WAS OLIVER GOLDSMITH COLOUR-BLIND?

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Thesis submitted to the Faculty of Arts of the University of Ottawa in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

Ottawa, Canada, 1951
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Mr. Peter McIntyre, Assistant Editor of Chambers's Journal, Edinburgh, Scotland, searched nineteenth-century files of that magazine in an attempt to locate the anecdote about the parson who appeared in church in a scarlet hunting jacket, referred to in the Introduction.

Dr. W. D. Wright, of the Imperial College of Science and Technology, London, England, wrote the letter reproduced herein as Appendix IV in answer to questions regarding colour-blindness and the possibility of Goldsmith's having acquired the defect as a consequence of smallpox.

The assistance given by these gentlemen is gratefully acknowledged.
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INTRODUCTION

The theory that Oliver Goldsmith may have been colour-blind first suggested itself to the present writer in January, 1951, as a possible explanation of an incident which affected Goldsmith's entire subsequent career. As a young man, Goldsmith — after one or two other false starts — made an attempt to take holy orders, but on presenting himself for examination he was summarily rejected by the bishop who interviewed him. Of this event his biographer Forster writes:

His sister says that his youth was the objection; while it was a tradition "in the diocese" that either Mr. Theaker Wilder had given the bishop an exaggerated report of his college irregularities, or (which is more likely, and indeed is the only reasonable account of the affair) that he had neglected the preliminary professional studies. Doctor Strean on the other hand fully believed, from rumours he picked up, that "either Holl's offence was the having presented himself before his right reverence in scarlet breeches; and certainly if this last reason be the true one, it is our first ominous experience of the misplaced personal finery which will find reiterated mention in this veritable history."

The parenthetical remark in the first sentence of the above quotation shows that Forster was at first inclined to reject the "scarlet breeches" story, but at the end of the paragraph we see that he was not quite so sure. Subsequent biographers refer to the story with caution, if not

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with scepticism. Some consider it a pure invention, tagged upon a man whose eccentricities made him vulnerable to the creators of fantastic legends; others hold, with Forster, that it was an example of the lack of savoir-faire and of judgment which was only too evident in later life; others suspect that Goldsmith actually shrank from the prospect of a clerical career, and (consciously or unconsciously) tried to fail in the test.

None of these explanations seems to be entirely satisfactory. As an invention, the story would be rather far-fetched; and Forster says that it was "fully believed" by the first definite person to whom it is credited. The second theory overlooks the fact that Goldsmith had been born and brought up in a parson's family, making it very improbable that he would commit such a blunder through ignorance or neglect of clerical conventions. The third suggestion is untenable in view of the long period of study and preparation which had preceded the test, of Goldsmith's high regard for the clerical profession (evident in *The Deserted Village* and *The Vicar of Wakefield*), and of the industry and versatility which he showed in his almost life-long struggle with poverty: he certainly undertook tasks (such as those of school usher and bookseller's hack) which must have been far more irksome to an imaginative, sensitive spirit than would be the quiet life of a rural parson.
The present writer, on reading the story of the scarlet breeches, was struck by its similarity to an anecdote which he had read many years before in an article on the subject of colour-blindness. It was there related that an English parson scandalised his congregation by appearing at the morning service in a scarlet fox-hunting jacket, and was puzzled by the objections raised to what he thought was a proper garment of clerical black. The suggestion that Goldsmith was colour-blind, and that he really thought himself suitably attired for his interview with the bishop, immediately presented itself as a much more logical explanation of his blunder than any that had been previously offered.

This paper is an attempt, if not to solve the question "Was Goldsmith colour-blind?", at least to discover what light can be thrown upon it. The remoteness of the period of Goldsmith's life (1728-1774) makes it improbable that the question can ever be answered with absolute certainty. We have, however, a large volume of material in Goldsmith's writings and in references to him by his contemporaries which may be sifted in the hope of finding scraps of evidence which, individually or pieced together,

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2. This anecdote is thought to have appeared in an issue of Chambers' Journal dated about 1870, but has not been again located. The editor of Chambers' Journal kindly searched his files of the period, but was unable to trace the anecdote.
will indicate whether the theory of his colour-blindness
is well-founded or otherwise.

If Goldsmith was really colour-blind, the importance
of proving the fact would not be confined to the
explanation of a single incident in his youth. Colour-
blindness might be shown to have a bearing on many features
of his life which have puzzled biographers and critics.
It might throw light on the paradox which was summed up by
Garrick in the well-known description of 'Noll, who wrote
like an angel and talked like poor Poll.' It would without
doubt influence his poetic language and imagery, his mode
of expression, and his descriptions of things observed by him.

The phenomenon of colour-blindness is familiar to
us to-day, and has been studied by workers in both optics
and physiology. A subsequent chapter of this paper will
be devoted to a discussion of modern knowledge of the sub-
ject as it affects our present problem. It is important
to remember that, although colour-blind individuals have
probably existed in every generation of the human race,
the defect was not generally recognised until the chemist
Dalton, who himself was a sufferer, investigated and des-
cribed his own peculiarities of vision about twenty years
after Goldsmith's death. This fact explains why no refer-
ence to Goldsmith's colour-blindness (if it existed) is
found in the writings of himself or of his contemporaries,
and why his biographers and critics, basing their work on that source material, appear never to have suspected that he was colour-blind.

The present research project is both impeded and assisted by the considerations noted in the preceding paragraph. It is impeded because, since the problem is here formulated for the first time, no previous research has been done in the field; there are therefore no books of reference to which the research worker can turn for the data and conclusions of his predecessors, for a survey of ground already covered, for a warning against blind alleys which may exist, or even for a hint whether the whole project is likely to be of any value. Methods of examining the material available, of collecting and analysing data, and of deriving conclusions have to be devised independently.

On the other hand, the fact that colour-blindness was first described only after Goldsmith's death assists the project, because it assures that a virgin field is being entered. Any relevant allusions by Goldsmith or others can be taken at face value, since they could not have been affected by preconceived ideas. Any discovered indication that Goldsmith knew of the existence of colour-blindness will be strong evidence that his knowledge came from personal experience, because he could not draw upon
INTRODUCTION

the writings of others (as he did with regard to many other subjects) for his information.

The methods employed may be described simply. The project involves examination of every reference, direct or indirect, to colour of any kind, in all of Goldsmith's available writings, except in those which are obviously of no value for the purpose. In his History of Greece, for example, any colour reference would have no bearing on the present problem, since all of his information on the subject was necessarily derived from other writers.

Different weights must be given to references in writings of different kinds. In poetry and personal letters we may expect to find Goldsmith expressing his own thoughts and observations more freely than in his plays, where he is constrained by the requirements of the dramatic medium; and colour references in his novel of family life are likely to be more spontaneous than those in his essays and compilations, where he draws heavily on the writings of other authors.

As they are extracted from the writings, the colour references are arranged under separate headings, according to the colours mentioned. This grouping shows whether Goldsmith referred to some colours more often than to others, and may perhaps indicate the extent of
his powers of hue-discrimination. Too much importance should not, however, be attached to this last consideration, because colour-blind people may at different times apply different names (believing them to be synonymous) to the same colour, and they may also group a number of colours under the same name, which may or may not be the correct name of any one of the colours in the group. We may expect, or at least hope, that the arranging of the references according to colour will give some hint as to Goldsmith's tendencies, if any, to show more confidence with regard to some colours, to be hesitating or mistaken with regard to others.

For the present purpose white, black, and grey are considered to be colours, although they might be excluded from some definitions of that word. Generalised references, where no individual colour is mentioned, are grouped together.

In addition, each reference must be judged independently and classified, if possible, under one of three general headings: based on personal observation; derived from conventional terms of speech (e.g., 'green peas'); and derived from other writers. It is clear that such a classification cannot be certain and exact. Among other difficulties, one finds that Goldsmith had the economical habit of making the same idea, even the same phrasing,
serve more than once: thus there is one colour reference, ostensibly original, in *The Vicar of Wakefield* ("all our migrations from the blue bed to the brown") which can be found with almost identical wording in a personal letter written some years earlier, where the context shows that it was a quotation. In this connection we may consider that the preservation of that particular letter was a fortunate accident, since the greater part of Goldsmith's correspondence has been lost.

In addition to colour references in Goldsmith's own works, we must also examine relevant anecdotes and allusions by his contemporaries, and we must consider whether any incidents in his life take on new significance when the possibility of his being colour-blind is admitted.

In view of the nature of the material, it is scarcely practicable to lay down in advance a fixed plan for its study. Some references may need no further attention after being classified. Others, apparently of little importance in themselves, may become significant as members of a group, or when they are considered in relation to other specific items, to incidents in Goldsmith's life, or to his general background. A phrase which might attract no special attention if used by a writer of undisputed normal vision may become valuable corroborative evidence when used by a writer who is suspected to be colour-blind.
In a few cases, what is written by our author may actually be less important for our purposes than what he omitted to write.

It is therefore necessary to consider the material as it comes to hand, without laying down a rigid plan of study. We must be prepared to give to each item whatever treatment its nature calls for, whether that treatment is simple classification, detailed examination, comparison with other items, or perhaps even an attempt to deduce the workings of Goldsmith's mind which preceded the writing of the item.

