*Tristram Shandy* in the Age of Insurance

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I

In late November 1759, the poet Thomas Gray watched in horror as fire spread through Swithin’s Alley in London, entirely destroying properties on the opposite side of the street. Writing to his friend William Mason shortly afterwards, he bemoaned a culture of complacency in which ‘all of us (here in Town) lay ourselves down every night on our Funeral Pile ready made, & compose ourselves to rest; while every drunken Footman, & drowsy Old-Woman, has a candle ready to light it before the morning.’[[1]](#footnote-1) House fires were a common hazard and popular spectacle in eighteenth-century London, featuring in numerous literary works. Defoe’s Moll Flanders exploits the commotion of such an incident to steal from goods being salvaged from a burning house, and John Cleland’s prostitute heroine, Fanny Hill, finds herself set up for life when her wealthy lover perishes having contracted a ‘violent cold’ while watching a night-time blaze.[[2]](#footnote-2) Gray himself had always been morbidly afraid of fires. As a young don in Cambridge he had decamped from Peterhouse to Pembroke College in the aftermath of a student prank that had preyed on his phobia. Lodging in a top floor room, he had fixed an iron bar next to his window to which a rope could be tied to create an escape route. When one night students mischievously raised the fire alarm, he bolted down his exit shoot only to end up in a barrel of water secretly placed below.[[3]](#footnote-3)

 Gray’s anxiety about fires however reflects more than just his sense of vulnerability to calamitous acts of chance. His apprehension was conditioned by the cultural changes with which this essay is expressly concerned, including the growth of the financial services industry and the emergence of an associated set of mentalities concerning risk calculation and avoidance. It is not coincidental that his childhood home in Cornhill stood only a stone’s throw from the offices of the London Assurance Corporation, founded in 1720, where his father, a ‘money-scrivener’ or banker, was a regular visitor.[[4]](#footnote-4) Ledgers in London Metropolitan Archives show Phillip Gray subscribing for shares in the firm’s marine insurance business for the benefit of himself and clients.[[5]](#footnote-5) He also took out fire insurance both on his main residence and a second property. When the Gray family home, by then rented out, burned down in the terrible Cornhill fire of 1748, the family benefited from his foresight, though his son later grumbled that the insurance policy paid out less than the full cost of reconstruction.[[6]](#footnote-6) After his mother Dorothy’s death in 1753, responsibility for the renewal of the insurance policy fell to Thomas, a chore that continued to vex him.[[7]](#footnote-7) Gray’s trepidation about fires should perhaps be seen as less a neurological pyrophobia than an early form of ‘insurance anxiety’: a peculiarly modern emotion, in part fuelled by the very fact that by this time it was better appreciated how the risk of fire could be actively managed through precautionary measures (vigilant snuffing of candles and so on) and household insurance. It was indeed his early induction into the culture of insurance that denied him the luxury of fatalism.[[8]](#footnote-8)

The same month of Gray’s letter to Mason (December 1759) also witnessed an incandescent event of a literary kind: the appearance of the first two volumes, printed by Ann Ward in York, of Laurence Sterne’s *Tristram Shandy*. The case I will argue here is that Sterne, as much as Gray, was a product of the age of insurance, albeit that this is reflected in different ways. Unfortunately, no evidence exists of Sterne’s purchasing of financial products. We don’t know whether he took out fire insurance on any of the properties he occupied, and no evidence has survived that he insured his own life. So much is in keeping with what we know of his banking arrangements. It was with a distinct note of chagrin that Sterne’s biographer Arthur Cash conceded in 1986 that ‘The attempt to locate Sterne’s banking records has so far proved futile’; and my own extensive trawling through bank archives points to the likelihood that Sterne never opened a customer account in his own name.[[9]](#footnote-9) Instead he seems to have entered into *ad hoc* peer-to-peer arrangements (relatively common in the eighteenth century) with both his friend David Garrick and publisher Thomas Becket, who held his literary earnings for him and disbursed them on request.[[10]](#footnote-10)

Despite the lack of evidence of Sterne as a consumer of insurance (and other financial) products, there is a case for claiming his great novel *Tristram Shandy* to be quintessentially a product of the age of insurance. Its serial publication between 1759-67 brings it into close conjunction with the founding of the Equitable Life Assurance Society in 1762, arguably the first modern life assurance scheme in as much as its business model was founded on actuarial principles.[[11]](#footnote-11) It was the earliest society to adjust its premiums on the basis of probabilistic calculations of life chances at all ages: to its deed of settlement we owe the actual term ‘actuary’ as applied to someone who computes insurance premiums. Sterne’s great novel about life’s unpredictable mischances coincides with the growth of an industry increasingly based on the formulaic calculation of life contingencies. The philosopher Ian Hacking has described the eighteenth century as witnessing the ‘taming of chance’.[[12]](#footnote-12) People became increasingly intent on insulating themselves from the volatilities of life and reducing their vulnerability to the randomness of events. This mentality can be seen in the growth of conduct and educational literature, in the rise of financial products that allowed subscribers to fence against risk and loss, and even (as I discuss later) in the vogue for manuals on effective gaming which instructed players how to strategize their playing of games of chance through the application of probability theory.[[13]](#footnote-13) These tendencies are however most embodied in the growth of insurance services, especially in the new actuarial approach to the setting of life assurance premiums. This essay reads *Tristram Shandy* as a novel constituted by an insurance ‘mentality’ in its heightened appreciation of the risks besetting an individual’s life, the possibility of calculating these, and the strategies of risk mitigation that might be adopted.

What unites literature and insurance during the middle of the eighteenth century is a shared sense of the contingency of human events. Johnson defines ‘contingency’ (noun) as ‘The quality of being fortuitous’, and ‘contingent’ (adj.) as ‘Falling out by chance; accidental; not determinable by any certain rule’.[[14]](#footnote-14) During the eighteenth century, the insurance industry increasingly responds to the uncertainties and risks posed by the contingent nature of events: as Charles Brand observes in his *Treatise on Assurances and Annuities* (1775), ‘ASSURANCES on Lives are grounded upon certain Contingences, expressed in Policies, by the Assurance of certain Sums of Money to be paid to the *Assured*, upon the Determinations of such Contingences’.[[15]](#footnote-15) While contingency is nowadays used as a synonym for ‘chance’, as invoked by philosophers it carries a much sharper denotation, describing, as Christina Lupton puts it, the ‘exclusion of both necessity and impossibility from a proposition’.[[16]](#footnote-16) Contingent events are ones that are defined by the unrealized possibility of their having fallen out differently, and by their susceptibility to being understood as occupying a position within a range of possible variations of outcome. Sterne’s uncle Toby defines the concept in these terms in an interjection in Corporal Trim’s rambling tale of ‘The Story of the King of Bohemia and his Seven Castles’:

Now the King of Bohemia with his queen and courtiers *happening* one fine summer’s evening to walk out—Aye! there the word *happening* is right, Trim, cried my uncle *Toby*; for the King of Bohemia and his queen might have walk’d out, or let it alone;–– ’twas a matter of contingency, which might happen, or not, just as chance ordered it.’[[17]](#footnote-17)

