

AUBREY'S BRIEF LIVES

Edited by Oliver Lawson Dick

(Secker and Warburg 1949)

## JOHN GRAUNT

Born 1620. Statistician. He gained such esteem by his integrity as a merchant that he was able, when he was only thirty years old, to procure the Professorship of Music in Gresham College for his friend Dr William Petty. In 1662 appeared the first *Natural and Political Observations made upon the Bills of Mortality by John Graunt, City of London. With reference to the Government, Religion, Trade, Growth, Ayre, Diseases, and the several Changes of the said City.* This work laid the foundations of the science subsequently styled Political Arithmetic by Sir William Petty. Charles II specially recommended Graunt to be chosen an original member of the Royal Society, advising the Society that *if they found any more such tradesmen, they should be sure to admit them all without any more adoe.* After his retirement, Graunt was admitted into the management of the New River Company, and was rumoured, because of his Catholicism, to have cut off the supply of water to the city before the Fire of London. He died in 1674.

CAPTAIN JOHN GRAUNT (afterwards, major) was borne *24<sup>o</sup> die Aprilis*, at the 7 Starres in Burchin Lane, London, in the parish of St Michael's Cornhill, \* an houre before eight a clock on a munday morning, the signe being in the 9 degree of Gemini that day at 12 a clock, Anno Domino 1620.

He was bred-up (as the fashion then was) in the Puritan way; wrote Shorthand dextrously; and after many yeares constant hearing and writing sermon notes, he fell to buying and reading of the best Socinian bookes, and for severall yeares continued to be of that Opinion. At last, he turned a Roman Catholique, of which Religion he dyed a great Zealot.

To give him his due prayse, he was a very ingeniose and studious person, and generally beloved, and rose early in the morning to his Study before shop-time. He understood Latin and French. He was a pleasant facetious Companion, and very hospitable.

He was by Trade, Haberdasher of small-wares, but was free of the Drapers-Company. A man generally beloved; a faythfull friend. Often chosen for his prudence and justnes to be an Arbitrator; and he was a great Peace-maker. He had an excellent working head, and was very facetious and fluent in his conversation.

He had gonne through all the Offices of the City as far as Common-councill-man. He was Common-councill-man two yeares. Captaine of the Trayned Band, severall yeares: Major of it, two or three yeares, and then layd downe trade and all other publique Employment for his Religion, being a Roman Catholique.

He wrote *Observations on the bills of Mortality* very ingeniosely, but I believe, and partly know, that he had his Hint from his intimate and familiar friend Sir William Petty, to which he made some *Additions*, since printed. And he intended (had he lived) to have writt more on the subject.

He wrott some Observations on the Advance of the Excise, not printed; and also intended to have written something of Religion.

Major John Graunt dyed on Easter-eve 1674, and was buried the Wednesday followeing in St Dunstan's church in Fleetstreet in the body of the said church under the piewes towards the gallery on the north side, i.e. under the piewes (alias hoggsties) of the north side of the middle aisle (what pittty 'tis so great an Ornament of the Citty should be buried so obscurely!) *aetatis anno 54<sup>o</sup>*.

His death is lamented by all Good men that had the happinesse to knowe him; and a great number of ingeniose persons attended him to his grave. Among others (with Teares) was that ingeniose great Virtuoso, Sir William Petty, his old and intimate Acquaintance, who was sometime a student at Brasenose College.

He had one son, a man, who dyed in Persia; one daughter, a Nunne at (I think) Gaunt. His widowe yet alive.