We can hardly expect to be able, as a result of this study, to say more than that the weight of evidence is in favour of, or against, the probability that Goldsmith suffered from one form or another of colour-blindness. In order that the reasoning on which we base such conclusions may be clear, a brief discussion of the nature of colour-blindness is desirable. An outline of modern knowledge of the subject is given in the next chapter.
CHAPTER I

COLOUR-BLINDNESS.

Colour has no material existence: it is the name given to a sensation experienced when, through the medium of our eyes, we become aware of direct or reflected light of certain wave-lengths. The normal human eye can distinguish about 5,000 separate colours, a few of these being monochromatic (consisting of radiations of only one wave-length) but the majority being composed of blendings in varying proportions of three primary colours — red, green, and blue. In certain human eyes the power of distinguishing colours is greatly reduced, although vision may be otherwise normal. Persons whose colour vision is thus affected are usually described as being colour-blind, a convenient but vague and not strictly accurate term.

Colour-blindness of one type or another has probably existed from the earliest days of the human race, as it is now known to be both wide-spread and inheritable; but it was

1 The discussion of colour-blindness in this chapter has been derived from the following sources:


not recognised until the chemist Dalton, himself affected
by it, described it in 1794. The reason for this curious
historical fact is that colour-blindness, unlike such
defects as blindness or deafness, may pass unnoticed during
the entire lifetime of the person affected owing to the
difficulty of explaining the sensation of colour to one
who cannot experience it. A person who cannot distinguish
between the colour of a leaf and that of a cherry may yet
freely use the words "green" and "red" without suspecting
that they have different meanings for him and for his
friends with normal colour vision. He may accept those
words as representing different degrees of depth of shade,
but unless he has the enquiring mind of the scientist he
is unlikely to probe deeply into the reasons for the fact
(which must at times perplex him) that the language has
so many specific names for what to him are unimportant
variations in shade.

Even to-day, when the term "colour-blindness" is
familiar to all and when the number of named colours in
everyday use runs into hundreds, many persons never realise
that their colour vision is defective until they fail in a
test, such as the tests for certain railway and marine
positions, where colour discrimination is essential. It

2 See Appendix I.
is not surprising, therefore, that in the simpler conditions of life obtaining before the closing years of the eighteenth century the condition failed to be recognised.

Research into colour-blindness begins with examination of the solar spectrum, which, in the form of the rainbow, has been familiar since antiquity. Newton was the first to demonstrate that the spectrum is produced by the resolving of white light into constituents varying in colour and in refrangibility. On the analogy of the seven notes of the musical scale, he named seven colours of the spectrum: violet, indigo, blue, green, yellow, orange and red; but there is no exact boundary between these, which pass one into another by imperceptible gradations. The gradations in colour from violet to red correspond to increases in wave-lengths, with associated decreases in refrangibility.

Wave-lengths of light are measured in units of one-thousandth of a millimetre (abbreviation μ). The visible spectrum, for normal vision, extends, in terms of wave-lengths, from about .38μ to about .77μ. Within this range the normal eye can distinguish about 150 separate colours, the amount of variation in wave-length necessary to make a recognisable change in colour varying with the part of the spectrum being examined and with the individual observer. Most of these recognisable colour changes, of course, are too minute to call for changes in colour names.
The majority of observers would give simple or compound names to regions of the spectrum varying in extent from .02\(\mu\) upwards, as follows:

\[
\begin{align*}
.77\mu & \quad \text{red} \\
.63\mu & \quad \text{orange} \\
.59\mu & \quad \text{yellow} \\
.57\mu & \quad \text{yellowish-green} \\
.55\mu & \quad \text{green} \\
.51\mu & \quad \text{bluish-green} \\
.48\mu & \quad \text{blue} \\
.45\mu & \quad \text{violet} \\
.38\mu &
\end{align*}
\]

It will be noted that Newton's term "indigo", which merely signifies a dark blue, has fallen into disuse in scientific colorimetry. Apart from the spectral range, in which the colours may be represented by a linear diagram, almost 5,000 more complex colours -- each of which may be matched by a combination of spectral colours -- can be distinguished by the normal human eye. Many of these colours have simple common names, such as pink, which is a red diluted with that compound of red, green and blue light which we call white.

In the researches in colour vision carried out at the Imperial College of Science, South Kensington, London,
it was proved that no importance could be attached to the naming of colours by a person whose colour vision was known to be defective. In naming the colour of an article such a person may be guided by one or more extraneous factors, such as surface texture, brightness, association with a similar article of known colour, similarity to or contrast with another article within range of vision, or mere guesswork. The chance that a colour-blind person may give the correct name to a colour is therefore reasonably high, and his mistakes in colour naming are of no scientific value except as confirmation of the existence of his defect.

Colour-matching tests by an instrument known as a colorimeter eliminate the extraneous factors mentioned. This instrument permits light of known colour value to be thrown on one half of a small screen. The other half of the screen may be illuminated by light taken from three points in the spectrum, separately or in combination, and in each case passed through a narrow slit so that the separate components are practically monochromatic. The amount of light coming from each source can be regulated separately, and thus the composition of the blended light falling on the second half of the screen can be measured quantitatively with precision.

The value of the colorimeter in colour-matching tests depends on the fact that persons with normal colour
vision can match any test colour thrown on the first half of the screen with a spectral colour or a combination of two or three spectral colours, not only to their own satisfaction but to the satisfaction of other normal observers. The three spectral colours used in blending do not require to be of any specified wave-length, provided that they are taken from well-separated regions of the spectrum. In practice it was found suitable to use for all experiments a red (.65μ), a green (.53μ) and a blue (.46μ).

The colorimeter can also be used to test hue discrimination, by throwing colours of slightly different wave-lengths on the two halves of the screen and determining the minimum difference which can be perceived by a particular observer. In the linear diagram on page 4 were shown the names which a normal person would apply to certain regions of the spectrum; but within (for instance) the yellowish-green range, extending from .55μ to .57μ, the same person would be able to distinguish a considerable number of different yellowish-green tints separated by gradations much less than .01μ. Towards the ends of the spectrum the power of hue discrimination is less acute, but from extreme violet to extreme red the number of steps which to a normal person constitute perceptible differences between one hue and another is about 150.
Sensitivity to luminosity is a third variable which can be measured. To a normal person all colours of the spectrum, although they may be equally illuminated, are not equal in brightness: yellow, for example, appears to be brighter than red. "Luminosity curves" can be drawn for individual observers, to show comparative luminosities throughout the spectral range. While these curves show a general similarity for normal individuals, for persons with certain types of defective colour vision they show greatly reduced luminosity at the red end of the spectrum, indicating that it is possible for these persons to confuse red with black.

As recently as the end of the nineteenth century it was believed that colour-blindness existed in three forms, each characterised by lack of the physiological mechanism for appreciation of one of the three primary colours. The three forms were therefore named with reference to the ends and the middle of the spectrum -- red-blindness, violet-blindness, and green-blindness. More recent investigation has shown this to be an undue simplification. The modern system recognises three main groups (not comparable to the three earlier forms) which may be distinguished by colour-matching tests, with subdivisions classified on the bases of hue discrimination and sensitivity to luminosity.
The type of vision which requires to blend three spectral colours to match a given test colour (except, of course, these three spectral colours individually or in simple two-colour combinations) is called trichromatism. All persons with normal colour vision are trichromats. There are, however, many people who require three spectral colours to match a test colour, but their matches are unacceptable to normal trichromats: their type of vision is known as anomalous trichromatism.

Some persons can match any colour to their own satisfaction by blending only two spectral colours, and are therefore described as dichromats. Since all colours not in the spectrum (pinks, creams, purples, etc.) call for combination of three colours, it follows that dichromats cannot distinguish a non-spectral as such, but confuse it with a spectral colour; even white, for them, is a spectral colour, occurring at a neutral point in the spectrum where all colour disappears. Their power of hue discrimination is less acute than in normal trichromats, and is also limited in range to part of the spectrum, so that a dichromat cannot distinguish more than about thirty separate colours (to be compared with the 5,000 which may be distinguished by a normal trichromat).

An unusual defect of colour vision is monochromatism, where hue discrimination is entirely absent. The
monochromat probably sees only a range from white to black through varying shades of grey. Monochromatism is so rare that little research upon it has been possible.

The various types of colour vision now known may be classified as follows:

1. Trichromatism (requiring to combine three primary colours to match a test colour).
   
   (a) Normal.

   (b) Anomalous, including three types:

   (i) Tritanomaly, with reduced hue discrimination in the red-yellow-green range, and lowered luminosity at the red end of the spectrum.

   (ii) Deuteranomaly, with reduced hue discrimination in the red-yellow-green range, and normal luminosity.

   (iii) Tritanomaly, with reduced hue discrimination in the blue-green range.

2. Dichromatism (requiring to combine only two primary colours to match a test colour).

   (a) Protanopia, with no hue discrimination in the red-yellow-green range, and reduced luminosity at the red end of the spectrum.