Trim’s narrative (as Sterne’s) occupies a fictional world in which things fall out according to ‘hap’, contingency, and chance, such terms being consistent with fictions that foreground the fact that the events occurring need never have happened. Things that ‘happen’ belong to a different fictional logic, for example, from those that ‘occur’: *ob* (against) + *currere* (run), indicating events that ‘run against’ or confront a protagonist, where the emphasis is on the way characters collide with the tide of onrushing incidents rather than orienting themselves in a world of contingent possibilities. A characteristic of *Tristram Shandy* is its constant imagining, even from its first sentence, of the unrealized possibilities of contingent events: ‘I Wish either my father or my mother, or indeed both of them, as they were in duty both equally bound to it, had minded what they were about when they begot me’ (1: 1). Indeed, had Tristram's parents so ‘minded’, everything else in the novel would have turned out otherwise. Tristram, Walter and Toby find themselves constantly tormented by their imagining of things perhaps having been different, and intrigued by the possibility of calculating the underlying probability of events materialising one way rather than another. A pronounced mindset in the novel is ‘apprehension’, or the anxiety of foresight. Walter's interventions on behalf of his son (his stipulations about Mrs Shandy's lying in, trust in the talismanic properties of his preferred name, and laborious compilation of the *Tristrapoedia*) are all means of inoculating Tristram against mischance. They also speak to a wider culture of risk mitigation which the insurance industry existed to promote and cater for.

II

The fickleness of fortune and the precious brevity of human existence are persistent themes in Sterne’s writing. The opening chapter of Volume 9 of *Tristram Shandy* begins with a solemn invocation of ‘the powers of time and chance’, as those which ‘severally check us in our careers in this world’ (2: 735). The same formula occurs in *A Sentimental Journey* when Yorick reflects on how much might be learned ‘within this little span of life’ by those observant of what ‘time and chance are perpetually holding out’ to them.[[18]](#footnote-18) It is the general ‘force of accidents’ that Yorick holds accountable for the epidemic of dwarfs he encounters on the streets of Paris (6: 79); and Tristram’s own formative years are blighted by numerous ‘misadventures and cross accidents’, making his life uniquely the ‘Sport of small accidents’ (1: 9, 196).

Sterne’s religious writings tend to stress the way that this appearance of contingency can still be reconciled with a wider providential dispensation. One of his published sermons was preached on *Ecclesiastes* 9 11, a biblical passage which asserts the unpredictability of human rewards (‘I returned, and saw under the sun, that the race is not to the swift,––nor the battle to the strong’) and the certainty alone of ‘time and chance’ as determinants of individual fortune. Sterne directs his reader to Bishop Tillotson’s ‘sermon on this subject’, probably number 36 (‘Success not always answerable to the probability of second causes’), though Tillotson composed a number of sermons on the same theme.[[19]](#footnote-19) Sterne’s sermon takes as its topic our everyday experience of events working out not just contrary to our wishes and endeavours but indeed ‘counter to all probabilities’. The mistake though, so Sterne reasons, is to interpret these apparently random outcomes as suggesting that God’s providence stands ‘neuter and unconcerned’ in the general disposal of events. Sterne’s argument is, in fact, that the opposite applies. It is the very unpredictability of events, the fact they so often fail to run smoothly in the expected channel, that testifies to God’s shaping hand, such apparent signs of contingency providing in fact evidence of ‘pure designation’. This line of argument may seem sophistical, and something less than ‘the proof and illustration’ of the doctrine of Providence that Sterne takes it to be, but it testifies to the strength of the paradoxical reasoning that could claim the very haphazardness of events to be demonstrable proof of providence. This argument for providential direction, as has been pointed out by Sterne scholars, seems much more relevant to Sterne’s sermons (including others such as 15 ‘Job’s expostulation’ and 32 ‘Thirtieth of January’) than to his fictions, where the stream of mischances and cross-accidents that afflict Sterne’s characters seems much less explicable in terms of a larger providential design.[[20]](#footnote-20)

 Sterne must have been aware of this discrepancy between the consolations of providence he was obliged to teach to his congregation and the world of grievous accidentality he created in his fictions. That he never took out a life assurance policy probably owed to his suspect health and fraught relationship with his wife (the most obvious beneficiary). Yet, paradoxically, clergymen comprised a professional group especially drawn to financial policies of this kind, being scrupulous in providing for their dependents rather than merely trusting to the beneficent providence they espoused from their pulpits.[[21]](#footnote-21) This distinction between trusting in assured outcomes and subjection to risk and randomness could be seen as reflected in Sterne’s two careers, with the regularity of his clerical emolument contrasting with the unpredictability of his earnings from the pen. In a letter of October 5th 1759 he quoted back to Robert Dodsley the bookseller’s stated reason for rejecting Sterne’s request for £50 for the opening instalment of *Tristram Shandy*: namely, that ‘it was too much to risk on a single Vol’.[[22]](#footnote-22) Risk and trust also play their part in the Sternean aesthetic. While the novel carefully feigns an impression of randomness and spontaneity, it is never certain that Sterne’s beginnings truly know their own endings. This spirit of improvisation he labelled as the ‘most religious’ way of writing, summed up in his statement that ‘I begin with writing the first sentence––and trusting to Almighty God for the second’ (2: 656). To have encountered the novel in 1759, with its bizarre chains of causation and odd sequencing of narrative events, must have felt like entering a world of pure contingency. Avoiding bafflement or incomprehension must have involved a process or readerly risk management that mimicked the broader regulation of life risks that was increasingly falling under the purview of the insurance industry.

It is distinctive of characters in *Tristram Shandy* to express matters of uncertainty or strong likelihood in terms of arithmetical probability. So in an early passage Tristram contrasts the people of Denmark, whose mental capacities converge mostly at the same level, with those of the English who ‘are all ups and downs in this matter’, its being ‘fifty to one’ in this country whether any individual turns out to be a ‘great genius’ or a ‘great dunce and a blockhead’ (1:27). While these odds are not precisely calculated, they capture the sense of the distribution of talents being essentially random but also vaguely computable. Such probabilistic formulations occur frequently during the novel. When Walter Shandy first takes up Bruscambille’s treatise of noses, we learn that he ‘solaces’ himself with its contents in a manner which it is ‘ten to one’ (that is ten to one ‘on’ rather than against) that the reader solaced himself with his first lover: that is, ‘from morning even unto night’ (1: 266). Similarly, when a work by the Flemish mathematician Stevinus is first alluded to, Walter offers to ‘lay twenty guineas to a single crown piece’ that, in keeping with Toby’s obsession with military fortifications, ‘this same *Stevinus* was some engineer or other’ (1: 127). In a more central passage of the novel (to which I will return), Walter and Toby debate the odds that the edge of Dr. Slop’s forceps should just happen to connect with and shatter little Tristram’s nose, an eventuality that, calculated ‘fairly’, Walter estimates at ‘a million to one’ (1: 336).

It is significant that the fracture of Tristram’s nose should not be represented as a purely random chance but rather as a risk susceptible to calculation, and indeed Walter’s own enumeration of the odds stands as a considered rebuttal of his brother Toby’s more modest formulation of the risk as a mere ‘hundred to one’ (1: 335). Yet neither of these figures of course comprise *calculations* as such, so much as parodies of calculation or rhetorical exclamations of the sheer unlikelihood of the event’s occurring. Walter’s inflation of the odds in this respect merely represents his deeper vexation at the unlucky nature of the accident. Something of the flourish of these arithmetical pronouncements is captured by the breathless opening of Sterne’s letter to his wife of May 16th 1762, beginning ‘It is a thousand to one that this reaches you before you have set out—However, I take the chance.’[[23]](#footnote-23) Similarly, when Trim gambles his ‘Montero cap’ on the likelihood of Widow Wadman succumbing to Toby’s charms within ten days, Walter brushes away a sense of there being an impropriety in such a wager by declaring there to be nothing improper in it: ‘’tis a mode of expression’ (2: 724).

