

# Goldsmith and the *Busy Body*

Peter Dixon

Formerly of Queen Mary, University of London, UK

David Mannion

Formerly of Royal Holloway, University of London, UK

## Abstract

Assessments of Goldsmith's contribution to the *Busy Body* have fluctuated widely. We examine the ten possible attributions, gathering evidence from verbal parallels, selected linguistic features, and measures of sentence-length, together with idiosyncrasies of vocabulary and syntax in the 'doubtful' essays themselves. We conclude that apart from the essay on London clubs, which he later acknowledged, only one piece can be attributed to Goldsmith with any confidence.

### Correspondence:

Dr David Mannion,  
30 St Margaret's Road,  
Oxford, OX2 6RX, UK.

### E-mail:

david.mannion@  
btinternet.com

## 1 Introduction

The *Busy Body*, a thrice-weekly essay-journal, ran from 9 October to 3 November 1759, a total of twelve numbers. It has the mild distinction of hosting the first of Goldsmith's occasional essays, a satirical description of London clubs which reappeared, much enlarged, in *Essays by Mr. Goldsmith* (1765). While a single authenticated contribution does not in itself imply further contributions, it does legitimately prompt further investigations. In 1837 Sir James Prior proposed Goldsmith as the author of the sixth number, an essay both humorous and serious to which Prior gave the title 'On Public Rejoicings for Victory'. He found no evidence of Goldsmith's hand in the rest of the journal (Prior, 1837, i, pp. 335–6). In his edition of Goldsmith's *Collected Works*, Arthur Friedman supported Prior's attribution; he too saw no reason to admit any of the remaining ten numbers to the canon.<sup>1</sup>

Meanwhile R.S. Crane had tentatively suggested that Goldsmith might also have been responsible for nos. IV and VIII (Crane, 1927, pp. 125–7), and more recently John Ginger has credited Goldsmith with no fewer than 'ten pieces' (Ginger, 1977, p. 130). Since Ginger does not

identify the pieces, his total may include the two poems—'The Logicians Refuted' (in no. V) and 'On the taking of Quebec' (in no. II)—which are doubtfully attributed to Goldsmith. Even so he is giving Goldsmith the lion's share of the contents. As does Mary Anne Schofield: Goldsmith is the 'chief contributor' to the *Busy Body*, with four essays which are 'definitely' his and five others 'which share the same tone, moral philosophy, and ideology' (Schofield, 1983, p. 30<sup>2</sup>). In his comprehensive account of Goldsmith's journalism Richard C. Taylor likewise comments that 'the tone, narrative stance, and themes' of the *Busy Body* 'are strikingly similar to those of the *Bee*', Goldsmith's own weekly miscellany, launched just three days earlier (Taylor, 1993, p. 118). Taylor accepts 'Public Rejoicings' as Goldsmith's, but wrongly states that it was reprinted in *Essays* (1765). He also believes that Goldsmith was contributing to the *Busy Body* in November 1759, which would make him responsible for the two final numbers (they are evidently by the same hand), and though Taylor describes no. IV as 'unattributed', he appears to suggest that Goldsmith could well be its author (Taylor, 1993, pp. 84, 118). Perhaps Prior and Friedman were over-cautious.

## 2 The Case for Goldsmith

Leaving aside no. III (the essay on clubs, certainly by Goldsmith) and no. V, which consists of 'The Logicians Refuted' and a set of prose parodies which are not susceptible to the tests we propose to apply, we have ten possible candidates for the canon. In the complete absence of external evidence we can support the candidature of these 'doubtful' essays from internal evidence only. We look, therefore, for clues in each of these 'doubtful' essays, especially clues in the form of parallels of expression and idea. But two general points may first be made:

- (1) Goldsmith is a notorious self-plagiarist. Echoes from one work to another are frequent and frequently of great help to the attributionist. Arthur Friedman used them to good effect. Yet, as he acknowledged, 'certain reviews known to be [Goldsmith's] afford no conspicuous parallels with his other works' (Friedman, 1946, p. 24). The same is true of the flippant essay on Theophilus Cibber (*Works*, iii, pp. 46–8). To say, then, that a piece of which Goldsmith is the putative author has no parallels with his other writings, is to make a purely neutral statement. It does not (or should not) imply that he may not have written it.
- (2) The *Busy Body* and Goldsmith's early writings share a number of topical allusions. We discount them as evidence because without exception they are, in the words of the *Busy Body* itself, part of 'the general converse of coffee-houses . . . and the chat of the tea-table' (no. II, p. 7). They include the Elizabeth Canning affair of 1753–54, the court-martial and execution of Admiral Byng, the threat of French soldiers invading England in flat-bottomed landing-craft, and a couple of well-known comic butts—Doctor Rock, the self-promoting quack, and Jacob Henriques, the self-styled patriot.

We turn now to the individual essays:

I. Mr Busybody's boyhood; amusing consequences of his meddlesome nature.

We can detect no evidence of Goldsmith's authorship; there are no parallels with his authentic work in either thought or word.

II. Busybody's early career among his London neighbours and fellow-tradesmen.

Here, too, there is no positive evidence. The phrase 'a citizen of the world' (p. 9) was well-established before Goldsmith first used it in *Polite Learning* (*Works* i, p. 291, and see ii, 16–17, nn.1 and 4).

IV. Busybody goes to France (where the natives are as 'restless and active' as he), and twice lands himself in prison, the victim of 'despotick power'.

After quoting the account of Busybody's second arrest, and the description of his fellow-prisoners in the Bastille, R.S.Crane comments: 'The manner of this is clearly not unlike Goldsmith's. I should not press the point, however, were it not that the three French writers alluded to [Voltaire, Fréron, the Chevalier d'Arcq] . . . had all been mentioned a few months earlier in his *Enquiry into the Present State of Polite Learning* and that Voltaire's residence in the Bastille [sic] had been described about the same time in his "Memoirs of M. de Voltaire"' (Crane, 1927, pp. 126–7). Voltaire's imprisonment falls into the category of common knowledge. Moreover, the *Busy Body* is correct in ascribing the *Journal étranger* to Fréron (p. 23), whereas Goldsmith had wrongly given it to d'Arcq (*Works*, i, p. 289 and n. 3). It is possible that Goldsmith checked his sources in the intervening six months. It is perhaps more likely that the information has a common source, which Goldsmith read rather too hastily. We must respect Crane's feeling that in its 'manner' the piece resembles Goldsmith, but we note that he did not press the point so far as to reprint it as one of the *New Essays by Oliver Goldsmith*.