   (b) Deuteranopia, with no hue discrimination in the red-yellow-green range, and normal luminosity.

   (c) Tritanopia, with no hue discrimination in the blue-green range.

3. Monochromatism, with no hue discrimination.

   Two types, one associated with other eye defects such as photophobia and loss of visual acuity, the other independent of such defects. Both types are so rare that little research on them has been possible.
There is abundant information to indicate that the more common types of defective colour vision are sex-linked hereditary characteristics, and that they occur much more frequently in men than in women. It may be that these attributes belong also to the rarer types, but information regarding these is so limited that a positive statement on the point cannot be made. Because of the hereditary nature of the common types, our present study would be aided if we knew of any peculiarities of colour vision among Goldsmith's near relatives. Unfortunately he died unmarried and left no known descendants, and other members of his family lived comparatively obscure lives, so that no records which might be useful to us in this respect have been preserved.

It must be added that the faculty of colour perception may be impaired by certain diseases affecting the central retina or the optic nerve, or by toxic conditions. Such cases do not appear to be very common, and little information is available about them. Excessive smoking has been known to cause loss of colour appreciation, "aided by mental depression and a low state of health\(^3\)." In most cases acquired colour-blindness is accompanied by general lowering of the light sense.

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If evidence can be found to support the theory that Goldsmith was colour-blind, the possibility that the defect was acquired and not congenital may be taken into account. The words quoted in the preceding paragraph — "mental depression and a low state of health" — would certainly apply to him during much of his poverty-ridden adult life, but we are not told that excessive smoking was one of his weaknesses; he might, however, have acquired some toxic condition sufficient to impair his colour vision during his years of squalor and hand-to-mouth living. He suffered an attack of smallpox while a young child, but it does not appear that his eyesight was noticeably affected by the disease, because he travelled alone without difficulty and he has recorded many acute observations made on his travels, and he was also able to accomplish a remarkable amount of literary work during the last dozen years of his life. It would seem, therefore, that on the one hand the possibility of his suffering from acquired colour-blindness cannot be ruled out, but that on the other hand there is no conclusive evidence sufficient to convert that possibility into a probability.

We are on safer ground in estimating the mathematical probability that Goldsmith suffered from one of the hereditary forms of colour-blindness. The proportion of the male population of Britain affected by defective colour
vision has been variously given at from four per cent to about eight per cent. Wright, on the basis of tests made upon several thousands of individuals, estimates the incidence of the various types among the male population as follows:

<table>
<thead>
<tr>
<th>Anomalous Trichromatism</th>
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<tr>
<td>Protanomaly</td>
<td>1.0%</td>
</tr>
<tr>
<td>Deuteranomaly</td>
<td>4.6%</td>
</tr>
<tr>
<td>Tritanomaly</td>
<td>0.0001%</td>
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</table>

<table>
<thead>
<tr>
<th>Dichromatism</th>
<th></th>
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<tbody>
<tr>
<td>Protanopia</td>
<td>1.2%</td>
</tr>
<tr>
<td>Deuteranopia</td>
<td>1.4%</td>
</tr>
<tr>
<td>Tritanopia</td>
<td>0.0001%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monochromatism</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Both types</td>
<td>0.003%</td>
</tr>
</tbody>
</table>

These figures indicate that all types of colour-blind persons who inherited the defect comprise slightly over 0.2% of the male population of Britain. If we make the reasonable assumption that the proportions were about the same two centuries ago, the chance that Goldsmith could be referred to one of these types is a little less than one in twelve. In order that the "scarlet breeches" story might be satisfactorily explained by the theory that he actually mistook red for black, he would require to have one of the types of defective colour vision where luminosity at the red end of the spectrum is reduced; that is,

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he would have to be a protanomalous trichromat or a protanopic dichromat. These types together constitute 2.2% of the male population: consequently the chance of his having been one or the other is about one in forty-five.

The defects of tritanomaly, tritanopia and monochromatism are so rare that comparatively little is known about them, and it cannot be stated positively that one of them would explain the incident of the scarlet breeches. It seems unlikely, however, that Goldsmith would have the type of monochromatism that is usually associated with eye defects (nystagmus, photophobia, loss of visual acuity, etc., none of which he is recorded as having), and the chances of his having had the other type of monochromatism, tritanomaly, or tritanopia are extremely small. While examining the evidence we must, however, be alert for any indication that he suffered from any form of congenital or acquired colour-blindness.

The available evidence falls into two groups—biographical details written by others, and Goldsmith's own writings. It is convenient to begin by examining the evidence of the first group, as it is smaller in bulk and can be summarised with little difficulty.
CHAPTER II

BIOGRAPHICAL REFERENCES

No complete contemporary biography of Goldsmith exists. Since colour-blindness was unknown to his generation, and any possible defect in his colour vision was his own well-kept secret, we cannot expect to find direct evidence for our present study in the scattered information which was pieced together by biographers working after his death. Even the anecdotes which have been preserved as examples of his eccentricity and his blundering are few, and are mostly irrelevant. Among them, however, are some which are significant either in themselves or in relation to the whole picture of his life as we know it.

The incident of the scarlet breeches is typical in that it has been treated with a certain amount of levity, and has been briefly passed over by biographers with no more than a casual attempt at explanation. If it were known positively that Goldsmith was colour-blind, that incident would assume importance as an obvious consequence of the defect; but for the present we may treat it merely as our starting-point, proving nothing by itself, but available as supporting evidence if our research makes the theory of Goldsmith's colour-blindness seem plausible.
Boswell relates many incidents regarding Goldsmith, and there can be little doubt that if the latter had displayed any signs of colour confusion in the great biographer's presence they would have been carefully recorded. The absence of any such records does not, of course, prove anything of importance; but we have grounds for supposing that Boswell was shrewd enough to guess that Goldsmith's conversational oddities were due to something else than want of sense. In this he had far more insight than the great Johnson, whose pronouncements he recorded with such respectful humility. Three quotations will indicate the divergence of views between Boswell on the one hand and Johnson (with whom most of Goldsmith's other acquaintances apparently agreed) on the other.

Of our friend Goldsmith he said, "Sir, he is so much afraid of being unnoticed, that he often talks merely lest you should forget that he is in the company." . . . BOSWELL: "For my part, I like very well to hear honest Goldsmith talk away carelessly." JOHN-SON: "Why, yes, sir; but he should not like to hear himself".  

(Johnson said) "The misfortune of Goldsmith in conversation is this: he goes on without knowing how he is to get off. His genius is great, but his knowledge is small. As they say of a generous man, it is a pity he is not rich, we may say of Goldsmith, it is a pity he is not knowing. He would not keep his knowledge to himself".

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2 Ibid., page 200.
Goldsmith, however, was often very fortunate in his witty contests, even when he entered the lists with Johnson himself. These quotations indicate that Boswell usually found Goldsmith's talk entertaining, but never found it dull, even when he allowed his tongue to run away "carelessly". That scarcely conveys the picture of a stupid blunderer.

If we postulate for a moment Goldsmith's colour-blindness, would it not explain much of the paradox of a wit making blunders in conversation? In a social group which included Sir Joshua Reynolds the painter and David Garrick the actor and theatre manager, the talk must often have turned on matters involving colour. In such discussions a colour-blind man would be completely out of his element, and compulsory silence would be especially galling to a loquacious and rather vain man such as Goldsmith undoubtedly was. It is very probable that he tried to divert the conversation to safer themes, or simply called attention to his presence, by breaking with some irrelevant or absurd remark, and then continuing in the same vein so that the true reason for his interruption might not be suspected.

His tailor's bills show that Goldsmith, when he could afford it, spent money lavishly on dress; the colours

3 Ibid., page 211.
4 See Appendix III.
of his garments are not always mentioned, but when they are, it is evident that they were not subdued. Another passage in the Life of Samuel Johnson tells us that on at least one occasion Goldsmith's friends mocked at his colour choices, and suggests that his lack of taste in this respect was notorious.

He honoured me with his company at dinner on the 16th of October, at my lodgings in Old Bond Street... Goldsmith, to divert the tedious minutes, strutted about bragging of his dress, and I believe was seriously vain of it, for his mind was wonderfully prone to such impressions. "Come, come," said Garrick, "talk no more of that. You are perhaps the worst—eh, eh!" Goldsmith was eagerly attempting to interrupt him, when Garrick went on, laughing ironically, "Nay, you will always look like a gentleman; but I am talking of being well or ill drest." "Well, let me tell you," said Goldsmith, "when my tailor brought home my bloomer-coated coat, he said, 'Sir, I have a favour to beg of you. When anybody asks you who made your clothes, be pleased to mention John Filby, at the Harrow, in Water Lane.'" JOHNSON: "Why sir, that was because he knew the strange colour would attract crowds to gaze at it, and thus they might hear of him, and see how well he could make a coat even of so absurd a colour."

Goldsmith's "strutting" may have had a double motive — to beguile the tedious moments, as Boswell suggests, and also to get his blow in first before the expected mockery of his new coat commenced. When Garrick, nevertheless, cast scorn on it, Goldsmith defended himself not by giving his own opinion but by quoting his tailor — a stratagem which may well indicate that Goldsmith's notions of colour

in clothing and fabrics were derived mainly from the conversation of his tailor, in whose establishment he obviously spent a good deal of his time.