He was my honoured and worthy Friend—*cujus animae propitietur Deus, Amen.*

## EDMUND HALLEY

Born 1656. Astronomer. Elected a Fellow of the Royal Society at the age of twenty-two. But for Halley, Newton's *Principia* would not have existed; his suggestions originated it and, although his father's death had left him in poor circumstances, he printed Newton's work at his own expense and averted the threatened suppression of the third book. In 1691 Halley was refused the Savilian Professorship of Astronomy at Oxford, owing to a suspicion of his being a materialist. Assistant Secretary to the Royal Society 1685-93. Deputy Controller of the Mint at Ipswich 1696. William III gave him command of a war-sloop, the *Paramour Pink*, in 1698, with orders to study the variation of the compass and to attempt to discover what land lay to the south of the Western Ocean. Halley penetrated to the Antarctic, and explored the Atlantic from shore to shore until 1700. The following year he published a general chart of the variation of the compass shown by Halleyan lines. He then made a thorough survey of the tides and coasts of the English Channel, of which he published a map in 1702. In 1703 he was made Savilian Professor of Geometry at Oxford. He was also elected Secretary of the Royal Society in 1713, and became Astronomer Royal in 1721. At the age of sixty-four, he began the process of observing the moon through its complete cycle of eighteen years, and in 1729 was elected a foreign member of the Paris Academy of Sciences. Peter the Great admitted him to his table, and at Vienna he was presented with a diamond ring from the Emperor's own finger. Halley worked out the Law of Inverse Squares, the first detailed description of a circulatory theory of Trade Winds and Monsoons, and a new method of finding the roots of equations. He discovered the law connecting elevation in the atmosphere with its density, and first measured height by barometric readings. He improved diving apparatus, experimented on the dilation of liquids by heat, and by his scientific voyages laid the foundations of physical geography. But his most enduring fame was caused by his accurate prediction of the return in 1758 of the comet (named after him) of 1531, 1607, and 1682. He died in 1742 after drinking a glass of wine against his doctor's orders.

MR EDMUND HALLEY, Artium Magister, the eldest son of Edmund Halley, a Soape-boyley, a wealthy Citizen of the City of London, of the Halleys of Derbyshire, a good family. He was born in Shoreditch parish, at a place called Haggerston, the backside of Hogsdon.

At 9 yeares old, his father's apprentice taught him to write, and arithmetique. He went to Paule's schoole to Dr Gale: while he was there he was very perfect in the celestiall Globes in so much that I heard Mr Moxton (the Globemaker) say that if a star were misplaced in the Globe, he would presently find it. He studied Geometry, and at 16 could make a dyall, and then, he said, thought himselfe a brave fellow.

At 16 went to Queen's Colledge in Oxon, well versed in Latin, Greeke, and Hebrew: where, at the age of nineteen, he solved this useful Probleme in As-

tronomie, never done before, viz. *from 3 distances given from the Sun, and Angles between, to find the Orbe*, for which his name will ever be famous.

He went to Dantzick to visit Hevelius. December 1st, 1680, went to Paris: Cardinal d'Estre caressed him and sent him to his brother the Admirall with a lettre of Recommendation. He hath contracted an acquaintance and friendship with all the eminentst Mathematicians of France and Italie, and holds a correspondence with them.

He gott leave and a viaticum of his father to goe to the Island of *Sancta Hellena*, purely upon account of advancement of Astronomy, to make the globe of the Southerne Hemisphere right, which before was very erroneus, as being donne only after the observations of ignorant seamen. There he stayed some moneths. There went over with him (amongst others) a woman, and her husband, who had no child in several yeares; before he came from the Island, she was brought to bed of a Child. At his returne, he presented his Planisphere, with a short description, to his Majesty who was very well pleased with it; but received nothing but Prayse.

## SIR WILLIAM PETTY

Born 1623. Political economist. He went to sea at an early age, but his precocious talents so excited the envy of his fellow-seamen that they deserted him on the coast of France with a broken leg. Instead of returning home, he studied on the Continent. He published economic treatises, the most important of which were entitled *Political Arithmetic* (collected edition 1690), a term signifying what we now call statistics. He died in 1687.

HIS father was by profession a clothier, and also did dye his owne cloathes: he left little or no estate to Sir William. About 12 or 13, i.e. before 15, he haz told me, happened to him the most remarkable *accident* of life (which he did not tell me) and which was the foundation of all the rest of his greatnes and acquiring riches. He haz told me that he never gott by Legacies, but only x pounds, which was not payd.

He enformed me that, about 15, in March, he went over into Normandy, to Caen, in a vessell that went hence, with a little stock, and began to play the merchant, and had so good successe that he maintained himselfe, and also educated himselfe; this I guessed was that most remarkable accident that he meant. Here he learn't the French tongue, and perfected himselfe in the Latin (before, but a competent smattering) and had Greeke enough to serve his turne. Here (at Caen) he studied the Arts: he was sometime at La Flesshe in the college of Jesuites. At 18, he was (I have heard him say) a better mathematician than he is now; but when occasion is, he knows how to recurre to more mathematicall Knowledge. At Paris he studied Anatomie, and read Vesalius with Mr Thomas Hobbes, who loved his company. Mr H then wrot his *Optiques*; Sir W.P. then had a fine hand in drawing and limning, and drew Mr Hobbes Opticall schemes for him, which he was pleased to like. At Paris, one time, it happened that he was driven to a great streight for money, and I have heard him say, that he lived a weeke on two peniworth (or 3, I have forgott which, but I thinke the former) of Walnutts.