VI. ['Public Rejoicings for Victory.']. Participating in the celebrations for the taking of Quebec, Mr Busybody suffers damage to his wig, observes joy in the coffee-houses, and advocates moderate terms of peace.

Prior's familiarity with Goldsmith's works led him to assert that this essay is 'beyond doubt by Goldsmith; it contains not only his sentiments . . . but his manner, his humour, and even his unusual

phrases' (Prior, 1837, i, p. 335). Judgements based on sentiments and humour are not always reliable, but 'unusual phrases' provide firmer evidence. Prior pointed out that the phrase 'may this be my poison', used here by the waiter at Ashley's Punch-house, occurs in 'The Adventures of a Strolling Player', 'The Haunch of Venison', and Letter 4 of *The Citizen of the World*.<sup>3</sup> That same letter also has an episode comparable to the scene of the quarrelling shoemaker and his wife; the phrasing is particularly close in the original version of the 'Chinese Letters' in the *Public Ledger*. Friedman adds a further parallel with *The Citizen of the World* (Letter 17: the business of a victorious army is to offer peace), and points to the reappearance in *The Traveller* (at line 400) of the image of 'a flambeaux, the brighter it burns, the sooner it is often wasted.' He concludes, like Prior, that these parallels put Goldsmith's authorship 'beyond reasonable doubt' (*Works*, iii, p. 4).

VII. A letter from 'Thomas Ubiquist', a member of the Busybody clan, describing his and his parents' extremely active lives.

We can find no evidence for Goldsmith.

VIII. 'The flat-bottomed Boats. A Vision.' The narrator's dream of an enemy invasion is the occasion for sharp satire of the French—their religious superstition, foolish boasts, and poor diet (the standard jokes about frogs and soup maigre)—and warm praise of Britain ('this land of liberty') and William Pitt.

The essay begins: 'After the little excursion mentioned in my last Paper, I returned home full of those patriot thoughts with which I concluded that Essay.' A reference to the narrator's damaged peruke identifies 'my last Paper' as no. VI, 'Public Rejoicings'. Crane suggests that this 'may perhaps be interpreted as an indication of common authorship' (Crane, 1927, p. 127). We may prefer to interpret it as a narrative device, signalling that 'Mr Busybody' has resumed the pen after the intervening contribution from 'Mr Ubiquist'. In any case, the writer's recollection is faulty: 'Public Rejoicings' begins with 'patriot thoughts' but quickly and humorously undercuts the prevailing triumphalism, and ends with sober exhortation: 'Let victory be attended by peace, for peace is the only triumph of

victory.' There is nothing of any substance in no. VIII to support an attribution to Goldsmith.

IX. Busybody's unsuccessful attempts to make a fortune, with incidental satire on the usual targets: brokers, lawyers, and quacks.

No evidence for Goldsmith.

X. Busybody 'pop[s] into a coffee-house' and reports the speeches of a group of 'exotic figures' who are in turn ridiculed by a group of 'youngsters'. Thus refreshed he visits a tavern with Thomas Ubiquist, and meets a world-weary man whose melancholy is dispelled by a good dinner.

There is nothing here to suggest the hand of Goldsmith.

XI and XII. Two letters to the journal, signed by one 'T.O.', who claims to be yet another kinsman. Of the great variety of English character-types he offers to describe three: 'The odd Man. The singular Man. The hippish Man', but manages only the first two. The odd man is represented by 'Oakley Coothless'; Swift provides an example of singularity.

These two pieces are in the Character tradition, and employ (the first more than the second) the terse sentences of such English character-writers as Overbury, Webster, and Butler. Although this minor genre is not represented in Goldsmith's authentic works, it is discussed in a review of Butler's prose writings which appeared two months earlier in the *Critical Review*, and which Friedman convincingly attributes to Goldsmith (*Works*, i, pp. 206–12; Friedman, 1946, pp. 31–2). The reviewer nominates Theophrastus as Butler's model, quotes approvingly from the character of 'A Small Poet', and gives that of 'A Libeller' almost in its entirety. The recent publication of Butler's works (perhaps also the favourable review) may have stimulated 'T.O.' to follow in his footsteps; there is nothing more substantial to connect the two letters to Goldsmith.

With the notable exception, then, of 'Public Rejoicings', the evidence for Goldsmith's authorship of these essays is tenuous or non-existent. Nevertheless, we shall be obliged to entertain at least the possibility of his involvement if the manner of writing, in any of the essays, can be shown to be consonant with that displayed in his

early journalism. We need, therefore, to establish a profile of Goldsmith's style, from a study of aspects of his vocabulary and of his grammatical and syntactical practice, together with his preferences in the matter of sentence-length.

### 3 Linguistic Features

We use the same forty samples, each of 750 words, drawn from 'genuine' Goldsmith essays, which formed the basis of our study of the *Weekly Magazine* (Dixon and Mannion, 2007). In that study, we set out the rules we adopted with regard to repunctuating and modernizing the texts. We chose 35 linguistic features (listed in Appendix A, subsequently) and assembled the frequencies of occurrence of these in each sample—the forty Goldsmith samples, fifty-three control group samples from essays by eleven contemporary essayists, and thirty-four *Weekly Magazine* doubtful samples. The frequency scores for the Goldsmith samples are displayed in Table B1, Appendix B. In the present investigation the ten doubtful *Busy Body* essays, some of which are over 2000 words long, yield twenty-six samples, each of approximately 750 words:

$s_1, s_2, s_3$  (No. I),  $s_4, s_5, s_6$  (II),  $s_7, s_8, s_9$  (IV),  $s_{10}, s_{11}$  (VI),  $s_{12}, s_{13}$  (VII),  $s_{14}, s_{15}, s_{16}$  (VIII),  $s_{17}, s_{18}$  (IX),  $s_{19}, s_{20}, s_{21}$  (X),  $s_{22}, s_{23}$  (XI),  $s_{24}, s_{25}, s_{26}$  (XII).