The most significant of all anecdotes has been immortalised by Goldsmith's diligent biographer, John Forster:

Here appeared the dish of peas one day that were anything but their natural colour, and which one of Beauclerc's waggish friends recommended should be sent to Hammersmith, because "that was the way to Turnham Green (turn 'em green)". It was said in a whisper to Goldsmith; and so tickled and delighted him that he resolved to pass it off for his own at the house of Burke, who had a mighty relish for a bad pun. But when the time came for repeating it, he had unluckily forgotten the point, and fell into hopeless confusion. "That is the way to make 'em green," he said: but no one laughed. "I mean that is the road to turn 'em green," he blundered out: but still no one laughed; and as Beauclerc tells the story, he started up discomfited, and abruptly quit­ted the table.

Forster's explanation that "he had unluckily forgotten the point" will not stand up under careful examination. The jest is so simple that any person of normal intelligence could scarcely spoil it in the telling through forgetfulness, unless the effective last line had completely passed from his memory. Goldsmith's two versions of the last line prove that he had not forgotten the double pun on "way" and "Turnham Green", since the

two versions taken together contain both meanings of each pun. To bungle the repetition of the jest, while remembering its entire contents, would be impossible for a man of Goldsmith's intelligence and wit — unless we consider the possibility that he was colour-blind. Then the incident becomes perfectly clear and natural.

We may take leave to doubt that Forster's statement "it was said in a whisper to Goldsmith" tells the whole story of the birth of the pun. A jest which was merely whispered by one guest to another — and the latter a man who ruined it the first, and apparently the only, time that he repeated it — would be most unlikely to be recorded for posterity. A logical reconstruction of the whole anecdote might run as follows:

"When a dish of peas which were far from their natural colour was placed on the table, one of the guests remarked 'These peas should be sent to Hammersmith, because that is the way to Turnham Green.' Everybody laughed except Goldsmith, who missed the point because he was unable to distinguish any difference from normal in the hue of the peas. Pretending that he had not heard the joke because his attention had been distracted, he asked his neighbour in a whisper to repeat it to him. The neighbour did so, and Goldsmith, enjoying the pun although he was still uncertain as to its application, joined in the
general laughter. At the same time he made a mental note to repeat the pun on his next visit to Burke, who was a notorious lover of these plays on words.

Accordingly, when some time later he was a dinner-guest at Burke's house, he took the first opportunity of trying to bring out the jest exactly as he had heard it. Everybody became silent to pay attention, and for the first time Goldsmith realised his delicate position as a colour-blind person telling a story whose point depended on colour perception, to an audience presumably composed of persons of normal colour vision. (A parallel situation would be that of a Cockney starting to tell a joke based upon the peculiarities of Scottish speech, and suddenly realising that his entire audience consisted of closely-interested Caledonians.) He became overwhelmed with embarrassment and fear of ridicule, and concentrated so hard on getting the key-word 'green' correct that he said 'make 'em green' instead of 'turn 'em green'. Realising from the silence that he had blundered, he repeated the final phrase, correcting his first error but making another by saying 'that is the road to Turnham Green'. He was now in such miserable confusion that, rather than try to explain his mistake or endure the pitying amusement of his friends, he abruptly jumped up and left the table."
Unfortunately Goldsmith shared the limelight with so many other notable figures — Johnson, Boswell, Garrick, Reynolds, and others — that few details of his oft-mentioned blunderings have been recorded, and we have become accustomed to accepting without adequate proof the verdict of Garrick that he "talked like poor Poll". We have now seen that three instances of his apparently foolish behaviour — the incidents of the scarlet breeches, of the bloom-coloured coat, and of the "Turnham Green" pun — can be reasonably explained by the theory of his colour-blindness, so that they call for sympathy rather than ridicule. If a greater number of detailed anecdotes had been preserved in support of Garrick's epigram, it is possible that analysis of them would swing our opinion towards that of Boswell, that Goldsmith was an entertaining chatterbox with flashes of the most brilliant wit. Our altered appreciation of him would be tinged with regret that a defect — unrecognised by all around him, and little understood even by himself — prevented him from fully enjoying the company of his dearest friends, and prevented his friends from fully appreciating the merits of an unfortunate genius.
CHAPTER III

COLOUR CLASSIFICATION

For grouping the colour references extracted from Goldsmith's works, the simplest arrangement is one based upon the spectrum.

Newton attributed to the spectrum seven principal colours — violet, indigo, blue, green, yellow, orange, and red. It is generally considered now that indigo, a dark blue, is not sufficiently distinct to be regarded as a major colour. Violet and orange are certainly distinct colours, but they are so near to blue and yellow respectively that they are often referred to as varieties of those colours: in fact, the Newtonian colours violet, indigo and blue are frequently grouped in scientific works as "the blue end of the spectrum" or under the general term "blue".

Goldsmith simplifies for us the problem of whether or not to use the Newtonian list of spectral colours in studying his colour references. In all the works — poetry, drama, novel, letters, essays — which are sufficiently original to be included in our present survey, he never uses the adjectives "violet", "indigo", "orange", or any other adjectives which are indubitably equivalent to them.

For our purposes, we have to add to the remaining spectral colours four non-spectral colours which are important enough to be given equal rank: white (in its purest form, a blend of red, green, and blue light); black (the
absence of light); grey (white of reduced luminosity, possibly with a small amount of one or more colours added), and brown (a range of colours, commonly resulting from the mixture of red and black pigments).

We have thus eight principal colours on which to base our classification. Under the eight corresponding headings we may group a very large number of names of tints, metaphorical or stereotyped equivalents, and more or less indeterminate colour-adjectives. These subsidiary terms, as found in Goldsmith's works, are shown below in parentheses after the names of the major colours to which they appear to be most closely related.

1. Blue.
2. Green.
3. Yellow (buff; flaxen; gold; golden).
4. Red (blushing, flushing; cherry; crimson; pink; purple; rosy; ruddy; scarlet).
5. White (pale, pallid; silver; snowy).
7. Grey.
8. Brown (hazel; tawny).

The grouping of the subsidiary terms above is in general according to universal usage, but in some cases has been influenced by the special circumstances of this study. For instance, purple might well be considered a
distinct colour, at least equal in rank to brown; but in all of the works examined Goldsmith uses the word "purple" only once, and then in a stereotyped expression. The reference in question has no significance with regard to colour perception, but is included in order that the record may be complete, and is shown as subsidiary to "red".

Similarly, the inclusion of "tawny" in the "brown" rather than in the "yellow" group may seem challengeable; but Goldsmith uses the word "tawny" three times only, applying it to a gypsy, to Tartars, and to natives of Borneo. Elsewhere he uses the term "the brown Tartar", making it clear that, at least occasionally, he considered "tawny" to be synonymous with "brown", and it would appear appropriate to classify it here accordingly.

The classification of "pale", "pallid", "dark", and "dusky" as subsidiary colours could not ordinarily be justified, but it is necessary for this study. As has been pointed out on page 8, there is for dichromats a neutral point in the spectrum at which colour, but not light, disappears. Consequently hues in the immediate vicinity of that point (which falls in or near the green range) appear to them as almost white or very light grey, which might, in certain circumstances, be described as "pale" or "pallid". Persons with some defects of colour vision (certainly protanomaly and protanopia; possibly
tritanomaly, tritanopia, and monochromatism — see page 9) have reduced luminosity at the red end of the spectrum, and therefore may in certain circumstances describe as "dark" or "dusky" tints which normal observers would usually describe as "red". Since the terms "pale", "pallid", "dark", and "dusky" are relative and indeterminate, too much importance cannot be attached to them as a general rule, but we must not overlook the possibility that among the instances of their use we may find helpful indications.

At all times during the study we must bear in mind the fact ascertained by the Imperial College of Science (see pages 4 and 5) that the naming of colours by an observer who is known to be colour-blind has little significance. A corollary of this fact is that, when the quality of an observer's colour vision is unknown, correct naming of colours by him is not proof of normality; on the other hand, incorrect naming of colours, while strongly suggestive of colour-blindness, may be due to colour-ignorance, particularly in the case of colours other than the primary ones. For instance, it is quite common to find writers or speakers describing a blush by any of the terms (except perhaps "ruddy") listed above as subsidiary to "red": although their colour vision may be normal, many of those persons must have a vague or incorrect idea of the meaning of the term which they use. Since Goldsmith was a well-educated man, with a
wide vocabulary and an exquisite sense of the correct word
which constitutes one of the charms of his style, we may
rule out colour-ignorance as the explanation in any case
where we may doubt the correctness of his naming of a
particular colour.
CHAPTER IV

GOLDSMITH'S WRITINGS

Goldsmith's period of literary output for publication appears to have lasted from February, 1757, when he was hired by the publisher Griffiths to write criticisms for his Monthly Review, almost until his death in April, 1774. He had indeed commenced to write The Traveller (as is stated in its dedication to his brother) when he was in Switzerland in 1755, although that poem was not published until 1764; and it would seem probable that Griffiths had seen some examples of his writings before engaging him as a critic, because the records scarcely show Goldsmith as the type of person who would favourably impress a hard-headed prospective employer merely through a personal interview.