The most obvious precursor to Sterne in whose writings these arithmetical formulations occur with equal frequency is Defoe. Occurrences in Defoe’s fiction that stand out as mysteriously coincidental are often signalled through statements of probability. Most famously, perhaps, Robinson Crusoe’s discovery of a solitary footprint in the sand would have led him to conclude its maker to have been the Devil in human form but for the fact that it made no sense ‘to leave a Mark in a Place where ’twas Ten Thousand to one whether I should ever see it or not’.[[24]](#footnote-24) The exaggerated nature of the stated improbability is a hallmark of Defoe’s narrative style. Earlier, when his subsistence on the island is aided by his vessel’s re-floating itself before running aground again closer to the shoreline, he calculates this improbability as ‘*an Hundred Thousand to one*’.[[25]](#footnote-25) The exorbitant nature of the proposed odds is no less characteristic of more quotidian situations in Defoe’s novels: the probability of characters re-encountering each other following estrangements are set at ‘ten Thousand to one’ and a ‘hundred Thousand to One’ at different moments in *Roxana*.[[26]](#footnote-26) In *Captain Singleton*, the Englishman whom Singleton encounters on a remote island tells of his unhappy fortunes and miraculous deliverance, which was ‘a Million to one odds’.[[27]](#footnote-27)

These moments in Defoe seem importantly different from ostensibly similar ones in Sterne. Those events in Defoe’s fictions that attract improbable odds tend to be ones that could never have been subject to forecast or pre-emptive calculation, being, as it were, ‘unknown unknowns’ rather than the ‘known unknowns’ by which characters are so much vexed in Sterne’s world. Moreover, the huge odds against certain things happening in Defoe’s fiction confirm their status as pre-determined rather than contingent, the providential miracle of their occurrence being consistent with the sheer impossibility of their having fallen out otherwise. In this respect they belong with Sterne’s sermons rather than the haphazardly contingent world of his fictions. In spite of Walter’s calculation of the chances of Tristram’s nose injury as a million to one, Sterne's statements of probability in his novels tend to stick at the lower end of the scale, inhabiting a world closer to the actual practice of gentlemanly gambling, like the ‘ten to one’ odds offered at Arthur’s Club against members reading various ‘literary histories of past ages’ without dissolving into tears (1. 100). They belong with a wider culture of identifying and computing risks that manifested itself in the development of actuarial science and even in the vogue for ‘serious’ card play.

III

In his classic study *Religion and the Decline of Magic* (1971), Keith Thomas suggests that magic declined in coincidence with a marked improvement in the extent to which the wider environment became amenable to human control. Principal among mechanisms for reducing risk and volatility was the growth of banking and insurance services.[[28]](#footnote-28) We can detect a burgeoning confidence in the capacity of the emerging insurance industry to buffer the volatilities and hazards of life in Defoe’s ringing pronouncement in *An Essay on Projects* (1697): ‘All the Contingences of Life might be fenc’d against by this Method, (as Fire is already) as Thieves, Floods by Land, Storms by Sea, Losses of all Sorts, and Death it self, in a manner, by making it up to the survivor’.[[29]](#footnote-29) The earliest steps to providing security against commercial hazards were taken by merchants and shipowners. Marine insurance had developed in England by the mid-sixteenth century, allowing ship owners and merchants with cargoes in transit to pool their risk. Inevitably, the devastating fire of London in 1666 hugely invigorated the market in fire insurance, at this time the only form of insurance relating to individual property. The Fire Office (subsequently the Phoenix) which opened for business in 1681 insured 4000 houses in its first four years, while the Hand-in-Hand had issued over 7000 policies by 1704.[[30]](#footnote-30) The main insurers operated and equipped their own primitive fire brigades, though their efforts were not entirely reinforced by a spirit of active risk mitigation among the general populace, either in terms of changes to building practices or increased domestic vigilance. The 1750s and 1760s see a significant spike in reports of fires in newspapers and also in fire insurance policies underwritten by the major providers.[[31]](#footnote-31)

A final frontier in the take-up of insurance services was the emergence of life assurance, affording people the opportunity to monetize their own mortality or that of others. Although small-scale schemes run by guilds and friendly societies to meet burial costs and provide relief for widows and orphans had existed since the sixteenth century, the Amicable Society for a Perpetual Assurance Office, established in 1706, laid claim to be the first properly capitalized life assurance society anywhere in the world. It was set up by John Hartley, a bookseller based in Fleet Street, as a closed society of a kind that would be classed today as a mortuary tontine. Membership was confined to an initial 2,000 policy-holders (subsequently replenished by fresh entrants), each paying the same annual premium, out of which were generated the benefits to be received by the survivors of members who had died in the previous twelve months.[[32]](#footnote-32) The Amicable was succeeded by the London Assurance and the Royal Exchange as early providers in the market.

While most early life assurance policies were taken out in favour of loved ones, it was also permissible to take out policies on the lives of those in whom the customer had no ‘insurable interest’, to use the terminology of the Gambling Act of 1776 which outlawed this particular practice.[[33]](#footnote-33) Such ‘others’ tended to be notable figures in the public gaze, with the practice being so endemic that even the Amicable’s own directors invested in their company through issuing policies to themselves of this kind, insuring the lives of notable government ministers including Robert Walpole. The growth of life assurance in eighteenth-century England was unusual in its close links with the craze for betting on individual lives, viewed abroad as a rather aberrant but peculiarly English taste. Voltaire, for example, in his *Siècle de Louis XIV* noted that when the Sun King fell ill in August 1715, the English ambassador Lord Stair could not refrain from betting, ‘according to the genius of his nation, that the King would not live beyond September’.[[34]](#footnote-34) Speculations on the life-expectancies of named individuals occur in a number of cultural and institutional contexts. Prognostications about the deaths of notable figures, including monarchs and religious leaders including the Pope, were for example a staple feature of the highly popular almanacs that were churned out annually by the likes of the astrologer John Partridge.

In gentlemen’s clubs like White’s and Brooks’, bets on the life expectancy of named individuals far outnumbered those placed on horses. Of the first 150 wagers recorded in White’s betting book, spanning from October 1743 to April 1752, over half address life contingencies (i.e. births or deaths), with over a third relating to the deaths of individuals or groups of people.[[35]](#footnote-35) Bets could be made on the year of death, or whether one individual would outlast another, or even whether someone would perish inside the current calendar year. The idea of ‘betting on lives’ resonates through eighteenth-century culture, in its application to gentlemanly gaming, the growth of the life assurance industry, and the rise of the novel. The readerly engagement invited by novels could be seen as a kind of imaginative speculation on the likely fates of the central characters. In John Shebbeare’s *The Marriage Act* (1754), a novel about female elopement, the narrator wonders how much could be won in bets by the author against his own readership on the unfolding events of the story: ‘Now in this very Place, if an Author could lay Wagers with his Readers, Thousands of Pounds might be won; but as he cannot, it may serve as a Bet at *White*’s, where the Lives of Men are play’d at Chuck-Farthing’.[[36]](#footnote-36) The game of chuck-farthing involved players throwing farthings at a mark, giving the owner of the closest coin the opportunity of cleaning up the other stakes. The eighteenth-century gentle reader, no less than the louche gamesters at White's, could be seen as gambling on human lives.

