

DR. SAMUEL JOHNSON'S APHASIA*

by

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CLEAR clinical descriptions of aphasia are none too common before the beginning of the nineteenth century: personal accounts written retrospectively are even rarer. Dr. Samuel Johnson's own record of his apoplectic disturbance of speech is therefore a putative topic of interest; and it seems odd that the copious literature dealing with Johnson should so lightly pass over this particular event. This applies even to the excellent studies that have been made upon Johnson's medical history.

Unfortunately it is not feasible to emulate that great Johnsonian scholar Mr. Aleyne Lyell Reade, who in a preface to one of his monographs said:

The story is purged of all the elaborate presentations of evidence, the ponderous marshalling of authorities, the intricate arguments, the laborious explanations, the careful qualifications, the nice splitting of hairs and the solemn weighing of probabilities, that go to make up 'the hideous apparatus of research'.

Our task is too difficult for such a straightforward approach.

The clinical account can be assembled from various directions. Boswell is an obvious and valuable source-book, while Hawkins supplies additional material, even though he is not always scrupulous in his accuracy. Most important of all are the letters which Dr. Johnson himself wrote throughout his illness, in a fashion which is perhaps unique in the annals of aphasiology. Mrs. Thrale's diary and her correspondence throw some light from the standpoint of an onlooker.

The facts would appear to be as follows. In June 1783, Dr. Samuel Johnson, then living at No. 8 Bolt Court, off Fleet Street, was seventy-three years of age and in poorish health. Much overweight and a slave to a voracious and intemperate appetite, he was breathless, bronchitic and gouty. Some years before he had eschewed alcoholic beverages altogether, but he had not controlled his habits of gluttony. Always a hypochondriac, he kept in close touch with a number of medical men socially as well as professionally. Apothecaries too were numbered among his immediate circle and one had actually been incorporated within his own household.

On 16 June of that year the doctor had spent a fairly busy day, and had in the afternoon sat for his portrait at the studio of 'Renny', that is, Miss Frances Reynolds. He never liked this particular portrait and, mindful of Percy's *Reliques*, dubbed it a 'grimly ghost'†. He retired at his customary hour, feeling in no way out of the ordinary, as far as we know. In the middle of the night he awoke and immediately realized that he had sustained a stroke. What precisely

* The Menas S. Gregory Lecture, New York, 1960.

† It has been unkindly said about Frances Reynolds that she painted pictures that made everybody laugh—and her brother cry.

were the subjective sensations which befell him we can only surmise. Perhaps he felt some cephalic discomfort like headache or dizziness. It is possible that he found his limbs heavy on one side. Probably he tried to speak aloud in the solitude of his bed-chamber only to find that words eluded him. These are conjectural. We do know, however, that in his alarm he feared principally for his sanity and that he proceeded to carry out an intelligence test of a most unusual type. He composed a prayer in Latin verse. The alleged text is known to us, and, according to Chapman, was the following:

Summe Pater, quodcunque tuum de corpore Numen
Hoc statuatur, precibus Christus adesse velit;
Ingenio parcas, nec sit mihi culpa rogasse,
Qua solum potero parte, placere tibi.

(Almighty Father, whatever the Divine Will ordains concerning this body of mine, may Christ be willing to aid me with his prayers. And let it not be blameworthy on my part to implore that Thou spare my reason, by which faculty alone I shall be able to do Thy pleasure.)

There is no indication, however, of how Chapman discovered the identity of this text. Hawkins gives a different version, alleging that Johnson attempted to repeat the Lord's Prayer, first in English, then in Latin, and after that in Greek, and that '... he succeeded in only the last effort'.

Mrs. Thrale, in her *Anecdotes of the late Samuel Johnson, LL.D.* (2nd Ed. 1786, p. 277), reports this incident in the following terms:

Fear was a sensation to which Mr. Johnson was an utter stranger, excepting when some sudden apprehensions seized him that he was going to die; and even then he kept all his wits about him, to express the most humble and pathetic petitions to the Almighty: and when the first paralytic stroke took his speech from him he instantly set about composing a prayer in Latin, at once to deprecate God's mercy, to satisfy himself that his mental powers remained unimpaired, and to keep them in exercise, that they might not perish by permitted stagnation. This was after we parted; but he wrote me an account of it, and I intend to publish that letter with many more.

According to Fanny Burney, Dr. Johnson first of all composed this Latin prayer 'internally': next he endeavoured to speak it aloud, but found his voice was gone.

From all this evidence we are probably safe in presuming that Dr. Johnson's prayer did not entail the evocation of some well-remembered lines, but rather the execution of a spontaneous *ad hoc* composition. The task was performed with moderate success, and his awareness of any possible shortcomings was to him, correctly enough, an indication that his intellect was not too gravely disturbed. Immediately afterwards Johnson performed another remarkable act. Hoping to loosen his tongue, as it were, he deliberately broke his habit of abstinence and drank some brandy. What effect it had upon his speech we do not know, but we learn that he at once fell asleep again.

The next morning, on waking, or on being awakened perhaps, his speech was still impaired. The servant, as he entered the room was surprised to find Dr. Johnson speechless or maybe incoherent, for he put into his hands a note asking

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for Mr. Allen his next-door neighbour to be summoned, as well as Heberden, his physician and friend.

During the course of that day, 17 June, Johnson continued to write letters although with some difficulty. Heberden came and prescribed blisters to be applied to his head and throat. Dr. Johnson's disabilities continued throughout the ensuing days, but in diminishing severity so that by the end of a week there remained little or no loss in the faculty of language and no motor affection.

Let Dr. Johnson's letters tell their own tale:

Letter 1. First day of illness. (847 Chapman collection.) To Edmund Allen.