One difficulty which has not been wholly overcome by collectors of Goldsmith's works is that, until he became famous enough for his name to have value in the publishing business, he wrote a great number of minor items — essays, reviews, criticisms, etc. — which were paid for at low rates and published anonymously, sometimes with editorial alterations which obscured his style. A number of these items have been identified from study of Griffiths' memoranda, but many others are, perhaps irretrievably, lost.

A further difficulty is that, being compelled over a period of many years to turn out a large and continuous
flow of words in order to earn a meagre living, Goldsmith was forced to supplement his own literary ability by making translations, re-writing material taken from other authors, and filling up his essays with acknowledged or unacknowledged quotations. In the later years of his life, although his income was well above the average, his lack of financial sense kept him constantly in debt to the booksellers, and his original work was almost smothered in the mass of compilations written to order for his creditors. In these compilations, such as his *History of the Earth and Animated Nature* and *History of Greece*, most of the material was necessarily either copied or adapted from other writers, and the passages which are entirely his own are not always identifiable as such. For this reason these compilations have been excluded from the present study, with the exception that the *History of the Earth and Animated Nature*, where there was frequent occasion for Goldsmith to insert his own observations, has been carefully searched for significant passages.

The works of Goldsmith from colour references have been extracted are classified below in approximately the order in which relative weights should be given to the references taken therefrom. The same order will be adhered to throughout this study, for the sake of uniformity, ease of reference, and logical presentation.


3. Letters. Much of Goldsmith's correspondence has been lost, but most of his personal letters which still exist are long, lively and informative. Unfortunately it would appear that many of his relatives and acquaintances in Ireland to whom he wrote during his years of poverty did not wish to encourage his correspondence for fear of laying themselves open to appeals for help, and therefore they neither answered nor preserved his letters. The letters examined for the present purpose are those reproduced in the edition of his "Complete Works" published by Charles Griffin and Co.; they are thirty-three in number, and cover the period from about 1751 to 1773.

4. Plays. *She Stoops to Conquer* and *The Good-Natured Man*, apparently the only plays which Goldsmith wrote, although their finished quality might suggest that they had been preceded by earlier attempts in this highly-specialised branch of literature.


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Bee (a short-lived magazine, the entire material for whose eight issues was supplied by Goldsmith), and miscellaneous essays.

Because poetry is normally more highly charged with personal emotion and sensitivity than prose, Goldsmith's poems — especially The Deserted Village and The Traveller, which were for him a labour of love through two years and nine years respectively — may reasonably be expected to be most revealing of his true reactions to colour, and therefore they head the above list. His novel, which is based on his early impressions of home, family, and rural life and is full of deep feeling, comes next in importance. Personal letters might ordinarily be supposed to be most revealing, but in his extant letters Goldsmith seldom expresses without restraint the full bitterness which he must have experienced in his poverty-ridden struggles; for this reason, and because the surviving letters constitute only a small part of his entire correspondence, the letters have been given only third place. In his two comedies the limitations of dialogue, plot, and presentation necessarily modify his style, so that colour references in the plays may well have slightly less importance than those in the works previously mentioned. In last place come the essays, practically all of which contain a great deal of quoted, adapted and rehashed material.
In the analysis of colour references which follows the above classification of Goldsmith's writings has been adhered to, in order that the references grouped under each major or subsidiary colour may be presented uniformly and conveniently. It must not be forgotten, however, that the classification is more convenient than precise, and that highly-significant references are likely to be found in any of the groups.²

² In the classified list of Goldsmith's writings given in this chapter, only the principal works are named. A full list of all the works examined for extraction of colour references is given in Appendix II.
CHAPTER V

COLOUR REFERENCES – BLUE

1. Poetry.

It is noteworthy that in all the 2,608 lines of Goldsmith's poetry which have been examined for the present purpose, there is no reference to blue or to any of its subsidiary hues, or to the colour of any of the blue objects in nature which have so often appealed to poets — the sky, the sea, birds, flowers, human eyes, etc.


There are two references to blue in The Vicar of Wakefield:

Chapter 1, page 109: "... all our migrations (were) from the blue bed to the brown." In Letter 6, page 27, we read: "Nay, all the news I hear of you is, that you ... sometimes make a migration from the blue bed to the brown." This clearly indicates that the reference in the novel, which was published more than eight years after the date of the letter, was a quotation and not an original conception.

Chapter 5, page 114: "... the sloping field, that

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1 All page references, unless otherwise stated, are to The Complete Works of Oliver Goldsmith, London, Charles Griffin and Co., (before 1866), iv + 403 pages.
was embellished with blue-bells and centaury . . ." This, of course, is a fixed term of speech, and as such has no significance in the present study.

3. Letters.

Only one reference, in Letter 6, page 27; already discussed in the previous section.

4. Plays.

There is only one reference to blue in the plays, in *The Good-Natured Man*, Act III, page 72, where Honeywood says (in connection with the giving of one of his suits to the bailiff): "The blue and gold. I believe Mr. Flanigan will look best in blue." We shall find as we proceed that a large number of Goldsmith's colour references concern clothes and fabrics, as in this case. He apparently spent much time, and obtained a great variety of clothes for cash or more often on credit, at his tailor's. In this case he certainly may have taken the first remark from a tailor's bill, and adapted the second from a remark heard in the tailor's shop. The reference does not prove that he had any appreciation of the colours mentioned; it is not a description, but an indirect command to the property man to provide a suit to match the dialogue.

5. Essays.

Eleven references to blue appear in the *Citizen of the World*, the first in Letter 2, page 168: "I have seen
five black lions and three blue boars in less than the circuit of half a mile: and yet you know that animals of these colours are nowhere to be found, except in the wild imaginations of Europe." The Citizen of the World is here referring to the painted signs of inns named "Black Lion" and "Blue Boar". The concluding statement is probably not original with Goldsmith, because, although brought up in a rural district, his knowledge of animals was sketchy: on one occasion he states gravely that cows shed their horns\textsuperscript{2}. The passage containing the "blue boars" reference seems slightly out of place in its context: it suggests a remembered witticism brought in merely to fill up space in the letter describing the traveller's voyage and arrival in London. It therefore affords no evidence that the writer could distinguish the colour blue.

Another reference which merits close examination is in Letter 8, page 173: "I can now look on a languishing blue eye without disgust . . ." This has meaning only on account of the implied contrast between the black eyes of the Chinese and the blue eyes of many natives of England. Goldsmith's knowledge of this contrast, like the rest of his knowledge of China and the Chinese, was most probably derived from his reading. Even if he had met any Chinese in London, these could not have been numerous enough for

\textsuperscript{2} Oliver Goldsmith, \textit{A History of the Earth and Animated Nature}, Glasgow, Blackie and Son, (1840), vol. 1, page 270.
him to be assured that Chinese eyes (unlike English eyes) were not of many different colours, including blue. He had apparently read somewhere that the blue eyes so common in Northern Europe are unpopular in China; consequently this mention of blue eyes (unique in the works examined) is no proof of appreciation of blue.

A travel book evidently provided the reference in Letter 3, page 168: "I smiled at the blue lips and red foreheads of the Tonguese".

The allusion in Letter 3, page 169, "(English women use) blue powder . . . for their hair" might be credited to observation, but can be classified with greater probability as an item of common knowledge.

Two references are entirely fanciful, in a fairy tale: Letter 48, page 217, "blue mice", and Letter 49, pages 218 and 219, "a blue cat".

The other five references to blue in the Citizen letters concern clothes and fabrics, and may have been derived from conversation, reading, or tailor's bills as probably as from personal observation. They are: Letter 29, page 196, "You may distinguish him . . . by . . . the blue handkerchief round his neck"; Letter 32, page 199, "a gentleman with a blue riband tied round his shoulder"; and Letter 52, page 221, "That personage . . . in blue-and-gold".
COLOUR REFERENCES - BLUE

Letter 64, page 235, (princes reward subjects)
"... with about two yards of blue ribbon ... a yard of blue or green ribbon ... ."

Letter 105, page 274, "... Blue Mantle . . . "
(title or nickname of a court official).

There are two references to blue in The Bee. The first, in a description of a Swedish museum in No. 2, page 320, is certainly taken from a travel book: "... a coarse blue cloth coat . . . " (a relic of Charles XII).

The second, in No. 4, page 330, appears in an article headed The Sagacity of Some Insects. To the Author of "The Bee". This article may have been contributed by some other writer, or it may have been copied without acknowledgment from another publication, or it may have been written by Goldsmith himself. The latter possibility is unlikely, since the article, published in 1759, describes a spider first observed "about four years ago" (when Goldsmith was in Europe) and which lived for three years (Goldsmith lived a very unsettled life for three years after he returned to England in 1756). This spider is said to have caught "a large blue fly" in its web.