The frequency scores for these samples are displayed in Table B2, Appendix B; scores which are not expressed as percentages have been scaled in order to equalize the word-lengths of all the samples.

Our analysis of the samples comes in two parts. First we compare Goldsmith with the control authors to evaluate the effectiveness of the features in distinguishing between Goldsmith and the controls, the basis of comparison being as described in Dixon and Mannion, 2007. Table 4 of that article (reproduced below as Table 1) shows the optimal sets,  $B_q$ ; the best  $q$  features to use in distinguishing between Goldsmith and the controls, for each value of  $q$ ,  $q = 1, \dots, 35$ .

In the second part of the analysis, using only those features which pass the test for effectiveness, we calculate the distances of the doubtful

samples from the cluster of Goldsmith samples. Those doubtfuls which are at a greater distance from this cluster than we would expect for a typical Goldsmith sample will be considered non-Goldsmithian (i.e. significantly different from Goldsmith).

For the sake of clarity and definiteness, it is helpful to decide on the number of features to include, using the following rule of thumb. Let  $t_{qj} = 1$  if feature  $f_j \in B_q$ ;  $t_{qj} = 0$ , otherwise, and let  $t_j = \sum_{q=1}^p t_{qj}$ . The value of  $t_j$  indicates the effectiveness of  $f_j$ —the larger the value, the more effective the feature. Our rule is to include  $f_j$  if  $t_j \geq \bar{t}$ , where  $\bar{t} = 1/35 \sum_{j=1}^{35} t_j$  (the average of the  $t_j$ ). But  $\bar{t} = 18$ , and we see from Table 1 that just eighteen features have  $t_j \geq 18$ . These are:

$$\underline{B} = \{f_1, f_2, f_4, f_5, f_6, f_9, f_{11}, f_{13}, f_{15}, f_{18}, f_{20}, f_{21}, f_{23}, f_{25}, f_{26}, f_{28}, f_{30}, f_{31}\}.$$

We are reassured in our support of  $\underline{B}$  in that it agrees well with the optimal sets  $B_{17} B_{18} B_{19}$ .

Using only the score from  $\underline{B}$ , let  $X = [x_{ij}]$  be the  $n \times p$  matrix of the Goldsmith data, where  $n = 40$  and  $p = 18$ . Let  $\bar{x} = (\bar{x}_1, \dots, \bar{x}_p)'$ , where  $\bar{x}_k = 1/n \sum_{i=1}^n x_{ik}$ . Let  $x$  be the  $18 \times 1$  column vector of the scores of a doubtful sample. Then  $D^2$ , the Mahalanobis distance of  $x$  from  $\bar{x}$ , the centre of the cluster of the forty Goldsmith samples, is defined as follows. Let  $W = [w_{kl}]$  be the  $p \times p$  matrix given by

$$w_{kl} = \frac{1}{n-1} \sum_{i=1}^n (x_{ik} - \bar{x}_k)(x_{il} - \bar{x}_l).$$

Then,

$$D^2 = (x - \bar{x})' W^{-1} (x - \bar{x}).$$

If we make the usual normal and independence assumptions,

$$F = \frac{n(n-p)}{(n^2-1)p} D^2$$

is distributed as Fisher's  $F$ -distribution on,  $(p, n-p)$  degrees of freedom (Krzanowski and Marriott, 1995). With  $n = 40$  and  $p = 18$ , a value of  $F > 2.09799 \dots$  will be significant—indicating that the sample is non-Goldsmithian—at the 5% level of significance. The values of  $F$  for the

**Table 1** Inclusion of a feature in  $B_q$  (the optimal set of features for a given value of  $q$ ) is indicated by \*

	Feature	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
$q$																																					
35		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
34		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
33		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
32		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
31		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
28		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
26		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
9		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
8		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
3		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
1		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		

twenty-six samples are  $F_m$ ,  $m = 1, \dots, 26$ , where:

$$\begin{aligned}
 F_1 &= 3.14, F_2 = 2.19, F_3 = 4.83, F_4 = 2.62, \\
 F_5 &= 0.90, F_6 = 1.47, F_7 = 1.21, F_8 = 1.90, \\
 F_9 &= 1.09, F_{10} = 1.70, F_{11} = 1.29, F_{12} = 1.48, \\
 F_{13} &= 2.70, F_{14} = 4.18, F_{15} = 3.27, F_{16} = 2.58, \\
 F_{17} &= 3.58, F_{18} = 2.08, F_{19} = 2.60, F_{20} = 2.64, \\
 F_{21} &= 2.22, F_{22} = 1.77, F_{23} = 1.49, F_{24} = 1.43, \\
 F_{25} &= 1.47, F_{26} = 2.17.
 \end{aligned}$$

So samples  $s_1, s_2, s_3, s_4, s_{13}, s_{14}, s_{15}, s_{16}, s_{17}, s_{19}, s_{20}, s_{21}, s_{26}$  (and possibly  $s_{18}$ ) are outliers to the

Goldsmith sample cluster, and relative to our set of linguistic features should be considered as having a non-Goldsmithian character.

For the present investigation we selected the eighteen 'best' discriminatory features,  $\underline{B}$ , from the original thirty-five. However, on inspecting the scores among the remaining seventeen, we noted that  $f_{12}, f_{22}, f_{27}, f_{29}$  produced scores for some of the doubtful samples that were outside the range for Goldsmith.