He came to Oxon, and entred himselfe of Brasen-nose college. Here he taught Anatomy to the young Scholars. Anatomy was then but little understood by the university, and I remember that he kept a body that he brought by water from Reding a good while to read upon some way soused or pickled. About these times Experimentall Philosophy first budded here and was first cultivated by these Vertuosi in that darke time.

Anno Domini 1650 happened that memorable accident and experiment of the reviving Nan Green a servant maid, who was hang'd in the castle of Oxon for murdering her bastard-child. After she had suffer'd the law, she was cut downe and carried away in order to be anatomiz'd by some young physitions, but Dr William Petty finding life in her, would not venter upon her, only so farr as to recover her life. Which being look'd upon as a great wonder, there was a relation of her recovery printed, and at the end several copies of verses made by the young poets of the Universitie were added.

He was about 1650 elected Professor of Musique at Gresham Colledge, by, and by the Interest of his Friend Captaine John Graunt (who wrote the Observations on the Bills of Mortality) and at that time was worth but fourtie pounds in all the world.

Shortly after, he was recommended to the Parliament to be one of the Surveyors of Ireland, to which employment Capt John Graunt's interest did also help to give him a Lift, and Edmund Wyld, Esq, also, then a Member of Parliament and a good fautor of Ingeniose and good men, for meer meritt sake (not being formerly acquainted with him) did him great service, which perhaps he knowes not of.

Severall made offers to the Parliament to survey it (when the Parliament ordered to have it surveyed) for 4000 pounds, 5000 pounds, 6000 pounds; but Sir William (then Dr) went lower then them all and gott it. Sir Jonas More contemnd it as dangerous, loving to sleepe in a whole skin: he was afraid of the Tories [*Irish bandits*].

By this Surveying Employment he gott an Estate in Ireland (before the restauration of King Charles II) of 18,000 pounds per annum, the greatest part whereof he was forced afterwards to refund, the former owners being then declared Innocents. He hath yet 7 or 8000 pounds per annum and can, from the Mount Mangorton in the com. of Kerry, behold 50,000 Acres of his owne land. He hath an Estate in every province in Ireland.

The Kingdom of Ireland he hath surveyed, and that with every exactnesse, that there is now no Estate there to the value of threscore pounds per annum but he can shew, to the value, and those that he employed for the Geometricall part were ordinary fellowes, some (perhaps) foot-soldiers, that circumambulated with their box and needles, not knowing what they did, which Sir William knew right will how to make use of.

I remember about 1660 there was a great difference between him and Sir Hierome Sancy, one of Oliver's knights. They printed one against the other: this knight was wont to preach at Dublin. The Knight had been a Soldier, and challenged Sir William to fight with him. Sir William is extremely short sighted, and being the challengee it belonged to him to nominate place and weapon. He nominates, for the place, a dark Cellar, and the weapon to be a great Carpenter's Axe. This turned the knight's challenge into Ridicule, and so it came to nought.

Before he went into Ireland, he solicited, and no doubt he was an admirable good Solicitor. I have heard him say that in Soliciting (with the same paines) he could dispatch severall businesses, nay, better than one alone, for by conversing with severall he should gaine the more knowledge and the greater Interest.

In the time of the Warre with the Dutch, they concluded at the Councill-board at London, to have so many sea men out of Irland (I think 1500). Away to Irland came one with a Commission and acquaints Sir William with it; says Sir William, You will never rayse that number here. Oh, sayd the other, I warrant you, I will not abate you a man. Now Sir William knew 'twas impossible, for he knew how many Tunne of shipping belong'd to Ireland, and the rule is, to so many tunnes so many men. Of these shipps halfe were abroad, and of those at

home so many men unfit. In fine, the Commissioner with all his diligence could not possibly rayse above 200 seamen there. So we may see how statesmen may mistake for want of this Politique Arithmetique.