Dear Sir, It hath pleased almighty God this morning to deprive me of the powers of speech; and, as I do not know but that it may be his farther good pleasure to deprive me soon of my senses, I request you will, on the receipt of this note, come to me, and act for me, as the exigencies of my case may require.

I am, Sincerely Yours, S. Johnson. June, 17. 1783.

The present whereabouts of this letter is not known. The following letter is reproduced through the courtesy of the New York Public Library (Berg Collection).

Letter 2. First day of illness. (848 Chapman collection.) To the Rev. Dr. Taylor.

Dear Sir, It has pleased God by a paralytick stroke in the night to deprive me of speech.

I am very desirous of Dr. Heberdens assistance as I think my case is not past remedy. Let me see you as soon as it is possible. Bring Dr. Heberden with you if you can, but come yourself, at all events. I am glad you are so well, when [when] I am so dreadfully attacked.

I think that by a speedy application of stimulants much may be done. I question if a vomit vigorous and rough would not rouse the organs of speech to action.

As it is too early to send I will try to recollect what I can that can be suspected to have brought on this dreadful distress.

I have been accustomed to bleed frequently for an asthmatick complaint, but have forborn for some time by Dr. Pepys's persuasion, who perceived my legs beginning to swell. I sometimes alleviate a painful, or more properly an oppressive constriction of my chest, by opiates, and have lately taken opium frequently but the last, or two last times in smaller quantities. My largest dose is three grains, and last night I took but two.

You will suggest these things, and they are all that I can call to mind, to Dr. Heberden.

I am, &c. Sam: Johnson. June 17. 1783.

Dr. Brocklesby will be with me to meet Dr. Heberden, and I shall have previously make master of the case as well as I can (*stet*: previously make master).

Letter 3. Second day of illness. (849 Chapman collection.) To Mr. Thomas Davies.

Dear Sir, I have had, indeed, a very heavy blow; but God, who yet spares my life, I humbly hope will spare my understanding, and restore my speech. As I am not at all helpless, I want no particular assistance, but am strongly affected by Mrs. Davies's tenderness; and when I think she can do me good, shall be very glad to call upon her. I had ordered friends to be shut out; but one or two have found their way in; and if you come you shall be admitted: for I know not whom I can see that will bring more amusement on his tongue, or more kindness in his heart.

I am, &c. Sam. Johnson. June 18. 1783.

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Letter 4. Third day of illness. (850 Chapman collection.) To Mrs. Thrale, in Bath.

Dear Madam, I am sitting down in no chearful solitude to write a narrative which would once have affected you with tenderness and sorrow, but which you will perhaps pass over now with the careless glance of frigid indifference. For this diminution of regard, however, I know not whether I ought to blame you, who may have reasons which I cannot know, and I do not blame myself who have for a great part of human life done You what good I could, and have never done you evil.

I have been disordered in the usual way and had been relieved by the usual methods, by opium and catharticks, but had rather lessened my dose of opium.

On Monday the 16 I sat for my picture, and walked a considerable way with little inconvenience. In the afternoon and evening I felt myself light and easy, and began to plan schemes of life. Thus I went to bed, and in a short time waked and sat up as has long been my custom, when I felt a confusion and indistinctness in my head which lasted, I suppose about half a minute; I was alarmed and prayed God, that however he might afflict my body he would spare my understanding. This prayer, that I might try the integrity of my faculties I made in Latin verse. The lines were not very good, but I knew them not to be very good, I made them easily, and concluded myself to be unimpaired in my faculties.

Soon after I perceived that I had suffered a paralytick stroke, and that my Speech was taken from me. I had no pain, and so little dejection in this dreadful state that I wondered at my own apathy, and considered that perhaps death itself when it should come, would excite less horror than seems now to attend it.

In order to rouse the vocal organs I took two drams. Wine has been celebrated for the production of eloquence; I put myself into violent motion, and, I think, repeated it. But all was vain; I then went to bed, and, strange as it may seem, I think, slept. When I saw light, it was time to contrive what I should do. Though God stopped my speech he left me my hand, I enjoyed a mercy which was not granted to my Dear Friend Laurence, who now perhaps over-looks me as I am writing and rejoices that I have what he wanted. My first note was necessarily to my servant, who came in talking, and could not immediately comprehend why he should read what I put into his hands.

I then wrote a card to Mr. Allen, that I might have a discreet friend at hand to act as occasion should require. In penning this note I had some difficulty, my hand, I knew not how nor why, made wrong letters. I then wrote to Dr. Taylor to come to me, and bring Dr. Heberden, and I sent to Dr. Broclesby, who is my neighbour. My Physicians are very friendly and very disinterested, and give me great hopes, but you may imagine my situation. I have so far recovered my vocal powers, as to repeat the Lord's Prayer with no very imperfect articulation. My memory, I hope, yet remains as it was. But such an attack produces solicitude for the safety of every Faculty.

How this will be received by You I know not, I hope You will sympathise with me, but perhaps

My Mistress gracious, mild, and good,
Cries, Is he dumb? 'tis time he shou'd*

But can this be possible, I hope it cannot. I hope that what, when I could speak, I spoke of You, and to You, will be in a sober and serious hour remembred by You, and surely it cannot be remembred but with some degree of kindness. I have loved you with virtuous affection, I have honoured You with sincere Esteem. Let not all our endearment be forgotten, but let me have in this great distress your pity and your prayers. You see I yet turn to You with my complaints as a settled and unalienable friend, do not, do not drive me from You, for I have not deserved either neglect or hatred.

To the Girls, who do not write often, for Susy has written only once, and Miss Thrale owes

* A quotation from Swift.

and praise God, that however he might afflict my ^{body} he would
spare my understandings. This prayer, that I might ^{try} the in-
tegrity of my faculties I made in Latin verse. The lines were
not very good, but I looked ^{them} out to be very good, I made them
easy, and concluded my self to be unimpair'd in my facul-
ties.