An argument which suggests that these features should be added to the collection of 'good' features

goes as follows. Suppose that a feature measures ‘colour of eye’ and that Goldsmith and each of the control authors have eyes of a similar shade of blue, then ‘colour of eye’ would be unlikely to be included among the best set of features chosen to discriminate between Goldsmith and the controls. A doubtful author with eyes a very different shade of blue from Goldsmith or the controls, or with brown or green eyes, might then be mistaken for Goldsmith if the eye colour test has been excluded. Accordingly, we add these four features to the previous eighteen tests and recalculate the  $F$ -values (now with  $p=22$ ). A value of  $F > 2.16847 \dots$  will be significant at the 5% level of significance. The values of  $F$  for the twenty-six samples are  $F_m$ ,  $m = 1, \dots, 26$ , where:

$$\begin{aligned} F_1 &= 2.60, F_2 = 2.24, F_3 = 4.23, F_4 = 2.65, \\ F_5 &= 1.08, F_6 = 1.54, F_7 = 2.22, F_8 = 2.91, \\ F_9 &= 2.41, F_{10} = 1.77, F_{11} = 1.69, F_{12} = 1.60, \\ F_{13} &= 2.73, F_{14} = 3.49, F_{15} = 2.49, F_{16} = 3.30, \\ F_{17} &= 3.35, F_{18} = 2.40, F_{19} = 2.33, F_{20} = 3.06, \\ F_{21} &= 2.31, F_{22} = 1.48, F_{23} = 1.51, F_{24} = 1.61, \\ F_{25} &= 1.87, F_{26} = 2.58. \end{aligned}$$

So samples

$s_1, s_2, s_3$  (No. I),  $s_4$  (II),  $s_7, s_8, s_9$  (IV),  $s_{13}$  (VII),  
 $s_{14}, s_{15}, s_{16}$  (VIII),  $s_{17}, s_{18}$  (IX),  $s_{19}, s_{20}, s_{21}$  (X),  
 $s_{26}$  (XII)

are outliers to the Goldsmith sample cluster and should be considered as having a non-Goldsmithian character. These results provide strong evidence against Goldsmith’s authorship of five essays: I, IV, VIII, IX, and X, and cast some doubt on II, VII, and XII.

## 4 Sentence-length

We use the measures of sentence-length established in a previous paper where the measures for Goldsmith were tested against fifty essays by his contemporaries (Mannion and Dixon, 2004). We omit *Busy Body* XI as a special case; the length of its sentences is governed by the Character genre. We include XII, however, since it relaxes the

discipline of that genre, and presents more anecdotal material.

Let  $\mathcal{G}$  be the collection of Goldsmith samples considered as a single essay. Let  $a_0 = 0$ ,  $a_1 = 9$ ,  $a_2 = 13$ ,  $a_3 = 17$ ,  $a_4 = 20$ ,  $a_5 = 24$ ,  $a_6 = 29$ ,  $a_7 = 36$ ,  $a_8 = 200$ , and let  $\mathcal{G}_k$  be the collection of sentences in  $\mathcal{G}$  that have lengths greater than  $a_{k-1}$  and less than or equal to  $a_k$ ,  $k = 1, \dots, 8$ . The proportion of the sentences in group  $\mathcal{G}_k$  is  $p_k$ , where  $p_1 = 0.125$ ,  $p_2 = 0.122$ ,  $p_3 = 0.135$ ,  $p_4 = 0.118$ ,  $p_5 = 0.118$ ,  $p_6 = 0.137$ ,  $p_7 = 0.118$ ,  $p_8 = 0.127$ . For an essay  $\mathcal{S}$ , which we wish to compare with  $\mathcal{G}$ , let  $Z_k$  be the number of sentences in  $\mathcal{S}_k$ ,  $k = 1, \dots, 8$ , where  $\mathcal{S}_k$  is the collection of sentences in  $\mathcal{S}$  that have lengths greater than  $a_{k-1}$  and less than or equal to  $a_k$ ,  $k = 1, \dots, 8$ . Let  $N = \sum_{k=1}^8 Z_k$  be the number of sentences in  $\mathcal{S}$ . The statistic

$$X^2 = \sum_{k=1}^8 \frac{(Z_k - Np_k)^2}{Np_k}$$

is a measure of similarity between  $\mathcal{S}$  and  $\mathcal{G}$ . Suppose that  $Y$  is a random variable distributed as a  $X^2$  random variable on 7 degrees of freedom, then the probability that  $Y$  is  $>14.07$  is 0.05. Thus, a value of  $X^2 > 14.07$  is evidence—at the 5% level of significance—against  $\mathcal{S}$  being from the hand of Goldsmith. The values of  $Z_k$  and  $X^2$  for the nine essays (essay XI has been excluded) are displayed in Table 2.

So, in terms of sentence length, all but VI, X, and XII appear non-Goldsmithian. IV, with more longer sentences than one might expect of Goldsmith, is a borderline case—14.61 being only slightly more than the critical value of 14.07.

With so much unfavourable evidence for the majority of the essays, the possibility of Goldsmith’s being the ‘chief contributor’ to the *Busy Body* begins to look dubious. Consideration of another type of evidence may strengthen our suspicions.

## 5 Visible Markers

A doubtful text may express opinions and attitudes which are at odds with those of its suggested author. And it may contain idiosyncrasies of vocabulary and syntax, observable even at a first reading, which in



**Table 2** Frequency counts of sentence lengths (\* indicates 'unlikely to be by Goldsmith')

Essay	I	II	IV	VI	VII	VIII	IX	X	XII
Z <sub>1</sub>	1	4	7	8	0	1	2	10	17
Z <sub>2</sub>	0	3	8	9	3	2	3	9	11
Z <sub>3</sub>	1	9	9	12	6	2	2	11	20
Z <sub>4</sub>	6	8	7	7	5	4	0	5	10
Z <sub>5</sub>	1	10	6	9	6	6	5	6	9
Z <sub>6</sub>	3	12	8	9	6	5	6	12	9
Z <sub>7</sub>	7	14	8	3	7	10	7	11	6
Z <sub>8</sub>	29	21	20	14	14	30	17	15	14
X <sup>2</sup>	106.83	22.41	14.61	7.24	18.51	83.79	36.59	6.13	10.67
	*	*	*		*	*	*		

our case would distinguish it from the work of Goldsmith, always provided that any such idiosyncrasy is not influenced by content. The first two numbers of the *Busy Body*, recounting the early achievements of the meddling narrator, unsurprisingly make much use of the words *officious* and *officiousness*, with four occurrences in I, and three in II. The fact that these content-dependent words are absent from the Goldsmith samples is of no consequence.<sup>4</sup>