There were certain prominent individuals whose life expectancies constantly engaged gamblers, the most notable being Colley Cibber and Robert Walpole. Geoffrey Clark notes that higher premiums were charged on the much-insured life of Walpole during the Excise Crisis, while those on the lives of the Pretender and the rebel lords rose and fell during 1745, reflecting the fluctuations of the Jacobite campaign.[[37]](#footnote-37) That these general practices could be thought of as morally unsavoury was not lost on many commentators at the time. A particularly reprehensible incident, as reported by Horace Walpole in 1750, occurred at White’s Club, when a man who had collapsed near the door was carried into the club. Betting immediately broke out as to whether he was already dead, and when a doctor arrived to try to revive him, those who had put their money down on the side of his dying immediately objected to the medical intervention as distorting the odds.[[38]](#footnote-38) The novelist Tobias Smollett worked the incident into his novel *Ferdinand Count Fathom* (1753) in an episode which includes a pair of gambling aristocrats stooping so low as to run ‘their grandmothers against each other’.[[39]](#footnote-39) While these incidents have their comic aspect, the industry became increasingly troubled by the prospect that policy holders might succumb to the dark temptation ‘to hasten a Claim’, as appears to have happened in 1737 when a Southwark apothecary insured the life of his wife with the London Assurance Corporation, and then poisoned her.[[40]](#footnote-40) Although insurers were not obliged to pay out to individuals found guilty of murder, in 1769 the London Assurance also declared, as a further protection against foul play, that a policy would also be declared ‘null and void’ in the event of the insured individual’s death being accountable to suicide.[[41]](#footnote-41)

Until the Equitable Life set up in 1762, life assurance policies were not based on a calculation of the life expectancy of each member, and therefore of the risks incurred by the issuer in selling the policy. The same is true of other types of policy (such as annuities) where the eventual value would ultimately depend on the life-term of the policy holder. The greatest obstacle in calculating life-chances was the absence of data on which models could be constructed. The origin of actuarial science can be dated to John Graunt’s *Natural and Political Observations . . . upon the Bills of Mortality* (1662), the earliest work of statistical demographics published in England. Graunt unlocked the data contained in the London bills of mortality to produce informed assessments of male and female longevity, the comparative levels of disease in the city and the countryside, and the rate of infant mortality, the latter surmised from the recorded cause of death.[[42]](#footnote-42) His investigations enabled him to put together the first skeletal ‘life table’, predicting life expectancy at each age and pointing forward towards the emergence of actuarial science, which would progressively come to dominate the life assurance industry and the sale of annuities. He was followed in this work by the astronomer Edmond Halley’s compilation of death and survival rates in the Polish town of Wroclaw and the mathematician James Dodson’s ‘Table of Decrements’ showing the rate of erosion of a single life cohort.[[43]](#footnote-43) It was Dodson’s mortality statistics that were used by the Equitable Life to set their life assurance premiums. Such developments held out the possibility of seeing individual life chances not as subject to pure contingency, nor indeed as governed by a providential design, but as shaped by larger statistical regularities from which relatively stable forecasts could be generated, applicable to individual cases.

My argument here is  that *Tristram Shandy* is *constituted* by a culture of insurance rather than that it necessarily belongs with novels that could be said to be *about* the insurance industry, in the way that Wilkie Collins’s *The Haunted Hotel* (1878) explores the topic of life assurance crime. It is certainly true though that many of the adverse contingencies that occur in *Tristram Shandy*, such as the early death of Walter’s more promising son Bobby, the widowhood of Mrs. Wadman, and Tristram’s own ‘vile cough’ and galloping mortality, could be seen as falling in scope of the insurance industry. While the pain of Toby’s incapacitation might not have been eased by an insurance policy, as early as 1697, in his *Essay on Projects*, Defoe was recommending the setting up of insurance schemes specifically to benefit those injured in conflict, though the injuries he illustrates, including loss of arms, legs and eyes, fail to encompass unspecific maims in the region of the groin.[[44]](#footnote-44) My point here is that the ridiculous cross-accidents that afflict Tristram’s early life, such as his fractured nose and improbable circumcision, are ones for which it was becoming possible to imagine, even if only in a spirit of whimsy, an insurance solution. Take the following passage reflecting Walter’s paranoia about the likely damage done to his child’s mental faculties as a result of a head-first delivery assisted by forceps:

With all my precautions, how was my system turned topside turvy in the womb with my child! his head exposed to the hand of violence, and a pressure of 470 pounds averdupois weight acting so perpendicularly upon its apex—that at this hour ’tis ninety *per Cent*. insurance, that the fine network of the intellectual web be not rent and torn to a thousand tatters. (1: 355)

Walter’s alarm at the dangers inherent in Tristram’s being pulled out by his skull are embroidered from John Burton’s *Letter to William Smellie M.D.* (1753), which advocated podalic (feet-first) delivery as the safest method, and pointed out the high risk of cranial compression resulting from the opposite technique. (The inflated calculation of the applied force exerted is of course entirely Walter’s own.) Walter puts the risk of brain damage here at ‘ninety *per Cent*. insurance’, presumably meaning that any policy would need to be priced on the basis of a 90% likelihood of the accident insured against actually occurring.

In its pronounced sense of the ‘Uncertainty of Life’, general anxiety about future events, and culture of familial solicitude, *Tristram Shandy* partakes of the developing insurance culture.[[45]](#footnote-45) All the risibly ineffective precautions that Walter puts in place for his son constitute a parody of the insurance provision that a responsible father might settle upon his son’s life:

For the assurance of the life of any healthy boy at the age of Eight years, whose occupation shall not be hazardous, for a single year, upon payment of a premium of *One pound ten shillings and sixpence* for every One hundred pounds assured; and for the whole continuance of the life of such boy, upon payment of an annual premium of *Two pounds four shillings and ten-pence* for every One hundred pounds assured.[[46]](#footnote-46)

The high rate of child mortality meant that an individual’s highest point of life expectancy, in terms of probable future years of life, was agreed to occur around the age of 6, rather than at birth.[[47]](#footnote-47) The Amicable Society insured lives only from the age 12, though the Equitable, confident in its more robust actuarial model, was prepared to insure younger children, as set out (above) in its deed of settlement. One example of a sickly and ill-starred son who had his life insured by his father is the poet, Alexander Pope; and a reader of Sterne’s novel might be inclined it something less than prudent for Walter not (so far as we are told) to have sought to insure the life of such a dismally ill-fated child as Tristram proves to be.[[48]](#footnote-48)

IV

The changing mentality towards risk which accompanied the growth of insurance services was also mediated culturally by new attitudes towards gambling and games of chance. It is not known whether Sterne himself fancied a flutter, but we know that he regularly attended the August Race Week in York, partly no doubt to partake of the general social glitter. He was tickled on one occasion when, standing in the zone marked out for betting, he heard a lady being asked why she had put money on the smallest horse and responding by quoting from *Ecclesiastes*: ‘the race is not always to the swift nor the battle to the strong’.[[49]](#footnote-49) The same calculations of probability that lay behind the actuarial adjustment of life assurance premiums were also to brought to bear on the successful negotiation of games of chance. In Sterne’s work, such games figure as an allegory of human life itself, as unrelentingly beset by the adverse forces of contingency. Mastery of card games connotes mastery of life, especially the ability to navigate through life’s contingencies by exercising an ability to calculate and minimize risk.