Soon after I perceived that I had suffered a paraly-
tick stroke, and that my speech was taken from me.
I had no pain, and so little dejection in this dreadful state
that I wondered at my ^{own} apathy, and ~~could not~~ ^{confident} that great
help death itself when it should come, would excite to her-
sorrow then from now to attend it.

In order to ease the vocal organs I took two draughts,
which has ^{been} celebrated for the production of eloquence; I put
myself into violent motion, and, I think, repeated it. But
it was vain; & then went to bed, and, I judge as it may
soon, I think, slept. When I saw light, it was time
to consider what I should do. Though God stopped my ^{speech}
he left me my hand, I enjoyed a mercy almost ^{not} great
I led to my dear friend Laurence, who ^{perhaps} ~~was~~ ^{looks} ~~me~~ ^{as}
I am ^{and rejoicing that I have what he wanted.} ~~nothing~~ My first ^{was} ~~was~~ ^{was} necessarily to my servant,
who came in walking, and could ^{not} immediately comprehend
why he should read what I put into his hands.

Plate 1

Page 2 of Dr. Johnson's letter to Mrs. Thrale, written on the third day of his illness, June 19th 1783. (850 Chapman collection.)

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me a letter, I earnestly recommend as their Guardian and Friend, that They remember their Creator in the days of their Youth.

I suppose you may wish to know how my disease is treated by the Physitians. They put a blister upon my back, and two from my ear to my throat, one on a side. The blister on the back has done little, and those on the throat have not risen. I bullied, and bounced (it sticks to our last sand) and compelled the apothecary to make his salve according to the Edinburgh dispensatory, that it might adhere better. I have two on now of my own prescription. They likewise give me salt of hartshorn, which I take with no great confidence, but satisfied that what can be done is done for me.

O God, give me comfort and confidence in Thee, forgive my sins, and if it be thy good pleasure, relieve my diseases for Jesus Christs sake, Amen.

I am almost ashamed of this querulous letter, but now it is written, let it go.
I am, Madam, Your most humble servant Sam: Johnson. Bolt Court Fleet Street June 19. 1783.

Letter 5. Fourth day of illness. (851 Chapman collection.) Present location unknown. To Mrs. Thrale, in Bath.

Dearest Lady, I think to send you for some time a regular diary. You will forgive the gross images which disease must necessarily present. Dr. Laurence said that medical treatises should always be in Latin.

The two vesicatories which I procured with so much trouble did not perform well, for, being applied to the lower part of the fauces, a part always in motion, their adhesion was continually broken. The back, I hear, is very properly flayed.

I have now healing application to the cheeks and have my head covered with one formidable diffusion of Cantharides, from which Dr. Heberden assures me that experience promises great effects. He told me likewise that my utterance has been improved since Yesterday, of which however I was less certain. Though doubtless they who see me at interval can best judge.

I never had any distortion of the countenance, but what Dr. Brocklesby calld a little prolapsus which went away the second day.

I was this day directed to eat Flesh, and I dined very copiously upon roasted Lamb and boiled pease. I then went to sleep in a chair, and when I waked I found Dr. Broaclesby sitting by me, and fell to talking to him in such a manner as [as] made me glad, and, I hope, made me thankful. The Dr. fell to repeating Juvenal's tenth satire,* but I let him see that the province was mine.

I am to take wine to night, and I hope it may do me good.
I am, Madam, Your humble Servant Sam: Johnson. London June 20. 1783.

Letter 6. Fourth day of illness. (852 Chapman collection.) From the Hyde collection.

Sir, You know, I suppose, that a sudden illness makes it impracticable to me to wait on Mr. Barry, and the time is short. If it be your opinion that the end can be obtained by writing, I am very willing to write, and, perhaps, it may do as well: it is, at least, all that can be expected at present from,

Sir, your most humble servant, Sam: Johnson. Friday, June 20th. 1783.
If you would have me write, come to me: I order your admission.

Letter 7. Fifth day of illness. (853 Chapman collection.) To Mrs. Thrale in Bath.

Dear Madam, I continue my Journal. When I went to Bed last night I found the new covering of my [my] head uneasy, not painful, rather too warm. I had however a comfortable and placid

* 'Orandum est, ut sit mens sana in sano corpore', Juvenal Satires X. 356.

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night. My Physicians this morning thought my amendment not inconsiderable, and my friends who visited me said that my look was spritely and cheerful. Nobody has shown more affection than Paradise. Langton and he were with me a long time today. I was almost tired.

When my friends were gone, I took another liberal dinner such as my Physicians recommended and slept after it, but without such evident advantage as was the effect of yesterday's *siesta*. Perhaps the sleep was not quite so sound, for I am harrassed by a very disagreeable operation of the cantharides which I am endeavouring to control by copious dilution.

My orders are in other respects less than usual, my disease whatever it was seems collected into this one dreadful effect. My Breath is free, the constrictions of the chest are suspended, and my nights pass without oppression.

To day I received a letter of consolation and encouragement from an unknown hand without a name, kindly and piously, though not enthusiastically written.

I had just now from Mr. Pepys, a message enquiring in your name after my health, of this I can give no account.

I am Madam, Your most humble servant, Sam: Johnson. London June 21. 1783.

Letter 8. Seventh day of illness. (854 Chapman collection.) From the Hyde collection. To Mrs. Thrale in Bath.

Dear dear Madam, I thank you for your kind letter, and will continue my diary. On the night of 21st I had very little rest, being kept awake by an effect of the cantharides not indeed formidable, but very irksome and painful. On the 22 The Physicians released me from the salts of hartshorn. The Cantharides continued their persecution, but I was set free from it at night. I had however not much sleep but I hope for more to night. The vesications on my back and face are healing, and only that on my head continues to operate.