- (1) But the case is otherwise with *considerable* and *inconsiderable*. These words occur four times in *Busy Body* II, six times in IV, and three times in IX, with one appearance in each of I and X. In the forty Goldsmith samples we have just two *considerables*, while a trawl through the roughly 266,000 words which Goldsmith produced between April 1757 and November 1762 yields only eleven occurrences of the two words. The frequency rates in *Busy Body* II, IV, and IX are, respectively, 1 in 594 words, 1 in 336, and 1 in 488. For Goldsmith's early writings the ratio is 1:24182. In short, three of the *Busy Body* papers display a propensity for these words which Goldsmith does not share.
- (2) Equally striking is a fondness for the locution 'not only...but likewise'. It is used four times in I, twice in II, and once again in VIII. There is not a single instance in our Goldsmith samples: he follows 'not only' with 'but even', 'but also', or plain 'but'.
- (3) On occasion, the style of the *Busy Body* can only be described as ponderous, an adjective

that can very rarely be applied to Goldsmith. 'My positiveness, in some measure, overcoming my father's incredulity; he was persuaded to receive that conviction of my veracity by his sight...' (I, p. 3); 'An instance or two of [Swift's] singularity may not be foreign to the present dissertation' (XII, p. 69). As an admittedly rough-and-ready way of quantifying this impression we counted the number of words of four or more syllables in each 750-word sample, excluding proper nouns and ignoring inflections. To achieve a comparison on reasonably equal terms we omitted 'The distresses of a common Soldier', where Goldsmith uses a deliberately plain, unsophisticated vocabulary, and the essays on education and pulpit eloquence, which have a serious urgency untypical of almost all the *Busy Body* pieces. We were left with twenty-six Goldsmith samples. The scores for these and the doubtful samples are given in Appendix C. Seven of the *Busy Body* samples have scores outside the Goldsmith range:  $s_2, s_4, s_9, s_{12}, s_{17}, s_{18}, s_{20}$ .

- (4) We may also ask whether the political opinions expressed in the doubtful essays are shared by Goldsmith. In *Busy Body* I, William Pitt, responsible as first minister for the successful conduct of the war with France, is simply 'our great statesman', but in VIII he is praised as 'our state *Argus*', the 'honestest minister' since Elizabethan times, possessing 'a sagacity beyond applause'. The author of XII announces that Pitt has 'debarred

Table 3 Summary of results

Essay	Sample	18 linguistic features		22 linguistic features		Sentence length		Visible Markers			
		P-value		P-value		P-value		(i)	(ii)	(iii)	(iv)
I	1	0.006	*	0.022	*						
	2	0.041	*	0.044	*	0.000	*		*	*	
	3	0.000	*	0.001	*						
II	4	0.017	*	0.020	*					*	
	5	0.585		0.441		0.002	*	*	*		
	6	0.193		0.176							
IV	7	0.330		0.045	*						
	8	0.077		0.013	*	0.041	*	*			
	9	0.421		0.031	*					*	
VI	10	0.118		0.111		0.404					
	11	0.281		0.131							
VII	12	0.191		0.157		0.010	*			*	
	13	0.014	*	0.017	*						
VIII	14	0.001	*	0.005	*		*		*		*
	15	0.005	*	0.027	*	0.000					
	16	0.018	*	0.006	*						
IX	17	0.003	*	0.006	*	0.000		*		*	
	18	0.052		0.032	*					*	
X	19	0.017	*	0.037	*						
	20	0.016	*	0.010	*	0.525				*	
	21	0.038	*	0.038	*						
XI	22	0.102		0.199		Not available					
	23	0.187		0.187							
XII	24	0.212		0.155							*
	25	0.194		0.091		0.154					
	26	0.043	*	0.023	*						

[the singular man] of the very power of finding fault . . . and has forced him to join with the whole nation in one combined chorus of applause'. One ground for immediate doubt is that flattery was anathema to Goldsmith. Another is his disapproval of Pitt's vigorous prosecution of a belligerent policy which served commercial interests. The disapproval is fully and sardonically registered in Letter 17 of *The Citizen of the World* (*Works*, ii, pp. 72–5) just six months after the demise of the *Busy Body*. Three months later the conclusion of Letter 50 gives a veiled but unmistakable warning that 'a minister of merit and popularity'—who else but Pitt?—could become an actual threat to his country, were the king to give up even 'the smallest part of his prerogative to the people' (*Works*, ii, p. 213). In contrast to the adulation of Pitt

and his policies in *Busy Body* VIII and XII, the narrator of 'Public Rejoicings' glories only that 'My king, my country, and I are friends together', and reproves those who, like Pitt, see victory as an excuse to defer peace in the expectation of further conquests. Without naming the first minister (quite possibly a deliberate omission) the author in effect advises a change of policy. 'Public Rejoicings' is in line with Goldsmith's attitude elsewhere; *Busy Body* VIII and XII are not.

6 Conclusion

Table 3 is a summary of our results. Evidence against Goldsmith's authorship is indicated by an asterisk. The *P*-value is the probability of a score greater than the observed score, assuming Goldsmith as the author: the null hypothesis.



A *P*-value less than 0.05 is taken as evidence against Goldsmith.

The weight of evidence against nos. I, II, and VIII is such that we cannot accept Goldsmith as their author. Nos. IX and X have several negative scores which are not offset by any positive evidence: we rate them as very unlikely to be Goldsmith's. The negative scores for nos. IV, VII, and XII are fewer, but again there is nothing to tilt the balance clearly in Goldsmith's favour; our decision is therefore 'unlikely to be his'. No. XI is an awkwardly borderline case; we can adduce neither positive nor negative evidence. The fact that nos. XI and XII constitute a single (though unfinished) essay may tip the balance; they stand or fall together. Since Goldsmith's involvement in no. XII seems unlikely—the idolizing of Pitt tells heavily against it—we are inclined to pass the same verdict on its companion piece. There remains only 'Public Rejoicings': it has no adverse scores, while the strong positive evidence—parallels of phrase, attitude, and comic scene—moves it into the category of 'almost certainly by Goldsmith'.

We regret that our investigation has produced no pleasant surprises. But there is at least a subdued satisfaction in concluding that Prior and Friedman were correct in their assessment of Goldsmith's limited but not insignificant contribution to the *Busy Body*.

## Acknowledgement

We are most grateful to Professor Thomas Keymer for many helpful comments and suggestions.