Sterne’s fictions contain numerous references to card playing and other games of chance. In the seventh chapter of the seventh book of *Tristram Shandy*, on the road to Boulogne, Tristram puns twice on the term ‘size-ace’, that is, dice that have turned up a six and a one (totalling seven), which he uses in mock-reference to a couple of gentlemen, physically in inverse proportion to each other, who cast aspersions on his hurried flight from Calais (2: 585). It is a powerful idea throughout his fictions that life itself, with its opportunities and mischances, resembles the throwing of a set of dice: Sterne indeed refers in *A Sentimental Journey* to ‘every unexpected throw of the dice in life’ (6: 51). Walter in particular sees his various frustrated attempts to safeguard Tristram’s arrival into the world and early development (such as his obstetrical research and preferred name of Trismegistus) as so many throws of the dice: ‘Still, brother *Toby*, there was one cast of the dye left for our child after all––O *Tristram! Tristram! Tristram!*’ (1: 356):

I was my father’s last stake––he had lost my brother *Bobby* entirely,––he had lost, by his own computation, full three fourths of me––that is, he had been unfortunate in his three first great casts for me––my geniture, nose, and name,––there was but this one left . . . (1: 445)

The final ‘cast’ is Walter’s ‘TRISTRA-*poedia*’, the system of education compiled with a view to its being what Tristram calls ‘an INSTITUTE for the government of my childhood and adolescence’ (1: 445). Walter’s casts on Tristram’s behalf are strategic mitigations of risk, attempts to pre-empt his exposure to future mischances.

 A closer analogy to the travails of life than games of pure chance was provided by card games that mixed the randomness of the deal with the skill and strategy that could be brought to the playing of each hand. We know that Sterne played whist through a letter of summer 1764 in which he remembers having engaged in a ‘sober game’ of it in Paris with his friends the Thornhills, before being abruptly called away from ‘my afternoon’s amusement’ to prepare a sermon.[[50]](#footnote-50) ‘Sober’ was a word commonly used to refer to the modern style of whist-playing: Swift refers to Archbishop Tenison’s abhorrence at the idea of clergymen playing swabbers –– a type of whist that allowed for betting on privileged cards –– but as ‘to playing now and then a sober game at whist for pastime, it might be pardoned’.[[51]](#footnote-51) Although the name of the game derived from ‘whisk’, it became assimilated to ‘whist’, an obsolete term for ‘hush’, partly in recognition of the sobriety of the game and ‘the silence that is to be observed at it’.[[52]](#footnote-52) The rule of silence facilitated the game’s intellectual possibilities, while also prohibiting communication between partners other than as encoded in the tactics of play. This new culture of whist, which Sterne seems to have embraced, involving silence, concentration and strategy, was in marked contrast to the previous century, when the game was considered a vulgar pastime. Mrs Sullen in George Farquhar’s *The Beaux Stratagem* (1707) deprecates whist as a ‘Country’ pleasure and ‘rural Accomplishment’ to be placed alongside ‘drinking fat Ale’ and ‘smoaking Tobacco with my Husband’.[[53]](#footnote-53) During Sterne’s lifetime the game moved so far from this world of rural joviality that in 1767, the year of the author’s death, Horace Walpole could remark that the French had adopted the two dullest things that England had ever produced: whist and Richardson’s novels.[[54]](#footnote-54)

Much of the vogue for whist is attributable to a single individual, Edmond Hoyle, whose *A Short Treatise on the Game of Whist* (1742) became a publishing sensation, reaching its fifteenth edition by 1769.[[55]](#footnote-55) In the early nineteenth century, Robert Southey observed that ‘Few books in the language or in any language, have been so frequently printed, still fewer so intently studied’.[[56]](#footnote-56) The authority attached to the work spawned the catch-phrase ‘according to Hoyle’, invoked by a speaker to reinforce the unquestionable authority behind some utterance. Little is known of Hoyle’s life other than that he died on 29th August 1769, probably in his mid-nineties. He may well have figured in Lord Folkestone’s card-playing clique at the Crown Coffee-House in Bedford Row, and subsequently seems to have set up as a private whist tutor attending the homes of people of quality.[[57]](#footnote-57) Reducing his methods into a manuscript treatise on the game, he hawked copies around at a guinea apiece, until, in order to protect his copyright, he entered a printed version of his work at Stationer’s Hall. His subsequent determination to protect the copyright of his bestseller led him, along with his publisher Thomas Osborne, to sign subsequent editions of the work, a precedent that perhaps encouraged Sterne to assert authorial ownership over his own celebrated novel by signing all copies of the first and second (revised) editions of volume 5, and of the first editions of volumes 7 and 9.

Hoyle’s study of whist was not the first book of instruction on card playing –– whist itself had already been covered in Richard Seymour’s *Complete Gamester* (1734) –– nor even an introduction to the rules of the game, for such elementary knowledge was assumed. Its mission was instead to tutor the unwary gamester in the ploys that could be used against them by a more wily and experienced player. Its pitch was explicitly to the underdog, to uphold the interests of the casual player against the professional gamester. The potential ambiguity of such an objective is clear from a letter to the *Gentleman’s Magazine* in February 1755: ‘*Hoyle* tutor’d me in the several games at cards, and under the name of guarding me from being cheated, insensibly gave me a taste for sharping’.[[58]](#footnote-58) What Hoyle’s system stood for was the injection of calculation and strategy into a game previously assumed to be defined by chance. He tutored his followers to memorize the fall of the cards so as to identify those still in play; to signal to a playing partner the state of their hand through the order of playing it; to appreciate the value of smaller combinations of cards, especially for the purposes of trumps; and to sacrifice cards and tricks in order to conceal the strength of their position in the game. This latter tactic, to risk a smaller defeat in the pursuit of a greater victory, mirrored one of the most contentious risk-based practices of the age: human inoculation. All of these ploys helped turn whist from a game in which individuals battled against chance, to one in which pairs worked together to outmanoeuvre their opponents through projecting themselves into the hands of their opponents and calculating the odds of future sequences of cards.