My friends tell me that my power of utterance improves daily, and Dr. Heberden declares that he hopes to find me almost well to morrow.

Palsies are more common than I thought. I have been visited by four friends who have each had a stroke, and one of them, two.

Your offer, dear Madam, of coming to me is charmingly kind, but I will lay up for future use, and then not let it be considered as obsolete. A time of dereliction may come, when I have hardly any other friend, but in the present exigency, I cannot name one who has been deficient in activity or attention. What man can do for man, has been done for me.

Write to me very often. I am Madam Your most humble servant

Sam: Johnson. June 23. 1783 London.

Letter 9. Eighth day of illness. (855 Chapman collection.) From the Prime Minister's collection. To Mrs. Thrale.

Dear Madam, The journal now like other journals grows very *dry*, as it is not diversified either by operations or events. Less and less is done, and, I thank God, less and less is suffered every day. The physicians seem to think that little more needs to be done. I find that they consulted today about sending me to Bath, and thought it needless. Dr. Heberden takes leave tomorrow.

This day I watered the garden and did not find the watering jobs more heavy than they have hitherto been, and my breath is more free.

Poor dear . . . has just been here with a present. If it ever falls in your way to do him good, let him have your favour.

Both Queeny's letter and yours gave me today great pleasure. Think as well and as kindly of me as you can, but do not flatter me. Good reciprocations of esteem are the great comforts of life, hyperbolical praise only corrupt the tongue of one and the ear of another.

I am, dear Madam, Your most humble servant.

Sam: Johnson London, June 24. 1783.

Your letter has no date.

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Letter 10. Ninth day of illness. (856 Chapman collection.) From the Hyde collection. To Lucy Porter (Lichfield).

Dear Madam, Since the papers have given an account of my illness, it is proper that I should give my friends some account of it myself.

Very early in the morning of the 16th of this month, I perceived my speech taken from me: When it was light I sat down and wrote such directions as appeared proper. Dr. Heberden and Dr. Brocklesby were called. Blisters were applied, and medicines given; before night I began to speak with some freedom, which has been encreasing every since, so that I now have very [little] impediment in my utterance. Dr. Heberden took his leave this morning.

Since I received this stroke I have in other respects been better than I was before, and hope yet to have a comfortable Summer. Let me have your prayers.

If writing is not troublesome let me know whether you are pretty well, and how you have passed the Winter and Spring.

Make my compliments to all my Friends.

I am, dear Madam, Your most humble servant, Sam: Johnson London. June 25. 1783.

Letter 11. Thirteenth day of illness. (858 Chapman collection.) N.Y. Public Library, Berg collection. To Mrs. Thrale in Bath. Torn. Postmark 30.VI. Date, added by Mrs. Piozzi, 29 June 1783.

... I climbed up stairs to the garret, and then up a ladder to the leads, and talked to the artist rather too long, for my voice though clear and distinct for a little while soon tires and falters. The organs of speech are yet very feeble, but will I hope be by the mercy of God finally restored, at present like any other weak limb, they can endure but little labour at once. Would you not have been very (sorry) for me when I could scarcely speak? ...

Letter 12. Seventeenth day of illness. (861 Chapman collection.) To James Boswell (Edinburgh).

Dear Sir, Your anxiety about my health is very friendly, and very agreeable with your general kindness. I have, indeed, had a very frightful blow. On the 17th of last month, about three in the morning, as near as I can guess, I perceived myself almost totally deprived of speech. I had no pain. My organs were so obstructed, that I could say *no*, but could scarcely say *yes*. I wrote the necessary directions, for it pleased God to spare my hand, and sent for Dr. Heberden and Dr. Brocklesby. Between the time in which I sent for the doctors, I had, I believe, in spite of my surprize and solitude, a little sleep, and Nature began to renew its operations. They came, and gave the directions which the disease required, and from that time I have been continually improving in articulation. I can now speak, but the nerves are weak, and I cannot continue discourse long; but strength, I hope, will return. The Physicians consider me as cured.

July 3. 1783.

Letter 13. Nineteenth day of illness. (862 Chapman collection.) Hyde collection. To Lucy Porter (Lichfield).

Dear Madam. . . .

... My disease affected my speech, and still continues in some degree to obstruct my utterance, my voice being distinct enough for a while, but the organs being yet weak are quickly weary. But in other respects I am, I think, rather better than I have lately been, and can let You know my state without the help of any other hand.

In the opinion of my friends, and in my own I am gradually mending. The Physicians consider me as cured, and I had leave four days ago to wash the Cantharides from my head. Last Tuesday I dined at the Club.

... July 5. 1783

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Letter 14. Twenty-second day of illness. (865.1 Chapman collection.) To John Ryland (Cranbrook).

Dear Sir. . . .

. . . My recovery, I think, advances, but its progress is [is] not quick. My voice has its usual tone, and a stranger in the beginning of our conversation does not perceive any depravation or obstruction. But the organs of articulation are weak, and quickly tire. I question if I could read, without pausing, a single page of a small book. . . .

July 8. 1783

Letter 15. Twenty-ninth day of illness. (867 Chapman collection.) To William Strahan, Esq., M.P. London.

Sir. . . . My breath is more free, and my nights are less disturbed. But my utterance is still impeded, and my voice soon grows weary with long sentences. . . .

July 15. 1783.

Letter 16. Thirty-sixth day of illness. (869 Chapman collection.) To Mrs. Thrale in Bath.

. . . I am very well except that my voice soon falters. . . .

July 23. 1783.

Letter 17. Thirty-seventh day of illness. (871 Chapman collection.) To the Rev. Dr. John Taylor (Ashbourne).

. . . My voice in the exchange of salutations, or on other little occasions is as it was, but in a continuance of conversation it soon tires. I hope it grows stronger but it does not make very quick advance. . . .