## References

- Crane, R. S. (ed.) (1927). *New Essays by Oliver Goldsmith. Literary and Linguistic Computing*. Chicago: University of Chicago Press.
- Dixon, P. and Mannion, D. (2007). Goldsmith's contributions to the Weekly Magazine. *Literary and Linguistic Computing*, 10.1093/llc/fqm019. Advanced Access Published on 6 September 2007.
- Ginger, J. (1977). *The Notable Man: the Life and Times of Oliver Goldsmith*. London: Hamish Hamilton.
- Friedman, A. (1946). Goldsmith's contributions to the *Critical Review*. *Modern Philology*, 44: 23–52.
- Krzanowski, W. J. and Marriott, F. H. C. (1995). *Multivariate Analysis Part 2*. London: Arnold.
- Mannion, D. and Dixon, P. (2004). Sentence-length and authorship: the case of Oliver Goldsmith. *Literary and Linguistic Computing*, 19: 497–508.
- Prior, J. (1837). *The Life of Oliver Goldsmith*, 2 Vols., London: John Murray.
- Schofield, M. A. (1983). *The Busy Body*. In Sullivan, A. (ed.), *British Literary Magazines: The Augustan Age and the Age of Johnson, 1698–1788*. Westport, Conn. and London: Greenwood Press, pp. 30–3.
- Taylor, R. C. (1993). *Goldsmith as Journalist*. Cranbury, NJ: Associated University Presses.

## Notes

- 1 Arthur Friedman (ed.) (1996). *Collected Works of Oliver Goldsmith*, 5 vols. Oxford: Clarendon Press, iii, p. 4. Hereafter cited as *Works*.
- 2 Lest others should also be misled: the alleged 1789 reprint listed on p. 33 is a collection of essays by W. C. Oulton.
- 3 The phrase occurs also in *She Stoops to Conquer: Works*, v, pp. 117–18. Goldsmith's fondness for it may be explained by its presence in *The Recruiting Officer*, Act V sc.iii, and his admiration for Farquhar.
- 4 *Officiously*, however, appears in 'Public Rejoicings', applied not (as we might expect) to the narrator but to the mob—a tiny sly witticism?

## Appendix A

### LINGUISTIC FEATURES

The eighteen best discriminatory features are indicated by the symbol †. The four features that produced scores outside the Goldsmith range are indicated by \*.

(fb = followed by)

- 1†. Occurrences of a group of emphatic words: *even, ever, every, much, only, so, such, too, whole* (n. and adj.), *yet*.
- 2†. Total number of verbs, main and auxiliary.
3. Occurrences of present and past participles and gerunds.

- 4<sup>†</sup>. Ratio (as a percentage of all main verbs) of verbs fb a preposition or prepositional adverb.
- 5<sup>†</sup>. Occurrences of expressions of negation (other than verbs), such as *nay*, *no*, *nothing*, including words with negative prefixes and suffixes.
- 6<sup>†</sup>. Ratio of complex sentences to complex + compound + compound–complex sentences.
7. Word-patterns.
8. Occurrences of selected expressions of contrast, difference, and reservation.
- 9<sup>†</sup>. Percentage of sentences beginning with a subordinate clause.
10. Occurrences of *for*.
- 11<sup>†</sup>. Occurrences of tentative expressions, understatements, concessive words and phrases, formulas of politeness and modesty, e.g. *perhaps*, *give me leave*, *for my part*, *possibly*.
- 12<sup>‡</sup>. Occurrences of noun or pronoun fb adverb or adverbial phrase.
- 13<sup>†</sup>. Ratio of main clauses to main + subordinate clauses (other than ‘reporting’ clauses such as ‘he said’).
14. Percentage of sentences with a main verb as the penultimate word.
- 15<sup>†</sup>. Occurrences of noun or pronoun fb auxiliary verb.
16. Percentage of sentences terminating in an adjective or adverb, or equivalent phrase.
17. Occurrences of *the* fb adjective, as a percentage of all occurrences of *the*.
- 18<sup>†</sup>. Occurrences of a co-ordinating or subordinating conjunction or relative pronoun fb a relative pronoun or subordinating conjunction, e.g. *and* *that*, *but* *although*, *that* *if*, *if* *when*.
19. Ratio, as a percentage of all main verbs, of occurrences of *to be* and *to find*.
- 20<sup>†</sup>. Total number of adjectives.
- 21<sup>†</sup>. Occurrences of noun or adjective + coordinating conjunction + noun or adjective, e.g. ‘blood and altercation’, ‘ridiculous or pleasing light’.
- 22<sup>‡</sup>. Percentage of sentences having a deictic (excluding pronouns) or connective among their first four words.
- 23<sup>†</sup>. Occurrences of *that* and *zero-that* clauses.
24. Percentage of single-clause sentences.
- 25<sup>†</sup>. Occurrences of selected deictics and connectives, including *accordingly*, *also*, *besides*, *on this occasion*, *thus*.
- 26<sup>†</sup>. Occurrences of preposition fb present participle or gerund.
- 27<sup>‡</sup>. Occurrences of three- and four-word prepositional phrases, e.g. ‘in this situation’, ‘a labourer in the magazine trade’.
- 28<sup>†</sup>. Adjective/verb ratio.
- 29<sup>‡</sup>. Occurrences of selected adverbs.
- 30<sup>†</sup>. Words and constructions favoured by Goldsmith (though not uniquely his): twenty items, including triplets, *but* (= only), *still* fb *however*, *at last*.
- 31<sup>†</sup>. Ratio, as a percentage of main verbs, of verb fb infinitive, e.g. ‘happen to come’.
32. Percentage of sentences terminating in a monosyllable.
33. Occurrences of *by* and *with*.
34. Occurrences of a group of intensives.
35. Occurrences of *as*, *or*, *so*, *such*.

