

Doctor Samuel Johnson: 'the Great Convulsionary' a victim of Gilles de la Tourette's syndrome

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Introduction

In a scholarly essay, the late Lord Brain described Johnson as 'the Great Convulsionary'¹. He refers to, and comments eloquently, on several contemporaneous accounts of his many verbal and motor eccentricities; for example he quotes Thomas Tyers²:

he was to the last a convulsionary . . . His gestures, which were a degree of St Vitus' Dance, in the street attracted the notice of many, the stare of the vulgar, but the compassion of the better sort.

Before considering the nature of his malady, it is helpful to appraise the evidence by recounting the remarkably descriptive histories of some of Johnson's many distinguished and literary contemporaries. First, however, we must take note of the multitude of illnesses which beset him throughout his life. He was born at Lichfield on 18 September 1709. His father was a bookseller of whom Boswell says 'from him, then, his son inherited, with some other qualities, "a vile melancholy" which . . . made him mad all his life . . .'³ (p 4)

My mother had a very difficult and dangerous labour . . . I was born almost dead and could not cry for some time. [He was put out to nurse] Here it was discovered that my eyes were bad; and an issue was cut from my left arm . . . Dr Swinfen told me that the scrofulous sores which afflicted me proceeded from the bad humours of the nurse. . . . In ten weeks I was taken home, a poor diseased infant, almost blind⁴ (pp 129-31).

He was sent to London to be touched for the King's Evil by Queen Anne⁴ (p 133). Throughout his life he was short sighted, with poor vision in one eye, though Boswell commends his sharpness of observation of nature, and his vision probably improved, since in *Prayers and Meditations* he records 'When my eye was restored to its use'.

He was also partially deaf, and therefore sat in St Clement Danes Church, at the East end of the North gallery immediately above the pulpit, the nearest seat to the preacher. He was a victim to gout and dyspepsia, and a gallstone was found at necropsy. He suffered from bouts of melancholy, crushing guilt, habitual insomnia, and he endured a morbid fear of loneliness and of dying, about which he spoke and wrote at length. In this matter, Boswell reported⁵ (p 11) that when he was aged 20 (1729):

he felt himself overwhelmed with a horrible hypochondria, with perpetual irritation, fretfulness and impatience; and with a dejection, gloom and despair, which made existence misery.

He recounted to Mrs Piozzi³ (p 13) that from the age of 10 his mind was disturbed by scruples of infidelity, which preyed upon his spirit and made him very uneasy.

In 1774 when Johnson was 65, he was 'very ill of a cold and cough . . . for some weeks'³ (p 223) and was breathless thereafter. Brain ascribed this to chronic bronchitis and emphysema, excluding cardiac and renal causes because of the 10 years between the onset and his death on 13 December 1784.

On 20 April 1778 he wrote:

My nights have been commonly not only restless but painful and fatiguing. My respiration was once so difficult that an asthma was suspected . . . Some relaxation of my breast has been procured I think, by opium, which, though it never gives me sleep, frees my breast from spasm⁶.

Critchley has provided a peerless chronicle of his stroke⁶ with dysphasia and agraphia when aged 74: 'My hand, I know not how nor why, made wrong letters'. Two days later his speech was returning and had largely recovered within 5 weeks. However, breathlessness continued (and may have been cardiogenic) and in 1783 he suffered congestive cardiac failure with dropsy and probably unrecognized myocardial infarction, which confined him to the house for 8 or 9 weeks:

in great pain, being sometimes obliged to sit all night in his chair, a recumbent posture being so hurtful to his respiration, that he could not endure lying in bed.

He recovered remarkably well; and, in the summer of 1784 visited Lichfield, Birmingham, and Oxford, but 'was too breathless to scale the library' in Oxford. He died a month later in London, and James Wilson carried out the autopsy, the report of which rests in the Royal College of Physicians' library, headed *Asthma*.