Another time the Councill at Dublin were all in a great racket for the prohibition of Coale from England and Wales, considering that all about Dublin is such a vast quantity of Turfe; so they should all improve their rents, sett poor men on worke, and the City should be served with Fuell cheaper. Sir William prima facie knew that this project could not succeed. Sayd he, If you will make an order to hinder the bringing-in of Coales by foreigne vessells, and bring it in Vessells of your owne, I approve of it very well: But for your supposition of the cheapnesse of the Turfe, 'tis true, 'tis cheape on the place, but consider carriage, consider the yards that must contayn such a quantity for respective houses, these yards must be rented; what will be the chardge? They supputated, and found that (every thing considered) 'twas much dearer then to fetch coale from Wales, or etc.

Sir William was a Rota man [*member of republican Rota Club*], and troubled Mr James Harrington with his Arithmetically proportions, reducing Politie to Numbers.

Anno 1660 he came to England, and was presently [*at once*] received into good grace with his Majestie, who was mightily pleased with his discourse. He can be an excellent Droll (if he haz a mind to it) and will preach extempore incomparably, either the Presbyterian way, Independent, Cappucin frier, or Jesuite.

I remember one St Andrewe's day (which is the day of the Generall Meeting of the Royall Society for Annuall Elections) I sayd, Methought 'twas not so well that we should pitch upon the Patron of Scotland's day, we should have taken St George or St Isidore (a philosopher canonized). No, said Sir William, I would rather have had it on St Thomas day, for he would not beleeve till he had seen and putt his fingers into the Holes, according to the Motto *Nullius in verba* [not bound to swear obedience to any man's dogma].

Anno Domini 1663 he made his double bottom'd Vessell (launched about New-year's tide) of which he gave a Modell to the Royal Societie made with his own hands, and it is kept in the Repository at Gresham College. It did doe very good service, but happned to be lost in an extraordinary storme in the Irish sea. About 1665 he presented to the Royall Societie a Discourse of his (in manuscript, of about a Quire of paper) of Building of Shippes, which the Lord Broucker (then President) took away, and still keepes, saying 'Twas too great an Arcanum of State to be commonly perused; but Sir William told me that Dr Robert Wood, M.D., has a copie of it, which he himselfe haz not.

Anno Domini 1667 he married on Trinity Sunday the relict of Sir Maurice Fenton, of Ireland, Knight, daughter of Sir Hadrus Waller of Ireland, a very beautiful and ingeniose Lady, browne, with glorious Eies, by whom we hath some sonnes and daughters, very lovely children, but all like the Mother. He has a naturall Daughter that much resembles him, no legitimate child so much, that acts at the Duke's Playhouse.

He is a proper handsome man, measured six foot high, good head of browne

haire, moderately turning up. His eies are a kind of goose-gray, but very short sighted, and, as to aspect, beautifull, and promise sweetness of nature and they doe not deceive, for he is a marvellous good-natured person. Eie-browes thick, darke, and straight (horizontall).

He is a person of an admirable inventive head, and practicall parts. He hath told me that he hath read but little, that is to say not since 25 aetat., and is of Mr Hobbes his mind, that had he read much, as some men have. he had not known so much as he does, nor should have made such Discoveries and improvements.

He had for his patent for Earle of Kilmore and Baron of Shelbrooke, which he stifles during his life to avoyd Envy, but his Sonne will have the benefit of the Precedency. (I expected that his Sonne would have broken-out a Lord or Earle: but it seemes that he had enemies at the Court at Dublin, which out of envy obstructed the passing of his Patent.)

Monday, 20th March, he was affronted by Mr Vernon: Tuesday following Sir William and his Ladie's brother (Mr Waller) Hectored Mr Vernon and caned him.

He told me, that whereas some men have accidentally come into the way of preferment, by lying at an Inne, and there contracting an Acquaintance; on the Roade; or as some others have donne; he never had any such like opportunity, but hewed out his Fortune himselfe. To be short, he is a person of so great worth and learning, and haz such a prodigious working witt, that he is both fitt for, and an honour to, the highest preferment.

Sir William Petty had a boy that whistled incomparably well. He after wayted on a Lady, a widowe, of good fortune. Every night this boy was to whistle his Lady asleepe. At last shee could hold out no longer, but bid her chamber-mayde withdrawe: bid him come to bed, setts him to worke, and marries him the next day. This is certeyn true.

Sir William Petty died at his house in Peccadilly-street (almost opposite to St James church) on fryday, 16th day of December, 1687, of a Gangrene in his foot, occasioned by the swelling of the Gowt, and is buried with his father and mother in the church at Rumsey, a little Haven towne in Hampshire.