## Appendix B

Table B1 Linguistic feature scores of *Goldsmith* samples

Feature	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
Sample																																				
1		7	162	15	19	15	75	35	7	33	8	11	7	38	10	25	10	19	3	18	50	12	33	7	7	9	5	43	30	14	14	7	24	10	12	15
2		10	149	11	22	16	86	8	3	19	5	8	6	38	6	25	6	19	3	24	47	8	34	7	9	10	4	55	30	16	12	6	22	8	11	17
3		13	130	15	26	19	63	13	3	29	8	9	7	40	3	15	6	16	2	16	49	7	23	7	13	5	5	56	31	11	11	5	34	9	7	14
4		10	150	18	17	8	50	12	3	14	9	9	5	40	6	17	9	28	3	10	54	4	23	6	34	3	2	52	31	17	14	4	33	7	10	16
5		11	140	12	18	19	67	7	2	19	6	11	10	43	8	12	14	29	3	24	57	7	22	7	17	7	5	42	33	12	11	8	20	9	8	12
6		15	141	10	26	18	68	34	2	21	1	6	5	47	18	19	18	26	1	20	44	7	24	1	18	6	5	52	28	13	12	4	31	20	9	16
7		8	136	14	25	15	74	13	7	26	7	6	4	36	3	16	10	14	5	16	41	4	32	3	26	8	5	59	28	13	15	7	26	13	6	7
8		13	152	15	21	21	65	17	5	20	4	6	9	40	16	19	20	11	3	11	45	6	20	8	20	9	1	37	26	18	11	6	37	9	4	10
9		5	140	20	19	9	61	25	1	18	4	7	5	35	4	17	7	9	3	14	38	7	39	3	18	5	10	43	25	18	12	10	31	10	14	12
10		15	163	4	17	12	67	13	1	21	8	17	14	34	18	18	9	34	3	22	47	6	24	10	18	6	4	42	27	17	12	6	30	8	7	12
11		10	170	11	17	20	50	12	3	16	8	6	6	44	11	20	11	26	2	16	40	3	19	9	19	11	6	39	23	15	13	4	35	8	10	9
12		12	150	11	17	20	72	29	9	20	9	4	6	39	10	24	3	20	2	24	54	4	27	9	17	8	7	58	32	18	12	7	29	13	8	15
13		14	140	10	21	21	41	23	1	3	3	13	7	55	13	16	5	21	3	14	61	7	18	3	33	5	4	38	36	20	13	2	30	10	4	7
14		15	140	7	22	14	61	18	4	15	3	12	4	46	18	25	9	20	4	29	44	7	24	6	30	5	2	47	31	13	13	5	42	7	12	11
15		9	151	18	23	13	70	16	3	22	4	13	7	35	0	28	7	11	4	29	36	6	26	9	15	7	4	49	25	20	15	2	31	9	7	8
16		10	166	13	27	25	86	9	5	38	8	12	10	33	10	31	5	26	5	17	52	10	33	5	0	10	1	39	31	19	23	6	25	9	6	15
17		14	158	8	20	6	64	36	3	15	6	12	6	36	7	27	15	30	2	12	52	5	30	3	19	8	3	40	34	10	13	7	31	11	7	19
18		16	142	16	25	18	71	19	3	26	8	12	6	40	10	22	10	29	3	22	48	3	26	4	32	7	8	49	31	15	13	7	45	13	12	11
19		14	151	14	27	8	76	11	2	19	9	17	7	32	8	20	4	25	4	9	46	3	23	4	19	5	6	55	30	13	7	6	44	12	9	9
20		14	131	16	25	21	62	34	1	13	2	6	9	44	10	11	3	29	1	8	45	5	17	2	30	6	3	53	30	15	12	8	44	14	12	4
21		7	128	21	21	15	60	16	1	8	3	6	7	48	5	13	8	27	0	17	59	10	17	2	49	3	2	58	37	16	13	2	37	7	4	4
22		13	150	16	11	18	70	17	5	13	15	8	8	46	18	19	11	19	1	16	54	10	32	5	29	8	3	43	32	14	8	5	28	8	10	14
23		11	150	7	18	28	56	15	8	6	6	9	13	47	23	16	14	32	1	29	59	7	26	2	23	5	0	35	34	17	29	3	21	11	14	5
24		13	146	14	19	17	40	16	2	7	13	8	10	47	7	18	10	23	2	19	45	5	34	5	17	5	7	39	28	15	9	6	34	12	12	9
25		14	150	12	18	20	66	32	2	6	5	8	7	45	6	17	8	22	4	18	58	4	39	5	19	8	1	38	32	17	13	5	33	10	7	12
26		15	160	9	16	13	52	19	5	13	5	10	16	47	10	21	18	19	3	19	43	6	21	8	26	4	1	31	26	18	20	7	38	6	12	12
27		15	138	5	13	13	70	33	8	3	8	9	7	44	6	22	19	32	1	19	54	10	31	6	28	7	3	36	33	22	17	1	25	12	3	12
28		17	149	7	24	17	43	10	6	14	4	8	9	59	16	20	14	11	2	16	32	10	33	3	30	6	2	50	21	13	15	8	30	10	4	11
29		10	152	13	27	12	63	17	3	5	9	9	9	46	11	17	5	10	5	23	41	7	16	9	29	6	6	40	25	15	14	6	32	12	6	8
30		16	147	12	23	11	50	11	2	8	6	12	8	52	3	21	14	13	2	24	44	9	22	3	28	1	4	50	28	17	12	9	30	14	8	11
31		9	137	12	18	19	63	18	2	6	6	8	4	51	3	17	11	18	2	19	65	9	29	1	23	5	4	56	38	9	7	7	44	7	3	9
32		10	144	8	31	14	63	10	2	30	5	8	10	45	6	20	15	27	3	15	45	5	30	5	27	7	1	48	30	18	8	7	35	11	8	8
33		16	140	18	28	22	56	17	2	9	7	10	6	42	13	17	19	22	1	19	45	11	16	2	16	2	5	56	29	11	9	4	26	6	6	10
34		8	168	10	26	10	39	10	2	18	12	12	10	51	16	28	21	5	3	18	29	4	32	7	18	9	2	40	18	9	16	6	59	2	9	7
35		4	165	7	24	14	43	7	4	15	7	7	11	50	18	26	21	14	3	13	25	3	38	8	18	9	1	48	16	14	7	6	40	12	5	6
36		11	153	6	14	21	61	16	2	21	7	11	8	46	12	14	22	11	4	22	47	3	20	7	21	6	2	37	27	17	9	3	36	12	8	13
37		9	139	15	25	10	73	13	4	10	5	14	9	37	6	20	3	41	3	25	65	10	26	6	16	4	6	52	39	18	10	4	23	14	9	8
38		15	145	18	21	11	84	21	7	9	5	17	6	37	6	24	16	15	1	13	52	5	19	6	22	3	15	55	33	15	10	1	14	15	7	9
39		20	140	21	23	12	73	13	4	20	4	16	8	38	13	22	20	13	2	18	49	2	31	8	13	13	7	40	31	18	13	3	48	11	10	12
40		3	150	13	23	11	71	11	5	9	8	7	9	41	14	23	14	22	2	21	40	2	34	7	20	9	5	39	26	18	11	5	49	3	11	7