July 24. 1783

Letter 18. Thirty-seventh day of illness. (871.2 Chapman collection.) To Wm. Bowles (Heale).

Dear Sir, You will easily believe that the first seizure was alarming. I recollected three that had lost their voices, of whom two continued speechless for life, but I believe, no means were used for their recovery. When the Physicians came they seemed not to consider the attack as very formidable, I feel now no effects from it but in my voice, which I cannot sustain for more than a little time. . . .

July 24. 1783

Letter 19. Fifty-seventh day of illness. (875 Chapman collection.) To Mrs. Thrale (Weymouth).

. . . I am now broken with disease, without the alleviation of familiar friendship, or domestick society; I have no middle state between clamour and silence, between general conversation and self-tormenting solitude. . . .

August 13. 1783

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To these letters there may be added the entry in Johnson's own diary, which contained the following note:

June 16. I went to bed, and, as I conceive, about 3 in the morning, I had a stroke of the palsy.

June 17. I sent for Dr. Heberden and Dr. Brocklesby, God bless them.

June 25. Dr. Heberden took leave.*

The available evidence as to Dr. Johnson's illness indicates an apoplectic disorder of speech, not very severe, and comparatively short in duration: that the disability was not a mere articulatory disorder but a dysphasic one, is shown by defects in his written compositions. The speech-difficulty seems to have entailed some dysarthria, which continued to show itself even after the availability of words had returned to normal. Johnson's aphasia appears therefore to have belonged to the category of what used to be termed Broca's aphasia (or aphemia), and such a diagnosis would doubtless still be applied by some neurologists uncritical in their attitude towards clinical classifications. It is of interest that, like so many aphasiacs, Johnson experienced a temporary difficulty with the particles *yes* and *no*, finding too that the negative term came more readily to his lips than the affirmative.

Perusal of the manuscripts of the actual letters written by Johnson during these days, reveals first of all a general untidiness of the penmanship. In addition there are to be seen numerous instances of verbal corrections, and a few examples of iterations. These defects are well shown for example in Letter 4 (850 Chapman collection), where we find:

1. Line 8 two illegible words erased, and 'human life' inserted.
2. Line 10 'had' changed to 'have' and 'been' inserted.
3. Line 18 illegible word erased, and 'my head' inserted.
4. Line 20 'body' inserted.
5. Line 21 'try' inserted.
6. Line 23 'them' inserted.
7. Line 29 'own' inserted; 'could not' erased and 'considered' inserted.
8. Line 33 'been' inserted.
9. Line 34 'a' changed to 'o' in 'motion'.
10. Line 37 'I' inserted; 'speech' inserted.
11. Line 38 'not' inserted.
12. Line 39 illegible erasure: 'perhaps' inserted.
13. Line 41 'not' inserted.
14. Line 50 'recovered' (corrected mis-spelling).
15. Line 58 'you' erased, 'that' inserted.
16. Line 67 erasure of 'on each way', and 'from my ear' inserted.
17. Line 72 'now' inserted.
18. Line 75 'him' erased, 'me' inserted.

The later stages of Johnson's aphasia betrayed themselves by a sort of asthenolalia, or undue fatiguability, which involved not only the volume of the voice, but also the task of word-finding.

* Johnson: 'Prayers and Meditations' No. 158.

Dr. Johnson was fortunate in sustaining no obvious paralysis. Nothing more than a temporary facial asymmetry developed, even though we cannot be sure whether it was the right or the left side which was impaired. A week later, Johnson was apparently himself again, for on 24 June Mrs. Thrale was writing in her diary that she had received a letter from him '... in his usual style'.

By November of the same year, that is, five months later, Johnson was exclaiming to Sir John Hawkins:

What a man am I! who have got the better of three diseases, the palsy, the gout and the asthma, and can now enjoy the conversation of my friends, without the interruptions of weakness or pain!

Scrutiny of the clinical evidence, it must be confessed, does not give us unequivocal information as to which cerebral hemisphere was the one involved by the presumed vascular accident. Only by assembling indirect evidence or clues, can we conclude that it was probably the left side of the brain which was at fault.

At this point some data as to the identity of Dr. Johnson's medical advisers might be interpolated.

Dr. Richard Brocklesby (1722–97) was born in Somerset of Quaker parents, but at an early age went to live in Ireland. He studied at the Edinburgh School of Medicine, qualified at Leyden, and practised not far from Bolt Court in Norfolk Street, Strand. He was not only a friend of Edmund Burke but also the medical attendant of Samuel Wilkes, Burke's political antagonist. Brocklesby was a close friend of Johnson's to whom he offered a home and an annual stipend of £100.

Dr. William Heberden (1710–1801) is well known as one of the greatest of the eighteenth century physicians. At the time of Johnson's illness he was practising at Cecil Street, Strand, though later he went to live in what had been Nell Gwynne's house in Pall Mall. Johnson spoke of Heberden as 'the *ultimus Romanorum*; the last of our learned physicians', though in another mood he also referred to him as the '*timidorum timidissimus*'. Heberden's private case-books, now within the Library of the Royal College of Physicians, unfortunately contain no certain note as to the problem of his distinguished patient.

It is true that Dr. Squibb, writing in 1849, believed he discovered a mention of Johnson's case in Heberden's *Index Historiae Morborum*. Although this record has been accepted at face value by Chaplin I am by no means convinced. The date is wrong and the information meagre, and I can but regretfully conclude that Heberden made no specific mention of this important case.