Hoyle’s mission to protect the unwary card player against sharpers is reflected in a critical passage in *Tristram Shandy*, describing the vulnerability of Uncle Toby to the amorous wiles of Widow Wadman:

She wanted not encouragement: a child might have look’d into his hand–––there was such a plainness and simplicity in his playing out what trumps he had–––with such an unmistrusting ignorance of the *ten-ace*–––and so naked and defenceless did he sit upon the same sopha with widow Wadman, that a generous heart would have wept to have won the game of him. (2: 778)

Toby is an unwary amateur, badly in need of Hoyle’s tutorship. The contents of his hand, rather than needing to be deduced by the skilful projection of his opponents, lie naked to their gaze; he fails to maximize the power of his trumps; and his tactical innocence applies even to the ‘tenace’, a position that occurred when a player possessed the first and third best cards while being the last to play. Advice on playing the tenace appears at the very beginning of chapter 1, ‘Some general Rules to be observed by Beginners’, of Hoyle’s *Short Treatise*, indicating the fundamental nature of tactical acumen in this area.[[59]](#footnote-59)

The popularity of Hoyle’s writings on whist and other card games is symptomatic of the cultural shift during the eighteenth century that Ian Hacking has labelled the ‘taming of chance’: the desire to eliminate, or express mastery over, the forces of randomness. From being a game of chance, dependent on the deal and the subsequent fall of the cards, whist turned into a test of calculation, teamworking and memory (‘*Artificial Memory’*, as Hoyle called it).[[60]](#footnote-60) Yet Hoyle’s method also relied heavily on the internalizing of certain basic probabilities, the most obvious being that in a traditional whist foursome the chances of your partner holding a particular card are always 2 to 1 against. Successful playing depended upon instant recall of the probability of a range of potential outcomes in the game:

Never choose to lead from King, Knave, and one small Card in any Suit, because it is 2 to 1 that your Partner has not the Ace, and also 32 to 25, or about five to four that he has the Ace or Queen; and therefore, as you have only about five to four in your Favour, and as you must have four Cards in some other Suit, suppose the Ten to be the highest, lead that Suit, because it is an equal Wager that your Partner has a better Card in that Suit than the last Player; and if the Ace of the first-mention’d Suit lies behind you, which is an equal Wager it should so happen, in case your Partner has it not, in this Case, on your Adversaries leading this Suit, you probably make two Tricks in it by this Method of Play.[[61]](#footnote-61)

Card playing, and whist in particular, provided a ‘recreational analogue of real-life strategies to manage risk’.[[62]](#footnote-62) Just as in whist the skilful player navigates through each game on the basis of the calculated probability of different outcomes, so the successful conduct of a life came to be seen as requiring a similar set of skills. This conception of life as strategic play is important to *Tristram Shandy*, in which characters are constantly put in mind of the odds governing the unlucky accidents that beset the central character.

V

Chapter IX of *Tristram Shandy* volume 2 is Sterne’s chapter of chances, one of several themed chapters that he promises the reader, not all of which he delivers. It follows immediately on Walter’s resolution to christen his son Trismegistus, a name sufficiently talismanic as to counteract the baleful effects of Tristram’s nose injury. The accident puts Walter in mind of the improbability of such events, their inherent randomness but also potential calculability. Descending the stairs in conversation with his brother Toby, he reflects

WHAT a chapter of chances, said my father, turning himself about upon the first landing, as he and my uncle *Toby* were going down stairs––what a long chapter of chances do the events of this world lay open to us! Take pen and ink in hand, brother *Toby*, and calculate it fairly––I know no more of calculations than this balluster, said my uncle *Toby*, (striking short of it with his crutch, and hitting my father a desperate blow souse upon his shin-bone)––’Twas a hundred to one––cried my uncle *Toby.*­—I thought, quoth my father, (rubbing his shin) you had known nothing of calculations, brother *Toby*.––’Twas a meer chance, said my uncle *Toby*––Then it adds one to the chapter—replied my father. (1: 335)

The chance of Tristram’s injury occurring, which Walter more extravagantly puts at a million to one, combines here with the further mischance that Toby, in attempting to smite a spindle of the staircase in rhetorical demonstration of his innumeracy at calculating chances, mis-judges his strike and instead connects with Walter’s shin: ‘’Twas a meer chance’, says Toby by way of apology for the blow.

 An immediate context for Sterne’s chapter of chances is provided by the eighteenth-century vogue for probability theory, or what came to be labelled the ‘doctrine of chances’. At this time, the terms ‘chance’ and ‘probability’ were more or less synonymous, the mathematician Thomas Bayes stating that ‘By *chance* I mean the same as probability’.[[63]](#footnote-63) The cult of probability is satirized in *The Adventurer* 109 (1753) as one of the distinctive modes of modern madness. The narrator describes a ‘meagre man’ who had ‘bewildered his understanding by closely studying the doctrine of chances’ in order to take up a professorship ‘at an eminent chocolate-house’, probably an allusion to White’s in London where gentlemen gambled on cards while downing their spicy beverage.[[64]](#footnote-64) The earliest textbook of probability theory was Abraham de Moivre’s *The Doctrine of Chances: or a Method of Calculating the Probabilities of Events in Play* (1718, 1738), a work designed by its author to ‘cure a Kind of Superstition, which has been of long standing in the World, viz. that there is in Play such a thing as *Luck*, good or bad’.[[65]](#footnote-65) The treatise sets out through basic probability theory to disprove the impression of gamblers that their fortunes at table vacillate depending on runs of good or ill luck. De Moivre shows how the same computations that can determine probabilities in games of chance can also be applied to the costing of annuities, taking into account the age and life expectancy of the purchaser.

The same idiosyncratic connection between strategizing games of chance and the actuarial costing of financial products is evident in Hoyle’s *An Essay Towards making the Doctrine of Chances Easy* (1754). Here Hoyle combines probabilistic calculations relating to card play (for example, ‘Calculations at Whist’) with two sets of annuity tables based on Graunt’s study of the London Bills of Mortality and Edmund Halley’s life tables derived from the Polish city of Breslaw.[[66]](#footnote-66) These tables enable calculation, for example, of the odds of a person aged 25 dying within a single year, or the resolution of more complex life puzzles such as how many further years of life for an individual beyond the age of 40 would represent a 50% chance.[[67]](#footnote-67) A particular conundrum, reflected on in Thomas Bayes’s paper of 1763 entitled ‘An Essay towards solving a Problem in the Doctrine of Chances’ was the calculation of probability not for single events but for combinations. Bayes’s ruling is that the ‘probability that several independent events shall all happen is a ratio compounded of the probabilities of each’: in other words, the probability of any particular outcome is mathematically unaffected by earlier outcomes in the same sequence.[[68]](#footnote-68) Throwing a 6 with your first cast does not reduce the odds of throwing another with your second. The probability of combination of events seems particularly germane to *Tristram Shandy* with its long genealogies of mischance (one chance event leading to another), and in which it could be thought that central character endures an especially pronounced ‘run’ of ill luck.

Sterne must have been aware of the maturing insurance industry. His chapter of chances references the vogue for probability studies, and the author would certainly have been aware of the relevance of probability theory to both card games (which Sterne played himself) and the pricing of financial products, especially life assurance policies and annuities. While *Tristram Shandy* postdates the invention of actuarial science, it appeared coincidentally with the emergence of the actuarial profession and with the issuing of life assurance policies priced in accordance with actuarial calculations. What my essay proposes is that the growth of actuarial science presents a more compelling context in which we can understand Sterne’s depiction of a world beset by contingency than the traditional explanations in terms of the tyranny of randomness or the occult nature of providential design. Incidents in *Tristram Shandy* are persistently shaped by the principle of contingency: they belong to the category of events that could always have turned out otherwise. Moreover the fact that things might have worked out differently –– but didn’t –– constantly teases the characters with the mirage of alternative outcomes. In Sterne’s world, the calamities very often represent known unknowns (the dangers of warfare, interrupted conception, childbirth etc), and Walter’s eccentric attempts to foresee and mitigate risk are ones that are closely aligned with an insurance ‘mentality’. Indeed, the ability of the main characters to apprehend risk –– while lacking the capacity to nullify it ––forms an integral part of their tragi-comic defeatedness. Robin Pearson has suggested that the steep rise in the third quarter of the eighteenth century both of fires reported in newspapers and of fire insurance policies issued by the major providers signals a growing sense that successful lives were ones that incorporated the prudent management of risk: by the middle of the eighteenth century, as he states, ‘an insurance policy had become an everyday object in many homes’.[[69]](#footnote-69) Such an object may not necessarily have existed in the Sterne household, but insurance itself provides an everyday context for his great novel *Tristram Shandy*.