Three references to blue occur in the miscellaneous essays, only one of these warranting close study. In Essay No. 12, page 377, Goldsmith says: "A clear blue sky, spangled with stars, will prove an insipid object to eyes
accustomed to the glare of torches and tapers, gilding and glitter . . ." This appears in an essay headed "Taste", the theme of which is that natural charms are to be preferred to those which are entirely artificial. At first glance the quotation seems to testify to Goldsmith's appreciation of the blue colour of the sky, in spite of the fact that no trace of this feeling is to be found elsewhere in his works. Careful examination, however, shows a curious divergence from the normal mode of expression in this passage. Goldsmith is attempting to convey to us an idea of the sky at its most beautiful, but to most of us a "clear blue sky" is a cloudless day-time sky; the blue fades when the sun goes down and the stars appear. On a clear evening there is a period when both the sky and the stars are in a dim transitional state, which has its own modest charm, but does not compare in beauty with either clear day or star-studded night. After this period has passed and the sky has become "spangled with stars", we admire the stars but we are scarcely aware of their background: this background is a very dark blue, but it can hardly be called "clear" on account of the multitude of low-magnitude stars and nebulae.

It is difficult to avoid the conclusion that in the passage we have just quoted Goldsmith was writing, as it were, synthetically. No doubt he remembered with
pleasure the starlit nights of his youth — before he became a resident of London — and combined that personal recollection with the fact of common knowledge that clear blue skies are beautiful. The fact that he made this combination suggests that the words "clear blue sky" conveyed little or nothing to him, but that he was aware that they had a connotation of beauty to other people, and he therefore brought them into his word-picture without realising their incongruity. This analysis of his mental processes may be considered challengeable, but we may cite his parallel action in his great poem The Deserted Village, where he combines the description of a living English village with the history of an Irish eviction.

There are two other references to blue in the miscellaneous essays, both of which concern clothing and may be classified as "tailors' terms". In Essay 6, page 369, the Strolling Player, describing makeshifts in the theatre, says: "The same coat that served Romeo, turned with the blue lining outwards, served for his friend Mercutio . . ." In Essay 25, page 402, Goldsmith writes: "... our gowns of mazarine blue, edged with fur, cut a pretty figure . . ." We need not pause to study references of this type.
Summary

Our analysis of the references to blue in Goldsmith's works has provided us with the following information:

1. Goldsmith's works contain no references to tints subsidiary to blue. We have previously noted that they contain no references to the Newtonian colours violet and indigo. These facts are compatible with the theory that he lacked the power of hue discrimination in the blue end of the spectrum.

2. His poetry contains no references to blue. The references to blue in his novel and in his letters are certainly derivative; the single reference in his plays is almost certainly derivative; and those in his essays are either certainly or probably derivative. Of none can it be said that they are probably based upon his own observations.

3. The "blue bed" reference has particular significance in our study as an example of Goldsmith's habit of quotation without acknowledgment. Moreover, the fact that it occurs in a passage written years after he first used the same idea, in almost exactly the same wording, suggests that even in his prose masterpiece he was diffident about using the word "blue" on his own responsibility, but considered it safer to adhere to wording which had been
used acceptably by another person and of whose humorous effect he was certain.

4. The "clear blue sky, spangled with stars" reference is significant as suggesting that Goldsmith was not aware of the blueness of the sky at first hand. Apparently he felt safe in using a common phrase, but he did not realise that he was using it in an incongruous context.
CHAPTER VI

COLOUR REFERENCES — GREEN

1. Poetry

We find the word "green" eight times in Goldsmith's poems, but never as a descriptive adjective. It forms part of a fixed term of speech in the Epilogue to "The Sisters", lines 5 and 6, where Goldsmith says the authoress should have —

"Warm'd up each bustling scene, and in her rage Have emptied all the green-room on the stage."

In every other case, "green" is a noun with the conventional meaning of "a grassy plot":

"How often have I loiter'd o'er thy green"¹.

"And desolation saddens all thy green"².

"Those healthful sports that graced the peaceful scene, Lived in each look, and brighten'd all the green"³.

"His seat, where solitary sports are seen, Indignant spurns the cottage from the green"⁴.

"The cooling brook, the grassy vested green"⁵.

"The wavy lawn, the sloping green"⁶.

"Ye shady walks, ye waving greens"⁷.

¹ The Deserted Village, line 7. ⁵ Ibid., line 360.
² Ibid., line 38. ⁶ Threnodia Augustalis, Part II, line 8.
³ Ibid., lines 71-2. ⁷ Ibid., line 23.
⁴ Ibid., lines 281-2.
2. Novel

The word "green" is used twice as a noun in The Vicar of Wakefield: in chapter 4, page 113, "... on one side a meadow, on the other a green"; and in chapter 15, page 127, "... a letter-case, which he found on the green."

There are two references to green clothing: in chapter 12, page 124, "His waistcoat was of gosling green"; and in chapter 16, page 129, "Olivia would be drawn ... dressed in a green Joseph". The first of these is one of Goldsmith's rare mentions of colour variation, but since it, as well as the second, uses a "tailors' term", it is not a clue to his power of hue discrimination.

Commencing in chapter 12, page 124, there is frequent mention of "a gross of green spectacles" — a term in common usage. Also stereotyped is the expression "green old age" found in chapter 14, page 126.

More interesting is the reference in chapter 16, page 129. We may quote the whole sentence, attributed indirectly to the match-making Mrs. Primrose: "If the cakes at tea ate short and crisp, they were made by Olivia; if the gooseberry-wine was well knit, the gooseberries were of her gathering; it was her fingers which gave the pickles their peculiar green; and in the composition of a pudding it was her judgment that mixed the ingredients."

If the statement about the pickles were taken alone, it
would look very much like a remark based on personal obser-
vation. The succession of housewifely idioms, however,
seems to rule out that possibility. Goldsmith had been
leading an unsettled bachelor life for years before he
wrote The Vicar of Wakefield; the characters are largely
drawn from the members of his father's family and their
neighbours; and it is most probable that the whole sen-
tence is a summary of remarks made by his mother or some
other ambitious lady of the district and remembered by
him with affectionate amusement.

3. Letters.

The letters yield only one mention of green, and
that in a stereotyped expression. In Letter 19, page 35,
Goldsmith writes of "my being half-poisoned with a dish
of green peas".

4. Plays.

In Act II of She Stoops to Conquer, page 91,
Hastings says: "Confound your made dishes. I shall be as
much at a loss in this house, as at a green and yellow
dinner, at the French ambassador's table. I'm for plain
eating." Since Goldsmith does not appear ever to have
been a dinner guest in diplomatic society, the expression
"green and yellow dinner" may have been a current cant
term. If Goldsmith invented the term to mean "formal"
or "ornate", the inspiration was not a happy one, since
a decoration scheme in green and yellow — especially with eighteenth-century illumination — seems rather bilious for a festive occasion. It may be that, in order to convey the idea of brilliance of colour, Goldsmith used the words "green" and "yellow", either confusing the colours to which they apply with colours more suitable to the occasion, or believing that any haphazard use of the words which had for others a meaning unintelligible to him would be equally effective.

The only other reference to green in the plays comes in Act IV of She Stoops to Conquer, page 102, where Miss Neville refers to "the gentlemen of Goose green" (a locality), and Tony Lumpkin later alludes to her remark with "your . . . Goose-greens".

5. Essays.

The essays contain numerous references to green, one of them concerning the meaning of "a grassy plot": in the Citizen of the World Letter 31, page 198, we read "the enamelled meadow (takes the place) of the shaven green".

One reference seems to be derived from reading of Chinese customs. In Letter 14, page 179, the Citizen is made to say: "I have got twenty things from China . . . Look at those jars: they are of the right pea-green . . . ."

The fanciful phrase "a white mouse with green eyes" occurs in the fairy-tale in Citizen Letter 48, page 217.
The Essays contain the only passages in Goldsmith's original works in which he mentions green as the colour of vegetation. One of these occurs in the description of a Chinese garden in the Citizen's Letter 31, page 199, with regard to the designed contrast between the entrance and the interior: "... the trees of a mournful green, conspired at first to disgust him (the visitor) ..." This may be an unacknowledged quotation from Goldsmith's reading, or it may be a flight of fancy. If the latter, it may or may not imply that the writer had a definite idea of a "mournful" tint of green; probably he had not, because, although the dark greens of some trees are gloomy or even depressing when in extensive unrelieved masses, they can hardly be "disgusting" within the limited area of a garden. It is possible that Goldsmith enlarged the idea of gloom (whether derived from reading or from his own imagination) by adding the conventional term "green" to round out a phrase.

The other reference to the green of vegetation is found in Essay 12, page 377. The theme of this essay, as previously stated, is the superiority of the natural over the artificial in the realm of good taste. The particular reference may be classified with equal justice as a picturesque embellishment of prose or as a cliché: "... eyes that will turn with disgust from the green mantle of the
spring, so gorgeously adorned with buds and foliage, flowers and blossoms, to contemplate a gaudy silken robe . . ." There may have been a slip of the pen here due to hasty writing; but the addition of "flowers and blossoms" changes the meaning of "adorned", since buds and foliage actually constitute an important part of the green mantle. Another explanation of the peculiar phrasing would be that, according to Goldsmith's perception of colour, the relation of flowers and blossoms to the green mantle was the same as that of buds and foliage.