Heberden was one of London's most fashionable practitioners, as is shown by the jingle popular at the end of the eighteenth century:

You should send, if aught should ail ye
For Willis, Heberden, or Baillie.
All exceeding skilful men
Baillie, Willis, Heberden;
Uncertain which most sure to kill is
Baillie, Heberden, or Willis,

body
my, he would
I might ^{try} the in-
the

and ^{confident}
~~considered~~ that per-

Wine has ^{been} celebrated

Speech
I stopped my

Plate 2

Enlargements displaying the writer's emendations

- (1) "... however he might afflict my [body] he would spare my understanding. This prayer, that I might [try] the integrity of my faculties. ..."
- (2) "... I wondered at my own apathy and [considered] that perhaps death ..."
- (3) "... Wine has [been] celebrated ..."
- (4) "... Though God stopped my [speech] ..."

Neither Heberden nor Brocklesby would accept fees from Johnson, who was later to bequeath to them and to each of his other doctors copies of his literary works. Dr. Johnson had an exceptionally wide acquaintance among the surgeons, physicians and apothecaries of London, and J. P. Warbasse (1907) was able to enumerate no fewer than fifty-nine medical names among his friends.*

Concerning the medical profession, Dr. Johnson is reputed to have said:

A Physician in a great city seems to be the plaything of fortune; his degree of reputation is, for the most part, casual: they that employ him know not his excellence; they that reject him know not his deficiency.

Neurologists might well ponder, on studying the Johnson case-report, why it was that the aphasia was so mild and so brief. Various possible explanations may be borne in mind. In the first place, the pathological lesion within the brain might have been small in size, and ischaemic rather than thrombotic or haemorrhagic in nature. It might have belonged either to the category of Pierre Marie's lacunar disintegration, or to what Denny-Brown chooses to call a 'haemo-dynamic crisis'. But besides this rather obvious suggestion, it is tempting to invoke a more endogenous factor, and to argue that the very magnitude of Johnson's literary capacity might have exercised a beneficial influence in the process of restoration of linguistic function. Johnson was not only a master of language, but he was a polyglot, and a man of prodigious verbal memory, who could read and assimilate a printed text with astonishing speed. True, his style was ponderous, pompous, mannered and clumsy. As Hazlitt complained:

. . . There is no discrimination, no selection, no variety in it. He uses none but 'tall, opaque words', taken from the 'first row of the rubric': words with the greatest number of syllables, or Latin phrases with merely English terminations.

His letters were quite different, being elegant and attractive. But his linguistic talents were undoubtedly shown best of all in his conversation, where his phraseology and his wit were dazzling, and of a kind which has rarely been equalled.

This personal background goes a long way to explain the nature of Johnson's dysgraphia and to indicate why the literary level continued to be so high. We recall his note to Mr. Davies written on the second day of his illness:

. . . if you come you will be admitted: for I know not whom I can see that will bring more amusement on his tongue, or more kindness in his heart.

lines which anyone would take pride in composing, and few aphasiacs could emulate. We can also refer to the phrase in letter 9:

. . . cool reciprocations of esteem are the great comforts of life, hyperbolic praise only corrupts the tongue of the one, and the ear of the other. . . .

* In 1782, the year prior to Johnson's stroke, there were 149 Physicians in London, 274 Surgeons and 351 Apothecaries. The population of London was at that time 650,845. In other words one person in every 840 had some form of medical qualification.

Dr. Samuel Johnson's Aphasia

Johnson's role as a lexicographer no doubt accounts for the vocabulary of his texts, which was so unusually rich for one afflicted with an aphasia. Some of the words which appear in the letters written during his illness are arresting, unexpected and yet wholly appropriate ('exigencies', 'integrity', 'discreet', 'endearment', 'unalienable', 'salve', 'querulous', 'dereliction'). These are words which one does not expect to find in the text of the average aphasiac, but Johnson was of course not an average man, but one who was very much *hors de série*. One or two of the terms which appear in the Johnson letters strike the modern reader as so unusual as to raise the question whether they were not indeed metonymous paragraphic substitutions. For example, one can pick out the words 'disinterested' as applied to the doctors (letter 4); 'solicitude' for the safety of every faculty (letter 4), 'obsolete' in the sense of 'rejected' (letter 7). Some light can be thrown upon this point by reference to Johnson's own dictionary where his personal views as to the meanings, definitions and synonyms for these unusual words can be found, and where they are seen to be not quite exact. Some fragments of his writings are frankly paraphasic errors as can be determined from a study of the original texts. Even as late as 4 August a letter to William Bowles (873.2 Chapman collection) contains a word which Chapman deciphered as 'poriting', which might be a neologism, if it is not a simple misreading of 'posting'.

Johnson's aphasic disability is also betrayed here and there in his letters by the phenomenon of 'contamination', whereby a word evoked in one context shortly afterwards crops up in another. This phenomenon is rare, however, and indeed one can but remain astonished at the amazing vocabulary which Johnson continued to utilize. If we adopt a statistical analysis of his phraseology and estimate the type-token ratio of his letters, we find no striking difference in those which were written before and those which were written after his stroke. This point is illustrated in the following table:

LETTER NO.	DATE	TOTAL NO. OF WORDS 'TOKENS'	NO. OF DIFF. WORDS 'TYPES'	TYPE-TOKEN RATIO (T.T.R.)
373	20.1.75	169	90	0.53
844	4.6.83	123	80	0.65
845	5.6.83	266	170	0.64
846	13.6.83	298	185	0.62
STROKE 16/17.6.83				
847	17.6.83	69	49	0.71
848	17.6.83	253	137	0.54
849	18.6.83	117	82	0.70
850	19.6.83	887	352	0.39
851	20.6.83	255	175	0.68
852	20.6.83	80	56	0.70
853	21.6.83	232	159	0.68
854	23.6.83	232	141	0.60

Another statistical study of Johnson's writings is possible, before and after his stroke, namely a differential punctuation count. Chapman has said that

ordinarily Johnson was rather erratic in his use of punctuation marks. It is probably true to say that he used them freely, and for him the semi-colon was a particularly favoured technique of writing. The following table illustrates a comparison between a random sample taken from his letters before 16 June and a punctuation count taken from the seven consecutive letters written after he had become aphasic:

SYMBOL	BEFORE		AFTER (Chapman enumeration)							
	ACTUAL	%	847	848	849	850	851	852	853	%
Comma (,)	72	55	8	12	10	85	18	13	15	59
Full stop (.)	43	33	3	13	6	40	13	4	13	34
Semi-colon (;)	12	9	1		4	3				3
Colon (:)	3	2		1	1	1	1	3	1	3
Dash (-)										
Question mark (?)						1				
Exclamation mark (!)										
Total:		130	12	26	21	130	32	20	29	

The difference, which is not great, shows itself particularly in Johnson's diminished employment of the semi-colon.