Rituals, tics - verbal and motor

We rely on the observations of Johnson's contemporaries to permit a description of his disordered movements, and so that these can be fairly appraised the relevant remarks are quoted in full:

*Boswell*³ (pp 135-6)⁷

Dr Johnson is often muttering pious ejaculations, when he appears to be talking to himself . . .

. . . yet his appearance was rendered strange and somewhat uncouth by convulsive cramps, . . . When he walked, it was like the struggling gait of one in fetters: when he rode he had no command or direction of his horse, but was carried as if in a balloon.

He commonly held his head on one side towards his right shoulder, and shook it in a tremulous manner, moving his

body backwards and forwards, and rubbing his left knee in the same direction, with the palm of his hand. In the intervals of articulating he made various sounds with his mouth, sometimes as if ruminating, sometimes giving a half-whistle, sometimes making his tongue play backwards from the roof of his mouth, as if clucking like a hen, and sometimes protruding it against his upper gums in front, as if pronouncing quickly under his breath, 'too, too, too'.

... he had another particularity ... his anxious care to go in and out at a door or passage, by a certain number of steps from a certain point ... I have on innumerable occasions, observed him suddenly stop, and then seem to count his steps with a deep earnestness; and when he had neglected, or gone wrong in this sort of magical movement, I have seen him go back again, put himself in a proper posture to begin the ceremony, and, having gone through it, break from his abstraction, walk briskly on, and join his companion.

*Fanny Burney (Mme D'Arblay)*⁸

He is, indeed, very ill-favoured! Yet he has naturally a noble figure; tall, stout, grand and authoritative: but he stoops horribly; his back is quite round: his mouth is continually opening and shutting, as if he were chewing something; he has a singular method of twirling his fingers, and twisting his hands: his vast body is in constant agitation, see-sawing backwards and forwards: his feet never a moment quiet; and his whole great person looked often as if it were going to roll itself, quite voluntarily, from his chair to the floor.

*Miss Frances Reynolds*⁹

... his extraordinary gestures or anticks with his hands and feet, particularly when passing over the threshold of a Door ... On entering Sir Joshua's house with poor Mrs Williams, a blind lady who lived with him, he would quit her hand, or else whirl her about on the steps as he whirled and twisted about to perform his gesticulations; and as soon as he had finished, he would give a sudden spring, and make such an extensive stride over the threshold, as if he was trying for a wager to see how far he could stride ...

But the strange positions in which he would place his feet (generally I think before he makes his straddles, as if necessarily preparatory) are scarcely credible. Sometimes he would make the back part of his heels to touch, sometimes the extremity of his toes, as if endeavouring to form a triangle, or some geometrical figure, and as for his gestures with his hands, they were equally strange: sometimes he would hold them up with some of his fingers bent, as if he had been seized with the cramp, and sometimes at his Breast in motion like those of a jockey on full speed; and often he would lift them up as high as he could stretch over his head for some minutes.

... his stretching out his arms with a full cup of tea in his hand, in every direction, often to the great annoyance of the person who sat next to him, indeed an imminent danger of their cloaths, perhaps of a Lady's Court dress ...

Miss Reynolds, walking with Johnson in Twickenham Meadows:

... I well remember that they (his gestures) were so extraordinary that men, women and children gathered around him laughing ... and they nearly dispersed when he pulled out of his pocket Grotius' *De Veritate Religionis*, over which he see-sawed at such a violent rate as to excite the curiosity of some people at a distance to come and see what was the matter with him.

His repetitive utterances were often of a religious nature but copralalia and scatological comments are very probable, though doubtless the social niceties of his friends inhibited their histories. For example, one

may wonder what unmentionable and possibly obscene material (copralalia) is dissembled by Mrs Piozzi (formerly Hester Lynch Thrale in whose house Johnson resided from 1765-81) when she remarks in 1766:

hearing a man (Johnson) so wildly proclaim what he could at last persuade no one to believe; and what, if true, would have been so very unfit to reveal (*sic*).

Also, Fanny Burney:

The careless old ejaculations have, in almost every case been modified or effaced in the manuscripts of the diaries ... by Mme D'Arblay herself, in more by her niece who was editor of her later diaries. These almost unmeaning expletives seem to have passed unrebuked by Dr Johnson¹⁰.