**Table B2** Linguistic feature scores of *Busy Body* samples

Feature	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
Essay Sample																																				
I	1	9	136	6	23	14	53	10	1	37	4	6	3	41	5	27	5	30	3	16	51	1	22	3	0	2	1	70	38	6	6	4	42	12	9	10
	2	5	135	13	14	18	79	13	2	40	7	3	4	29	21	20	0	32	3	16	49	4	20	3	7	3	3	72	33	8	9	13	21	14	6	8
	3	7	128	16	21	5	38	16	0	64	8	3	4	32	7	17	0	27	5	11	39	2	36	5	7	1	3	78	29	11	4	8	64	19	8	8
II	4	11	135	8	24	18	64	41	2	41	5	3	3	41	4	22	4	29	5	15	55	2	27	7	7	2	2	52	36	10	18	4	19	10	7	18
	5	8	138	19	24	13	68	7	2	26	8	4	4	36	11	17	4	27	2	12	44	5	12	8	7	3	7	71	29	6	6	3	22	12	2	7
	6	6	107	13	26	8	67	53	2	15	10	2	3	42	7	13	7	30	1	15	50	5	26	3	22	1	4	76	36	8	6	1	30	10	4	10
IV	7	13	128	18	27	19	68	10	2	15	9	5	2	34	21	15	11	24	2	8	53	7	42	2	5	0	14	54	34	16	5	6	32	15	6	14
	8	3	147	11	27	10	60	7	2	8	8	2	6	38	4	24	12	10	3	14	34	9	44	12	20	7	3	51	25	10	6	2	24	11	2	6
	9	4	147	26	22	7	78	3	2	25	5	8	2	39	4	22	0	25	1	8	42	5	46	4	18	3	5	58	27	15	7	7	30	11	4	12
VI	10	18	131	12	20	17	69	15	3	39	6	4	4	35	3	16	10	25	2	15	49	9	23	3	16	7	3	54	33	9	9	3	48	16	5	15
	11	19	137	15	23	15	70	23	3	9	9	2	8	44	7	16	9	18	3	17	49	3	25	4	27	6	3	46	31	12	10	3	38	12	7	19
VII	12	11	110	10	25	11	71	15	1	4	2	2	3	41	8	16	0	28	1	11	62	5	33	2	16	2	5	76	42	17	4	0	44	12	1	11
	13	8	122	7	26	11	73	23	3	14	2	3	8	34	0	29	5	34	1	11	60	14	18	10	0	3	3	59	40	16	6	1	41	9	7	14
VIII	14	6	112	19	29	11	75	18	1	63	4	3	1	24	0	16	0	29	2	16	57	4	13	8	0	2	4	81	40	5	11	3	19	14	7	10
	15	10	138	14	32	13	52	7	1	41	6	1	4	34	5	23	10	35	2	15	48	3	9	7	5	0	2	73	33	9	6	4	29	16	7	8
	16	4	130	21	27	6	74	18	1	30	5	1	2	25	16	19	0	27	2	13	38	3	16	3	5	2	7	66	27	7	6	0	17	18	8	8
IX	17	10	120	18	24	9	67	17	0	21	2	4	4	36	5	16	5	53	2	7	86	3	28	4	5	1	9	71	48	7	6	6	47	14	3	5
	18	5	110	12	30	11	71	9	3	17	5	3	7	37	13	15	13	38	0	10	71	4	35	4	9	1	4	68	45	8	4	3	30	11	4	8
X	19	8	113	15	34	11	63	18	6	13	3	3	4	41	8	12	4	35	0	24	79	6	27	3	21	1	7	66	47	8	3	6	25	17	4	10
	20	10	136	12	31	12	62	31	0	12	1	5	1	46	8	27	8	21	0	18	65	2	16	8	16	3	1	55	40	16	10	1	40	12	2	9
	21	2	145	16	26	7	52	11	1	3	7	2	10	46	3	22	3	31	2	7	62	2	28	7	28	2	6	58	35	11	9	3	21	9	2	7
XI	22	13	120	8	30	19	77	42	7	14	3	6	3	55	4	15	8	31	4	30	71	10	22	4	47	2	1	68	44	17	9	3	47	5	12	14
	23	9	129	10	24	14	69	20	1	10	4	5	9	49	3	20	13	44	3	14	69	7	17	7	29	1	4	64	41	18	7	3	34	8	6	8
XII	24	8	141	12	22	15	68	14	4	11	5	5	6	47	11	18	17	31	4	32	66	13	9	8	29	0	4	57	37	8	8	6	26	13	14	8
	25	8	143	11	28	13	65	9	2	12	0	2	7	51	13	25	13	43	4	14	54	9	15	6	24	5	1	57	33	20	6	3	45	11	12	13
	26	22	114	9	25	18	58	23	3	7	6	5	2	54	7	16	15	39	3	14	63	3	30	3	30	1	2	61	43	11	13	4	59	13	8	14

## Appendix C

Scores for Visible Marker 3: occurrences of words of four or more syllables (excluding proper nouns and ignoring inflectional endings) in samples of 750 words.

1. Scores for twenty-six Goldsmith samples:

12, 14, 29, 23, 22, 13, 29, 19, 10, 22, 31, 28, 33, 18,

19, 17, 16, 16, 21, 23, 26, 20, 32, 22, 15, 15  
Range: (10–33)

2. Scores for twenty-six ‘Doubtful’ samples, scaled where necessary (scores outside the Goldsmith range in italics):

I: 31, 34, 26; II: 41, 24, 28; IV: 30, 30, 38; VI: 22, 23;  
VII: 41, 26; VIII: 22, 19, 19; IX: 49, 37; X: 27, 36, 31;  
XI: 30, 22; XII: 25, 27, 32.