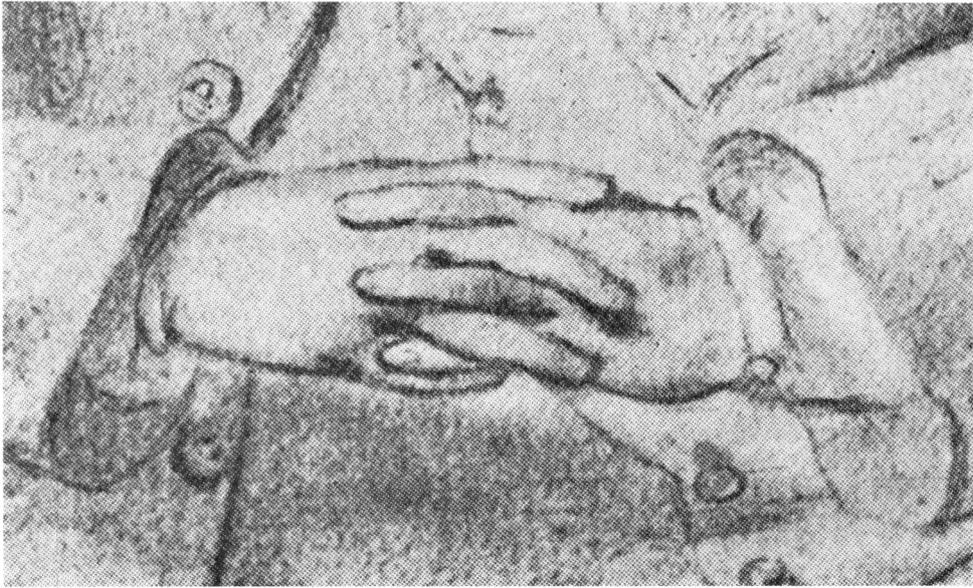
Yet another possible explanation of the transient and mild characters of Dr. Johnson's aphasia comes up for discussion. We have to consider the possibility that Dr. Johnson might have been left-handed and that no frank unilateral cerebral dominance existed. We believe that in left-handers, cerebral lesions—whether of the left or of the right hemispheres—are apt to be followed by speech-impairment of a benign type. From a study of Johnson's upbringing it is not possible to state with confidence whether he was right-handed or left-handed. We know from Johnson's own diary that an 'issue' was cut in his left arm which was deliberately kept open and was not allowed to heal until he six years of age. The purpose of this surgical intervention is not known. Probably it was a device practised to cure his defective eyesight. Whether it was of special importance that this seton—as it probably was—should have been inserted into the left arm and not the right, is conjectural. The commonsense view is that the seton was deliberately inserted into the subordinate limb, leaving the master hand free and unimpeded. It is indubitable that the doctor habitually wrote with his right hand, but this must not be taken as an argument for right manual preference. A scrutiny of contemporary portraits shows that Johnson automatically held a book in his right hand, and also a stick. There is but one picture which would appear to argue in favour of a left-sided preference. In the well-known illustration of Johnson entertaining the two pretty Methodists, a teacup lies on the table to the left-hand side. As this picture was executed many years after Johnson's death, it has no value in this present argument.

The problem of Johnson's handedness would appear, however, to be partly solved in the portrait painted by James Roberts, actually the last of the Johnson depictions. Here we see the doctor with his hands clasped before him in a natural posture of repose. It is clearly visible that the little finger of the right



From a painting by James Roberts, by kind permission of F. A. Hyett, Esq.
SAMUEL JOHNSON, LL.D.

Plate 3
Last portait of Dr. Johnson (by James Roberts)



12

(Asthma)

Wednesday December 15th 1784 — Opened the Body of Dr Samuel Johnson for Mr Quikshank in the presence of Dr. Heberden Brookes Butler, Mr C. & Mr White — He died on the Monday evening preceding. About a week before his death Mr C. by Desire of his Physicians scarified his Legs & Peritum. to let out the water which was collected in the cellular membrane of those parts — Dr Johnson being very impatient to have the water entirely gone, the morning of the day on which he died repeated the operation himself, & cutting very deep lost about ten ounces of blood he used a lancet for this purpose he was in too weak a state to survive such an apparently trifling operation. For several years past he had been troubled with Asthma

Plate 4

(a) Enlargement of the hands in James Roberts' portrait, showing Dr. Johnson clasping them in a characteristic right-handed fashion.

(b) Part of the Ms account by James Wilson of Dr. Johnson's autopsy. (From the Library of the Royal College of Physicians of London.)

Dr. Samuel Johnson's Aphasia

hand lies lowermost, an attitude which argues forcefully in favour of a right-handedness. However, this piece of evidence must not be over-stressed, for the hand-clasp test, taken alone, is unfortunately not an absolute index of manual preference.