Elsewhere, Boswell reports:

'I have often thought,' says Johnson, 'that if I kept a seraglio (harem), the ladies should all wear linen gowns, or cotton ... Linen detects its own dirtiness.'

James Clifford, a distinguished authority, refers¹¹ to his prayers harping so much on his former sins, on the sensuality of his thoughts; he ascribes them to sexual guilt, strong sexual desires which he had displayed to Mrs Desmoulins (and others), and possibly masturbation.

There are other illuminating passages in the writings of Burney, Miss Reynolds, and her famous brother Sir Joshua. Boswell mentions the malady in the *Life*, and in *Tour of the Hebrides*, but is uncharacteristically brief, perhaps because his daily close contact lent a tolerant acceptance to these strange eccentricities, or perhaps because of Boswell's loyal veneration and apprehension, of mannerisms which might easily be misconstrued as signs of madness (which Johnson himself had feared all his life).

What was the nature of Johnson's strange movements?

Johnson's many medical friends had noted his remarkable tics, mannerisms, ritualistic behaviour, stereotypies of movement and of speech. His religious practices often had an obsessive compulsive quality, as did his repetitive utterances (eg The Lord's prayer). He was attended by several distinguished physicians: Swinfen, Lawrence PRCP, the great William Heberden, Brocklesby, and in Scotland by Cruikshank, Sir Alexander Dick, Cullen, Munro and Gillespie. Mr Edwin Hector, surgeon of Birmingham, a schoolfellow and lifelong intimate friend, provided Boswell with observations of Johnson as a youth. He knew and corresponded with many doctors but it is of interest that there are more observations of his tics and mannerisms in the writings of the non-medical *cognoscenti* than from his doctors.

Boswell, Thomas Tyers and Pope regarded the malady as organic: 'infirmity of a convulsive kind' (Pope); 'the nature of the distemper called St Vitus's dance'³ (p 35). Frances Reynolds conjectured³ (pp 135-6):

What could have induced him to practise such extraordinary gestures who can divine: his head, his hands and his feet often in motion at the same time. Many people have supposed that they were the natural effects of a nervous disorder, but had that been the case he would not have sat still when he

chose, which he did, and so still indeed when sitting for his picture, as often to have been complimented with being a pattern for sitters, no slight proof of his complaisance or his good nature.

Sir Joshua, her celebrated brother in a paper to Boswell thought otherwise⁷.

it proceeded from a habit which he had indulged himself in, of accompanying his thoughts with certain untoward actions . . . as if they were meant to reprobate some part of his past conduct. . . . The great business of his life (he said) was to escape from himself, this disposition he considered as the disease of his mind, which nothing cured but company.

Brain considered¹:

There can now be no doubt that Reynolds and not Boswell was right, . . . because diseases of the brain are beyond the patient's control and become more vigorous when attention is drawn to them and during emotion. The fact that Johnson could control his movements when it was essential that he should do so supports their psychological origin . . . Miss Hunter who asked him with some temerity 'Pray, Dr Johnson, why do you make such strange gestures?' His answer was: 'from bad habit'.

The last 20 years has seen a marked shift of emphasis in our conception of tics¹² and movement disorders, notably the segmental dystonias such as writer's cramp and spasmodic torticollis. Although in the absence of defined neuropathology, specific neurotransmitter defects or molecular genetic markers, their aetiology is still debatable, an organic basis for both physical disorders and their invariable psychological accompaniments is now generally accepted¹³⁻¹⁵.

Tourette's syndrome

Dr Johnson's complex rituals, compulsions, dystonic tics, gesticulations¹⁶, verbal outbursts, profane and melancholic thought, his repetitions, mimicries and a wide variety of antics, witticisms and boundless energy are characteristic¹⁷ of the syndrome described in 1885 by George Albert Edouard Brutus Gilles de la Tourette, which we must consider:

(1) both multiple motor and one or more vocal tics; (2) tics occur many times each day, nearly every day or intermittently throughout a period of more than 1 year; (3) the anatomic location, number, frequency, complexity and severity of the tics change over time; (4) onset before age 21; and (5) occurrence not exclusively during psychoactive substance intoxication or known central nervous system disease, such as Huntington's chorea and post-viral encephalitis^{25,26}.