Three stereotyped uses of the word "green" occur in the Essays. In Letter 71, page 243, the Citizen of the World quotes a dig at people "that hardly knew a rabbit and onions from a green goose and gooseberries". In Essay 8, page 371, we read that Theophilus Cibber "was once known to give three pounds for a plate of green peas", and later that when an old man "he loved . . . green peas as before". In Essay 12, page 376, there is an allusion to "a maid pining in the green sickness".

In conclusion, the Citizen uses three "tailors' terms" which include the word "green". In Letter 52, page 221, he speaks of "that (personage) in green-and-silver"; in Letter 64, page 235, of "a yard of blue or green ribbon"; and in Letter 71, page 242, of a widow "dressed out in green damask".
Summary

We may draw the following conclusions from the references to green in Goldsmith's works:

1. Most of the references use the word "green" in a conventional manner; all of the references in the poems and letters are of this type. Goldsmith alludes only twice to the greenness of vegetation, and each time he combines conventionality with a peculiar phrasing which might suggest that he did not give to the word "green" the meaning normally attached to it.

2. The reference to "a green and yellow dinner" in _She Stoops to Conquer_, if not a cant term, suggests confusion of colours.

3. Variations in green tints are mentioned three times. One mention is explicit (a "pea-green" Chinese jar) and appears to be based on Goldsmith's reading. Another ("mournful green", applied to trees) may be a not-too-happy blend of convention and quotation. The third ("peculiar green" of certain pickles) is most probably a quotation or adaptation of a remark remembered from his youth. We can find no positive evidence that Goldsmith could distinguish between various tints of green.
CHAPTER VII
COLOUR REFERENCES — YELLOW

1. Poetry.

The only reference to yellow in Goldsmith's poems is found in line 293 of The Traveller, in the description of Holland:

"The slow canal, the yellow-blossom'd vale".

Goldsmith is here thinking of the Dutch tulip fields, but yellow is only one of the many colours that tulips display. It is not impossible that the phrase "the yellow-blossom'd vale" came to the poet's mind while he was actually walking among the tulips; but the context, and the fact that he mentions Holland last of the Continental countries (although it was the country from which his wanderings started) strongly suggest that the whole passage was written long after he had left Holland. We may therefore conclude that the term "yellow-blossom'd vale" may be most plausibly explained in one of two ways: that, of the many colours of tulips, the yellow made the deepest and most abiding impression on Goldsmith's mind; or that, owing to lack of power of hue discrimination, he lumped all the bright colours together under the general heading of "yellow".

In neither *The Vicar of Wakefield* nor the letters of Goldsmith is there any reference to yellow.

4. Plays.

In Act II of *She Stoops to Conquer*, page 90, Goldsmith uses a phrase which might have been (and, indeed, probably was) taken directly from his tailor's lips: "brown and yellow mix but very poorly".

The only other reference to yellow in the plays, "a green and yellow dinner", has already been discussed in Chapter VI, with the conclusion that it was either a cant term or an instance of colour confusion. While "green and yellow" does not convey an idea of festive brilliance, yellow — in the form of golden or gilt articles — would certainly have a part in the decorations and equipment at a banquet: therefore the word "yellow" in the phrase can not be called entirely incorrect, although (as in the case of the tulips) we can only hazard a guess as to the limits of the range of colours which Goldsmith would describe as yellow.

5. Essays.

Goldsmith's essays contain eight references to yellow, all of them in the letters of the Citizen of the World. One of them indeed occurs in *The Bee*, but in an essay in that magazine which Goldsmith, in his economical
COLOUR REFERENCES — YELLOW

way, repeated verbatim the following year when the series of Citizen letters was drawing near its end and even his fertile imagination was unable to keep pace with a twice-weekly deadline.

Among these references we find, for the first time in our journey along the spectrum, mentions of colour which appear to be based on the writer's personal observations and with which we can entirely agree. There are three such references in the Citizen letters:

Letter 12, page 176, "only flambeaux emit a yellow gloom" (in a death-chamber).

Letter 54, page 224, "his stockings of silk, though newly washed, were grown yellow by long service".

Letter 117, page 287, "the dying lamp feebly emits a yellow gleam". This reference also occurs in The Bee, No. 4, page 332, in the essay "A City Night Piece", almost the whole of which is repeated as Citizen Letter 117.

Three references appear to have been derived from Goldsmith's reading of books on the East:

Letter 39, page 208, "(his pigtail) was terminated by a bunch of yellow roses".

Letter 98, page 269, "yellow bird" (mentioned three times in a quoted Chinese fable).

Letter 114, page 284, "Their complexions were of a bright yellow" (description of Kashmir beauties).
One reference, in the fairy-tale in Letter 48, page 217, is entirely fanciful: "white mice with yellow eyes".

The remaining reference occurs on page 251, in Letter 79, which deals with the English theatre, partly in general terms and partly with plays (not specified) which seem to have been running at the time the letter was written. If this is an allusion to a particular character in one of these plays, it may have been derived either from personal observation or from the conversation of others; and, since the facts could be easily checked, we may assume that the colour was correctly stated, or the wits of the day would certainly have made much of the error. The passage reads: "in short, all are in motion, from the theatrical letter-carrier in yellow clothes, to Alexander the Great that stands on a stool."

Subsidiary tints: Buff

The word "buff" is used twice only, in The Bee, No. 2, page 320: "a sort of a buff waistcoat" and later "buff gloves". As the articles are said to be in a museum in Sweden, the reference is almost certainly derivative.

Flaxen

In Act II of She Stoops to Conquer, page 94, Mrs. Hardcastle says: "I have often wanted him to throw off his great flaxen wig". While this is really an indirect order
COLOUR REFERENCES - YELLOW

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to the property-man and not a description of an observed object, there can be no question that Goldsmith's use of the word "flaxen" here (the only occasion on which he uses it) is correct.

Gold, golden

In line 70 of The Traveller we find the expression "golden sands", which in most contexts would be merely a trite way of saying "yellow sands". It occurs, however, in a passage whose theme is that every country is by its own natives considered the most favoured on earth. The complete couplet runs —

"The naked negro, panting at the line,
Boasts of his golden sands and palmy wine".

Although the factual foundation for this statement is open to question, we may allow it to pass as an example of poetic licence if Goldsmith intended "golden" here to mean "gold-bearing": he could hardly expect his readers to believe that any human being could boast of living in a sandy desert, whatever its colour.

The colour-name "gold" (or the French equivalent, or) occurs once in the Citizen letters and four times in the plays. Since on all five occasions it is used as a "tailors' term", we may simply present the quotations:

Letter 52, page 221, "That personage . . . in blue-and-gold".
COLOUR REFERENCES – YELLOW

The Good-Natured Man, Act III, page 72, "The white and gold then"; and four lines later, "The blue and gold" (both with reference to Honeywood's suits).

She Stoops to Conquer, Act II, page 90, "I intend opening the campaign with the white and gold (suit)"; and in the fourth speech after this, "Don't you think the ventre d'or waistcoat will do with the plain brown?" The last remark was the occasion for the statement to which we have already referred, "brown and yellow mix but very poorly".

There is a somewhat ambiguous use of the word "golden" in Citizen Letter 37, page 204. The greater part of this letter is enclosed within quotation marks and is said to be "an allegory taken from the Zendavesta of Zoroaster". The blessings of a primitive Eden are thus enumerated: "the honeyed blossom, the refreshing breeze, the gliding brook, the golden fruitage". This reference does not call for detailed study, since it is ostensibly a quotation, and since the epithet "golden" in such a picturesque passage may apply to richness of quality or yield instead of to colour.

Summary.

1. Yellow is the first colour, counting from the violet end of the spectrum, regarding which Goldsmith expresses himself with apparent confidence in his own
judgment. The single reference in his poetry, and at least three of the references in his prose, seem to be based directly on personal observation. In contrast, all of his references to blue and all (except perhaps "the green mantle of spring") of his references to green have been shown to be more probably derived from other sources.

2. There are grounds for suspecting that Goldsmith included under the term "yellow" some colours that a person of normal colour vision would not describe as yellow or modifications of yellow.

3. It may be significant that, in writing of clothes, Goldsmith refers twice to the combination of blue and gold, twice to the combination of white and gold, and once to the combination of brown and yellow. He never refers to combinations of reds and yellows, although such combinations are frequent in luxurious garments and dress uniforms, and probably — in an age of colour in dress — were common in his own wardrobe. This may support the theory that his range of "yellow" extended through the orange and well into the reds.

1 See Appendix III, which reproduces Goldsmith's tailor's bills from 1767 to 1773.

2 Dalton included in yellow the red, orange, yellow, and green of normal observers: see Appendix I.
CHAPTER VIII

COLOUR REFERENCES — RED

1. Poetry

The word "red" occurs three times in Goldsmith's poems, each time in a conventional or figurative sense. Act III of Lines 35 and 36 of The Captivity read:

"And shall not Heaven for this avenge the foe, Grasp the red bolt, and lay the guilty low?"