1. Letter 307, December 1st 1759, in *Correspondence of Thomas Gray*, ed. Paget Toynbee and Leonard Whibley, three vols (Oxford: Clarendon Press, 1935), 2: 654. [↑](#footnote-ref-1)
2. Daniel Defoe, *Moll Flanders*, ed. David Blewett (London: Penguin Classics, 1989), pp. 269-72; *Memoirs of a Woman of Pleasure*, ed. Richard Terry and Helen Williams (Peterborough, Ontario: Broadview Press, 2018), p. 251. [↑](#footnote-ref-2)
3. The incident is narrated in Robert L. Mack, *Thomas Gray: A Life* (New Haven: Yale University Press, 2000), pp. 480-84. [↑](#footnote-ref-3)
4. See Bernard Drew, *The London Assurance: A Second Chronicle* (London: privately published, 1949), pp. 135-36. [↑](#footnote-ref-4)
5. See ‘Subscription Book’, London Metropolitan Archives, CLC/B/192/MS08725/007. On folio 22, three successive entries (nos. 154, 155, 156) are in Phillip Gray’s name. [↑](#footnote-ref-5)
6. See Mack, pp. 364-67. [↑](#footnote-ref-6)
7. See Letter to Warton, 9 March 1755, 1: 420-22, 422: ‘I am always in a little apprehension during this season of Conflagrations’. [↑](#footnote-ref-7)
8. For the way that the rising number of recorded fires in the third quarter of the century led to changing attitudes to risk in general, see Robin Pearson, ‘Fire, Property Insurance, and Perceptions of Risk in Eighteenth-Century Britain’, in *The Appeal of Insurance*, ed. Geoffrey Clark, Gregory Anderson, Christian Thomann, and J.-Matthias Graf von der Schulenberg (Toronto: Univ. of Toronto Press, 2010), pp. 75-106. [↑](#footnote-ref-8)
9. Arthur. H. Cash, *Laurence Sterne: The Later Years* (London: Methuen & Co. Ltd, 1986), p. 10; see ‘The Banking Habits of Eighteenth-Century Authors: Pope and Others’, *Review of English Studies* 69 (2018): 488-509. [↑](#footnote-ref-9)
10. Sterne did however use institutional banking arrangements for his continental tour of 1762: see Cash, *The Later Years*, 156-57. [↑](#footnote-ref-10)
11. For an extensive collection of original texts relating to the growth of actuarial science, see *History of Actuarial Science*, edited by Steven Haberman and Trevor A. Sibbert, ten vols (Brookfield Vermont: Pickering and Chatto, 1995). [↑](#footnote-ref-11)
12. See Ian Hacking, *The Taming of Chance* (Cambridge: Cambridge University Press, 1990). [↑](#footnote-ref-12)
13. For general treatment of the understanding of probability in this period, see Douglas Lane Patey, *Probability and Literary Form: Philosophic Theory and Literary Practice in the Augustan Age* (Cambridge: Cambridge University Press, 1984); Lorraine Daston, *Classical Probability in the Enlightenment* (Princeton: Princeton University Press, 1988); and Jesse Molesworth, *Chance and the Eighteenth-Century Novel: Realism, Probability, Magic* (Cambridge: Cambridge University Press, 2010). [↑](#footnote-ref-13)
14. Samuel Johnson, *A Dictionary of the English Language* (1755), p. 463. [↑](#footnote-ref-14)
15. Charles Brand, *A Treatise on Assurances and Annuities on Lives* (London, 1775), p. 1. [↑](#footnote-ref-15)
16. Christina Lupton, ‘Contingency, Codex, The Eighteenth-Century Novel’, *ELH* (2014) 1173-1192, 1173. See also Michael Rosenblum, ‘Shandean Geometry and the Challenge of Contingency, *NOVEL: A Forum on Fiction*, Vol. 10, No. 3 Tenth Anniversary Issue: III (Spring, 1977): 237-47; and Sean Silver, ‘Contingency in Philosophy and History, 1650-1800’, *Textual Practice* 32, 3 (2018): 419-36. [↑](#footnote-ref-16)
17. Sterne’s writings are throughout cited from *The Florida Edition of* *The Works of Laurence Sterne*, nine vols, ed. W.G. Day, W.B. Gerard, Joan New, Melvyn New, and Peter de Voogd (Florida: University Press of Florida, 1978-2014). Citations are by edition volume and page number. Here *Tristram Shandy: The Text*, ed. New and New, 2: 692-93. [↑](#footnote-ref-17)
18. *A Sentimental Journey and Continuation of the Bramine’s Journal*, ed. New and Day, 6. 36. [↑](#footnote-ref-18)
19. *The Sermons of Laurence Sterne*, ed. New, two vols (4 and 5): see Sermon VIII, 4: 74-80. [↑](#footnote-ref-19)
20. My comments here rely on the Florida annotation: see 5: 127-32. See Patey, p. 69. [↑](#footnote-ref-20)
21. For discussion of the demographics of the life assurance market, see Geoffrey Clark, *Betting on Lives: The Culture of Life Insurance in England, 1695-1775* (Manchester: Manchester UP, 1999), pp. 155-92. [↑](#footnote-ref-21)
22. Letter 36, 5 October 1759, in *The Letters*, ed. New and de Voogd, two vols (7 and 8), 7: 96. [↑](#footnote-ref-22)
23. Letter 91, To Elizabeth Sterne, in *The Letters*, 7: 267. [↑](#footnote-ref-23)
24. Daniel Defoe, *The Life and Strange, Surprising Adventures of Robinson Crusoe* (1719), p. 183. [↑](#footnote-ref-24)
25. Ibid., p. 73. [↑](#footnote-ref-25)
26. Daniel Defoe, *The Fortunate Mistress: or, A History of the Life and Vast Variety of Fortunes of Mademoiselle de Beleau* (1724), pp. 109, 276. [↑](#footnote-ref-26)
27. Daniel Defoe, *The Life, Adventures, and Pyracies, of the Famous Captain Singleton* (1720), p. 158. [↑](#footnote-ref-27)
28. Keith Thomas, *Religion and the Decline of Magic* (Harmondsworth: Penguin University Books, 1973). See pp. 775: ‘the stronger man’s control of his environment, the less his recourse to magical remedies’. [↑](#footnote-ref-28)
29. Defoe, *An Essay on Projects* (London, 1697), in *Social Reform*, vol. 8 of *Political and Economic Writings of Daniel Defoe*, ed. W.R. Owens and P.N. Furbank (London: Pickering and Chatto, 2000), p. 73. [↑](#footnote-ref-29)
30. Figures quoted from Thomas, p. 781. [↑](#footnote-ref-30)
31. See Pearson, ‘Fire, Property Insurance, and Perceptions of Risk’, in *The Appeal of Insurance*, p. 76 and *passim*. [↑](#footnote-ref-31)