Earlier, Itard described the Marquise de Dampière who from the age of 7 had tics and bizarre cries, 'mais tout cela sans délire, sans aucun trouble des facultés mentales'¹⁸. Coprolalia and worse tics succeeded a miscarriage, and such was her social embarrassment that she became a recluse. She died in her 90s, apparently still swearing and cursing.

Tourette (1857-1904) described¹⁹:

About the age of 7 or 8, a child commonly with a wretched family history, begins to exhibit a series of tics . . . At this stage also, expiratory laryngeal noises are occasionally superadded. The movements may be confined for a long time to the face, but later they gradually invade the shoulders and arms . . . The muscles of the larynx are also sometimes involved so that many sufferers from the tic give vent to

quick expiratory 'hems' and 'ahs' . . . the inarticulate laryngeal sound becomes organized and develops in a particular direction: this being pathognomonic of the disorder . . . the patients give vent one day to a word or short phrase of quite special character, inasmuch as its meaning is always obscene. These words or phrases are exclaimed in a loud voice, without attempt at restraint . . . Another physical stigma, echolalia is occasionally, though less frequently observed.

Beard had described in 1880 a similar choreic disorder, to be called 'The jumping Frenchmen of Maine' which was translated by Tourette. This may have stimulated Tourette's publication of nine patients with persisting tics, beginning in childhood, five of whom had coprolalia and echolalia. Hughlings Jackson described an example in 1864 and early single cases were reported (*inter alia*) by Trousseau, Osler, Guinon and Kinnier Wilson.

Discussion

Numerous reports²⁰⁻²⁴ in the last 30 years, of what was considered a curiosity, has perhaps led to uncritical acceptance of children and adolescents with transient tics, or with chronic multiple tic disorder in which either motor tics or vocal tics, but not both, is characteristic^{25,26}.

I have tried to cull the reliable descriptive passages from a huge volume of Johnsoniana to consider the nature of his embarrassing malady with which he contended so well. The sad case of Dr Johnson accords well with current criteria²⁵ for the Tourette syndrome³ (pp 135-6)²⁵⁻²⁷; he also displayed many of the obsessional-compulsive traits and rituals which are associated with this syndrome.

The evidence that Johnson was a coprolaliac is arguable (Critchley, personal communication) but certain observations (*vide supra*) suggest that his good friends concealed this trait for fear of impugning his formidable reputation²⁸. The description of his father's melancholy traits is consistent with the known, but genetically unidentified²⁹, hereditary component in the syndrome, though there is no evidence of tics or dystonia in his father. It is curious that Russell Brain, with his encyclopaedic knowledge and sophisticated intellect, appears to have overlooked or rejected this explanation in his extensive studies and writings: he was certainly aware of the Tourette syndrome. A notable literary work by a non-medical man²⁸ ascribes the gestures to 'lesions' . . . , or 'exaggeration of traits seen in many less gifted but perfectly normal mortals'. He suggests that the onset was unduly late (when Johnson was 20), but concedes that 'the absence of coprolalia does not preclude the diagnosis since it occurs in 55% of patients'. However, the evidence of obsessional traits and psychological disorder from the age of 10 is certain, and modern neurological thought would not accept such a complex movement disorder as other than organic; and, there are several hints of coprolalia, referred to above.

It is not without interest that periodic boundless mental energy, imaginative outbursts of inventiveness and creativity, are characteristic of certain Tourette patients³⁰. It may be thought that without this illness Dr Johnson's remarkable literary achievements³¹, the great dictionary, his philosophical deliberations and his conversations may never have happened; and Boswell, the author of the greatest of biographies would have been unknown.

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