Aside from the purely linguistic considerations of Johnson's aphasia, it is appropriate to consider briefly the changes in affect and personality which may have shown themselves after the stroke had occurred. A reactive depression supervening upon a preliminary period of apathy was the not unnatural change in disposition. Dr. Johnson had a particular reason for taking on an attitude of pessimism. All his life he had been of a melancholic temperament, coupled with severe obsessional and hypochondriacal preoccupations. Fears of insanity had consistently haunted him since his boyhood. Not long before his stroke his lodger, the apothecary Levitt, had suddenly died after lapsing into a final state of speechlessness. Still more disturbing was the terminal illness of his great friend Dr. Lawrence, one time President of the Royal College of Physicians. As the result of an apoplexy Lawrence sustained a right hemiplegia and a severe aphasia, and Johnson was in close touch with his friend up to the time of his death ten days before he himself was stricken with a cerebral vascular accident. Indeed, in a letter to Dr. Lawrence's daughter, Johnson had written:

. . . if we could have again but his mind, and his tongue in his mind, and his right hand, we should not much lament the rest. (Chapman 802)

This particular letter was despatched ten months before Dr. Lawrence's death, that is to say, ten months before Johnson sustained his own aphasia.

His depression lifted, however. On 1 July, Fanny Burney noted in her diary that she had called on Dr. Johnson and had found him very gay and very good-humoured. On 19 April 1784 she reported that he was amazingly recovered, perfectly good-humoured and comfortable, and smilingly alive to idle chat.

The muddled state of medical ideas on aphasia which existed up till the end of the eighteenth century, needs to be recalled. It is illustrated by the treatment to which Johnson submitted, whereby blisters were applied to his head, face and pharynx in an effort to stimulate his faculty of speech. At that time, no clear distinction was ever made between mental illness producing impaired speech through delirium or confusion; hysterical affections of speech ranging from dysphonia to mutism; the various clinical types of dysarthria or faulty articulation; and aphasia proper, that is to say, a loss of the faculty of *language*. Only too often an inability to talk was attributed to a paralysis of the tongue, and desperate efforts were often made to rouse that member into activity. Only rather gradually and tardily did there grow up a conception of an incomplete disorder of language, revealing itself in a faulty performance in speaking and also in writing.

As a matter of fact, Heberden happened to be well ahead of his contemporaries in his views upon this matter. Thus we read in his *Commentaries on the History and Cure of Diseases*—a work which appeared posthumously in 1802:

When a person has been struck on the left side, and has at the same time lost his voice, there is no certainty of his being able to signify his feelings, or his wants, by writing. They . . . have sometimes been able to do it, though in a confused manner; and the same person on different days would either write intelligibly or make an illegible scrawl.

This shrewd observation was in advance of current notions of the consequence of an apoplexy. A little later we also find him writing:

The inability to speak is owing sometimes not to the paralytic state of the organs of speech only, but to the utter loss of the knowledge of language and letters; which some have quickly regained, and others have recovered by slow degrees, getting the use of the smaller words first, and being frequently unable to find the word they want, and using another for it of a quite different meaning, as if it were a language which they had once known, but by long disuse had almost forgotten. . . . One person was forced to take some pains in order to learn again to write, having lost the ideas of all the letters except the initials of his two names.

It is uncertain when exactly Heberden wrote the above. He died in 1801 at the age of ninety-one, and his writings were not published until a year after his death. Johnson's apoplexy may well have inspired these particular paragraphs.

Sir Richard Blackmore in 1725 had indeed already observed the phenomenon of paraphasia or the erroneous substitution of one word for another, but like his contemporaries he attributed this to a defective motility of the tongue. Other eighteenth-century writers who touched upon the subject of centrally determined affections of speech, without realizing their true nature or significance, were R. James 1743, Linnaeus 1745, Delius 1757, Morgagni 1769, Spalding 1772, Gesner 1772, Falconer 1787, Alexander Crichton 1793 and Goethe 1796. A knowledge of aphasia did not really materialize until the work of Pinel, Gall, Spurzheim, Bouillaud, Auburtin, Broca, Trousseau, Dax, and most important of all, Hughlings Jackson, all of whom were nineteenth century figures.

Johnson's autopathographic account therefore constitutes an important item in the early literature of aphasia, and it should be set alongside the better known personal descriptions made by Professor Lordat and by Professor Forel.

It is rare for a creative writer to continue to work after an aphasia even when speech-functions have apparently been restored. Johnson lived eighteen months after his stroke, but while he regained his faculty of self-expression he continued a very sick man. During the remainder of his life his literary output did not cease altogether. As he informed Mrs. Thrale on 19 April 1784 (Chapman 954) his nights were sleepless and he would while the time away by turning Greek epigrams into Latin. Ninety-eight of these were published by Bennet Langton in Vol. XI of *Works*, 1787. During this period Johnson also wrote a dedication to Charles Burney's *Commemoration of Handel*, which appeared in 1785. He intended to furnish a preface to the posthumous collection of the works of John Scott, but this was never completed.

In November 1784 he translated into English verse Horace's ode 'Diffugere nives, redeunt, jam gramina campis'. He had also hoped to have written an epitaph in Latin verse to David Garrick but he found himself unequal to the task.

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Johnson died on 13 December 1784 from cardio-renal failure. As is well known, James Wilson performed the necropsy on 15 December 1784, whose manuscript record of the event is contained within the library of the Royal College of Physicians. An illustration of Johnson's emphysematous lung appeared in Matthew Baillie's *Morbid Anatomy* (1793–9). Dr. Johnson's right kidney was removed and preserved by the post-mortem attendant, Mr. White (subsequently Dr. White). While stitching up the body, Mr. White pricked his finger with the needle and developed later a septic infection therefrom.

So perished the gigantic but long-ailing Johnson. Let us in conclusion turn from further examination of his darker days, and carry away a recollection of what he said in a gayer heyday mood:

... If I had no duties, and no reference to futurity, I would spend my life in driving briskly in a post-chaise with a pretty woman; but she should be one who could understand me, and would add something to the conversation.

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