque and wildlife rich areas of Antarctica. These areas are only accessible by small boats which take tourists from their ship to shore. Tourism in Antarctica is self-regulated by the International Association of Antarctic Tour Operators (IAATO), which has 122 members. This is an organisation that applies strict guidelines to its member tour operators and ships.



The Antarctic is considered to be a fragile environment. The sea is frozen for much of the year. In the warmer months some of the ice breaks off forming many dangerous moving icebergs.

Fig. 4.1

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