

in divinity, having written so much on other subjects; for, not being permitted to serve the Church with my tongue in preaching, I know not but it may be my duty to serve it with my hand in writing; and I have made choice of this subject, as thinking myself best qualified to treat of it.' Natural theology had previously been developed in England by Boyle, Stillingfleet, Wilkins, Henry More, and Cudworth, and the Essex clergyman, William Derham (1657-1735); but Ray systematised and popularised the subject. Paley's *Natural Theology* (1802), which superseded Ray's work, is really a development of Ray's argument.

The following excerpts are from the *Observations*, a book of travels which, always lucid and often very entertaining, yet sometimes—as in the greater Italian towns—becomes almost like a guide-book. On the journey up the Rhine from 'Collen' to Mentz, hardly one of the castles escapes mention. In university towns, Ray prints the professors' names and the courses of lectures being delivered when he was there. He had an especially open eye for botany and zoology, and 'natural curiosities'; thus at Naples he ascended Vesuvius, stood in the Grotto del Cane till 'the sulphureous twinge in his nose' threatened to stifle him, and thrust a sword into the vents of the Solfatara of Pozzuoli.

The Dutch People.

The common people of Holland, especially inn-keepers, waggoners (foremen they call them), boat-men, and porters, are surly and un civil. The waggoners bait themselves and their horses four or five times in a day's journey. Generally the Dutch men and women are almost always eating as they travel, whether it be by boat, coach, or waggon. The men are for the most part big-boned and gross-bodied. The first dish at ordinaries and entertainments is usually a *salade*, *Stu* they call it, of which they eat abundance in Holland. The meat they commonly stew, and make their Hotchpots of it. Puddings neither here nor in any place we have travelled beyond sea do they eat any; either not knowing the goodness of the dish, or not having the skill to make them: puddings and brawn are dishes proper to England. Boil'd spinage minc'd and butter'd (sometimes also with currans added) is a great dish all over these countries. The common people feed much upon *cabliau* (that is cod-fish) and pickled herrings, which they know how to cure or prepare better than we do in England. You shall seldom fail of hung beef in any inn you come into, which they cut into thin slices and eat with bread and butter, laying the slices upon the butter. They have four or five sorts of cheese; three they usually bring forth and set before you. (1) Those great round cheeses, colour'd red on the outside, commonly in England called Holland-cheeses. (2) Cummin-seed cheese. (3) Green cheese, said to be so colour'd with the juice of sheep's-dung. This they scrape upon bread butter'd, and so eat. (4) Sometimes Angelots. (5) Cheese like to our common country cheese. Milk is the cheapest of all belly-provisions. Their strong beer (thick beer they call it, and well they may) is sold for three stivers the quart, which is more than three pence English. All manner of victuals, both meat and drink, are very dear, not for the scarcity

of such commodities, but partly by reason of the great excise and impost wherewith they are charg'd, partly by reason of the abundance of money that is stirring here. By the way we may note, that the dearness of this sort of provisions is an argument of the riches of a town or country, these things being always cheapest in the poorest places. Land is also here sold at 30 or 40 years purchase, and yet both houses and land set at very high annual rents; so that, were not the poor workmen and labourers well paid for their pains, they could not possibly live. Their beds are for the most part like cabbins, inconveniently short and narrow; and yet such as they are, you pay in some places ten stivers a night the man for them, and in most six. There is no way for a stranger to deal with inn-keepers, waggoners, porters, and boatmen but by bargaining with them beforehand. Their houses in Holland are kept clean with extraordinary niceness, and the entrance before the door curiously paved with stone. All things both within and without, floors, posts, walls, glass, household stuff, marvellously clean, bright and handsomely kept: nay, some are so extraordinarily curious as to take down the very tiles of their pent-houses and cleanse them. Yet about the preparing and dressing of their victuals our English housewives are, I think, more cleanly and curious than they; so that no wonder Englishmen were formerly noted for excessive eating, they having greater temptation to eat, both from the goodness of their meat, and the curiosity of the dressing it, than other nations.

Ray's 'foreman' is the Dutch *voorman*, German *fuhrmann*. *Angelots* were well-known Normandy cheeses.

At Heidelberg.

About the middle of the ascent of the hill, called Koning-thall, stands the castle where the prince keeps his court, a stately pile and of great capacity, encompassed with a strong wall and a deep trench hewn out of the rock, which upon occasion may be filled with water. Over the gate leading into the palace is a Dutch inscription, signifying the building of it by Ludovicus V. in the year 1519. It is not all of one piece, but since the first foundation several buildings have been added by several princes. One part is called the English building. Under one of the towers stood the great tun, which almost fill'd a room. It held 132 fudders, a fudder (as we were inform'd) being equal to four English hogsheds. The old tun is taken in pieces, and there is a new one in building by the prince's order, which is to contain 150 fudders, or 600 hogsheds. Being invited by the prince's order, we dined in the palace, where we observed all things carried with little noise and great decency. After dinner his highness was pleased to call us into his closet and shew us many curiosities, among others (1) a purse made of *Alumen plumosum*, which we saw put into a pan of burning charcoal, till it was thoroughly ignite, and yet when taken out and cool, we could not perceive that it had received any harm at all from the fire. (2) Two unicorns horns, each eight or ten foot long, wreathed and hollow to the top. By the way we may note, that these are the horns of a fish of the cetaceous kind (two distinct species whereof you may find described and figured in the History and Description of the Antilles, or Caribbee Islands, written in French by R. F. of Tertre, and the head of one in Wormius's Musæum), not the horns of a quadruped, as is vulgarly but erroneously thought. Whatever the antients have