32. A tontine is a closed fund where the benefits paid out are generated by subscribers’ premiums, with the last survivor taking all the remaining resource. [↑](#footnote-ref-32)
33. See Timothy Alborn, ‘A Licence to Bet: Life Insurance and the Gambling Act in the British Courts’, in *The Appeal of Insurance*, pp. 107-26; and Daston, pp. 163-82. [↑](#footnote-ref-33)
34. Cited from Clark, p. 49. [↑](#footnote-ref-34)
35. Clark, p. 50. [↑](#footnote-ref-35)
36. John Shebbeare, *The Marriage Act: A Novel. Containing a Series of Interesting Adventures*, two vols (London: J. Hodges, 1754), 1: 33. The passage is also cited in Lupton. [↑](#footnote-ref-36)
37. Clark, p. 49. [↑](#footnote-ref-37)
38. Letter to Sir Horace Mann, 1 September 1750, in *The Yale Edition of Horace Walpole’s Correspondence*, ed. W.S. Lewis (New Haven: Yale University Press, 1937-83), 20: 185. [↑](#footnote-ref-38)
39. Tobias Smollett, *The Adventures of Ferdinand Count Fathom*, two vols (1753), 2: 122. The longer passage runs: ‘In one corner of the room might be heard a pair of lordlings running their grandmothers against each other, that is, betting sums on the longest liver’. [↑](#footnote-ref-39)
40. John Richardson, *Some Remarks and Considerations on the Original and Supplemental Charters, which Incorporate the Amicable Society for a Perpetual Assurance Office* (London, 1733), pp. 8-9: quoted from Clark, p. 51. [↑](#footnote-ref-40)
41. See ‘Assurance on Lives Books’, London Metropolitan Archives, CLC/B/192/MS08740. [↑](#footnote-ref-41)
42. John Graunt, *Natural and Political Observations Mentioned in a following Index, and made upon the Bills of Mortality* (London, 1662). [↑](#footnote-ref-42)
43. See ‘Tables’, by James Dodson Sr. Archive of the Equitable Life Assurance Society (held by the Institute and Faculty of Actuaries): EL/6/1/2b. [↑](#footnote-ref-43)
44. *An Essay on Projects* (1697), in *Political and Economic Writings*, 8: 73-76. [↑](#footnote-ref-44)
45. The highlighted phrase is from Brand, p. 2. [↑](#footnote-ref-45)
46. ‘The Deed of Settlement of the Society, as inrolled in the Court of *King’s Bench*, in Hillary Term, 5 George III. in the Year of our Lord, 1765’, p. 2. [↑](#footnote-ref-46)
47. As an example, Richard Price’s Table VII, ‘Shewing the EXPECTATIONS of Human Life at every Age, deduced from the *Northampton* Table of Observations’, records average years of additional life at age 5 as 40.84, at age 6 as 41.07, and at age 7 as 41.03. See his *Observations on Reversionary Payments*, fourth edn, two vols (1783), 2: 38. Price (1723-1791) was hired as a consultant by the Equitable Life. [↑](#footnote-ref-47)
48. Pope senior opened the policy on his son’s life (that ‘long Disease, my Life’) in 1707, presumably to indemnify himself against the possibility that his offspring would pre-decease him. Purchased in France, it was worth 5220 French livres. See Pope to Caryll, 23 June 1713, in *The Correspondence of Alexander Pope*, ed. George Sherburn, five vols (Oxford, 1956), 1: 180. [↑](#footnote-ref-48)
49. Cited from Cash, *The Later Years*, pp. 193-94. [↑](#footnote-ref-49)
50. Letter 133, To William Combe, in *The Letters*, 7: 369-71, 370. [↑](#footnote-ref-50)
51. Swift, ‘Essay on the Fates of Clergymen’ (1728): cited from David Parlett, *A History of Card Games* (Oxford: Oxford University Press, 1991), p. 217. [↑](#footnote-ref-51)
52. See ‘Card Games and Hoyle’s Whist’, in Ronald Paulson, *Popular and Polite Art in the Age of Hogarth and Fielding* (Notre Dame: Univ. of Notre Dame Press, 1979), pp. 85-102, 85. [↑](#footnote-ref-52)
53. George Farquhar, *The Beaux Stratagem. A Comedy* (1707), p. 11. [↑](#footnote-ref-53)
54. To Sir Horace Mann, 27 September 1767, in *Correspondence*, 22: 555. [↑](#footnote-ref-54)
55. For Hoyle’s spectacular vogue, see Paulson; Parlett, pp. 47-60; and Molesworth, pp. 62-76. [↑](#footnote-ref-55)
56. Robert Southey, *Letters from England, by Don Manuel Alvarez Espriella*, second edn (London, 1808), 3: 77-78. [↑](#footnote-ref-56)
57. See Parlett, p. 58-59. [↑](#footnote-ref-57)
58. *The Gentleman’s Magazine* (February 1755), Vol. 25, p. 75. [↑](#footnote-ref-58)
59. Edmond Hoyle, *A Short Treatise on the Game of Whist. Containing the Laws of the Game* (1742), p. 6. [↑](#footnote-ref-59)
60. Ibid., p. 1. [↑](#footnote-ref-60)
61. Ibid., pp. 21-22. [↑](#footnote-ref-61)
62. Clark, p. 40. [↑](#footnote-ref-62)
63. Bayes’ essay, edited by Richard Price, was published in *Philosophical Transactions* 53 (1763): 370-418. Here, p. 376. [↑](#footnote-ref-63)
64. *The Adventurer* no. 109, Nov. 20th 1753, in *The Adventurer*, printed for J. Payne, two vols (1752-54), 2: 230-34, 231. [↑](#footnote-ref-64)
65. Abraham de Moivre, *The Doctrine of Chances: or, A Method of Calculating the Probabilities of Events in Play*. The Second Edition. (1738), iii. Pope, who may have known of De Moivre’s work through his friend, the mathematician, John Arbuthnot, praises him in his *Essay on Man* (1733-4), III. 103-04: ‘Who made the spider parallels design, / Sure as De-moivre, without rule or line?’ Cited from vol. III. i. (ed. Maynard Mack) of The Twickenham Edition of the Poems of Alexander Pope, gen ed. John Butt (London, 1950), p. 102.

 [↑](#footnote-ref-65)
66. Edmond Hoyle, *An Essay Towards Making the Doctrine of Chances Easy to Those who Understand Vulgar Arithmetick only* (1754): see pp. 24, 63-71. For Halley’s work, see ‘An Estimate of the Degrees of the Mortality of Mankind, drawn from curious Tables of the Births and Funerals at the City of Breslaw; with an Attempt to ascertain the Price of Annuities upon Lives’ (1693). The work is reproduced in *History of Actuarial Science*, 1: 165-84. [↑](#footnote-ref-66)
67. Ibid., pp. 72, 73. [↑](#footnote-ref-67)
68. Proposition 6, p. 382. [↑](#footnote-ref-68)
69. Pearson, p. 91. [↑](#footnote-ref-69)