Goldsmith uses the phrase "glowing intense like the red bolt of heaven" in Essay 15, page 384, as a paraphrase of "incensus ut fulmen". We may therefore conclude that the word "red" in the quoted couplet is merely a conventional epithet applied to the glare of lightning, and is not an adjective transferred to the bolt from the bloodshed or conflagration which it causes. In any case, personal observation is not involved.

The name of a tavern appears in the first couplet of Description of an Author's Bedchamber:

"Where the Red Lion, staring o'er the way, Invites each passing stranger that can pay . . . ."

The third reference is found in lines 99 and 100 of Retaliation, satirising David Garrick the actor:

"Like an ill-judging beauty, his colours he spread, And be-plaster'd with rouge his own natural red."

The meaning here, as is proved by the context, is that
Garrick continued to be an actor after he had stepped off the stage, and concealed his natural qualities behind a mask of affectation. The words "natural red" are almost meaningless in a literal sense, and have obviously been chosen as an antithesis to the artificiality of rouge.

2. Novel

There are seven references to red in *The Vicar of Wakefield*, the first of these, in chapter 8, page 118, mentioning a well-known bird by name: "the familiar red-breast came and pecked the crumbs".

Three of the references are to redness of the human features, in each case with an implication of contrast to normal or paler complexions. Awareness of this contrast is no proof of colour sensitivity, since the distinction is marked by a difference in reflection of light as well as a difference in colour. It is recorded of Dalton, for instance, that he "said a florid complexion looked blackish-blue on a white ground." Thus a person with no power of hue discrimination in the red range can discern a blush by the darkening of the face; and, knowing from experience that the darker shade is described as red, he may use such terms as "blush" and "redden" with confidence and correctness.

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1 See Appendix I.
The three references mentioned in the preceding paragraph are:

Chapter 10, page 121, "my wife observed . . . that working after dinner would redden their noses".

Ibid., "all blowzed and red with walking".

Chapter 18, page 133, "I immediately recollected this good natured man's red pimpled face".

Red hair is mentioned once in the novel, in a context which leaves open the question whether Goldsmith could distinguish hair of the varying hues generally described as red. In chapter 30, page 158, we read: "'I ask pardon, madam,' interrupted Jenkinson, who was by, 'but be so good as to inform me if the fellow wore his own red hair.'"

In chapter 9, page 120, the Vicar mentions his neighbour Flamborough's daughters " flaunting with red top-knots". Apparently red was a favourite colour in certain classes of society for the decorative bow known as a top-knot: Webster's Dictionary, after defining the word, quotes from Sir Walter Scott "a great, stout servant girl, with cheeks as red as her top-knots". A red top-knot may well have been regarded as symbolic of the less refined type of woman in Goldsmith's as in Scott's day, as both quotations seem to suggest, and therefore the Vicar's remark may be classified as a conventional use of the adjective.
COLOUR REFERENCES - RED

The remaining reference may perhaps be based on Goldsmith's personal observation, although the term "red" applied to the glow of a fire is standardised. In chapter 22, page 144, we read: "... the house bursting out into a blaze of fire, and every aperture red with conflagration".

3. Letters

In his personal letters Goldsmith uses the word "red" twice, once with allusion to the contrast between paleness and redness of complexion, and once in a context where it may be equivalent to "bright colour" and where it is certainly used in a very general sense:

Letter 2, page 23, "the Duchess has too much red in her complexion".

Letter 8, page 29, "I have not yet seen my face reflected in all the lively display of red and white paints on any sign-posts in the suburbs".

4. Plays

The solitary reference to red in *The Good-Natured Man* (Act IV, page 77) merely expresses an amusing superstition: "It's the worst luck in the world, (to be married) in anything but white. I knew one Bett Stubbs, of our town, that was married in red, and, as sure as eggs is eggs, the bridegroom and she had a miff before morning."

There are two references to red in *She Stoops to Conquer*, both applying to complexions: in Act II, page 95,
"cheeks as broad and red as a pulpit cushion"; and in Act IV, page 101, "that pleasant, broad, red . . . face". The first of these is notable as providing one of Goldsmith's rare colour similes. The phrase "as red as a pulpit cushion" is almost certainly a relic of the childhood days of the son of the Rev. Charles Goldsmith, and is picturesque and effective, if not precisely accurate. If we could be assured that the simile was original with the playwright and not taken from the more probable sources of the conversation of his father or of his clerical elder brother, or even of his mother (who no doubt was familiar with the tidying and cleaning of her husband's pulpit), there might here be evidence of some value in our present study; but Goldsmith's habit of borrowing choice phrases to incorporate in his work makes it unsafe to assume that this was his own.

5. Essays

Of eleven references to red in the Citizen of the World letters, three are obviously derived from Goldsmith's reading about other countries and periods:

Letter 3, page 168, "I smiled at the blue lips and red foreheads of the Tonguese".

Ibid., "The Ostiачs, powdered with red earth".

Letter 116, page 286, "The ancients . . . have praised . . . red hair".
Redness (natural and artificial) of the English complexion is the subject of two allusions in Letter 3, page 169: "red cheeks . . . are not only seen here, but wished for", and "they use . . . a red powder for the face on some particular occasions".

The other six items call for only brief mention: three "tailors' terms" (Letter 52, page 222, "a fiddle-case hanging at his neck by a red riband"; Letter 78, page 250, "an old red petticoat"; and Letter 79, page 251, "guards in red clothes"); one flight of fancy (Letter 48, page 217, "red mice"); and two standardised expressions (Letter 58, page 228, "which do you choose, white or red (wine)?" and Letter 122, page 292, "buildings of red brick").

The Bee contains one allusion to red complexion and one anecdote where red is either the colour of the complexion in a portrait or perhaps merely the typification of bright colour:

No. 2, page 318, "A lady of no quality can be distinguished . . . only by the redness of her hands".

No. 6, page 342, "an alehouse keeper . . . pulled down his old sign, and put up the Queen of Hungary. Under the influence of her red face and golden sceptre, he continued to sell ale".

There are two references to red in the miscellaneous Essays. We have already mentioned, on page 55 of this paper,
the somewhat inflated translation (in Essay 15, page 384) of "incensus ut fulmen" as "glowing intense like the red bolt of heaven". The other allusion, in Essay 5, page 364, is obviously derivative: "Your ancient Briton formerly powdered his hair with red earth like brick-dust".

Subsidiary tints: Blushing, etc.

It is noteworthy, in view of our comments above about the difference in light reflection between a pale and a red complexion, that Goldsmith uses the words "blush" and "flush", and derived terms, with great freedom. We have mentioned thirty instances of his use of the word "red" in all its applications, but his allusions to blushing are equally frequent. It is sufficient for our present purpose to list these allusions. A few of them, it will be noted, might be described as conventional, but there can be no question that Goldsmith showed far more ease and confidence in his mentioning of blushes than in his use of any of the colour adjectives which we have so far considered.

1. Poetry

In The Traveller, line 408: "The modest matron, and the blushing maid".

In The Double Transformation, line 20: "Miss frown'd, and blush'd, and then was — married".

In the Epilogue to "She Stoops to Conquer", spoken by Mrs. Bulkley, line 11: "(the maid) blushes when hired".
Ibid., line 14: "The unblushing bar-maid of a
country inn".

The Hermit, lines 83-84: "But while he spoke, a
rising blush his love-lorn guest betray'd".

In the Epilogue to "She Stoops to Conquer", intended
to be spoken by Mrs. Bulkley and Miss Catley, lines 3 and 4
of Miss Catley's second song: "you seldom are slack, when
the ladies are calling, to blush and hang back".

2. Novel

Chapter 6, page 116: "This was said without the
least design: however, it excited a blush".

Ibid.: "The readiness with which she undertook to
vindicate herself, and her blushing, were symptoms . . . ."

Chapter 15, page 129: "bad men . . . only blush at
being detected in doing good".

Chapter 23, page 145: "She now lost that unblushing
innocence".

Chapter 28, page 154: "Hold, sir," replied my son,
"or I shall blush for thee".

Chapter 31, page 160: "But no decorums could restraints
the impatience of his blushing mistress to be forgiven".

Chapter 31, page 162: "even Olivia's cheeks seemed
flushed with pleasure". (It may be noted that this is the
only occasion on which Goldsmith refers to "flushing".)
3. Letters

Letter 6, page 26: "nothing in it at which I should blush".

Letter 9, page 30: "to say without a blush how much I esteem you".

4. Plays

The Good-Natured Man, Act IV, page 78: "I presumed to reprove you for painting: but your warmer blushes soon convinced the company, that the colouring was all from nature".

Ibid., Act V, page 81: "Let him learn to blush for his crimes".

She Stoops to Conquer, Act III, page 96: "That natural blush is beyond a thousand ornaments".

5. Essays

In the Citizen of the World letters —

Letter 12, page 177: "pageants that posterity . . . shall blush to own".

Letter 13, page 178: "A person attended us, who, without once blushing, told a hundred lies".

Letter 16, page 180: "how should they blush to see their own books . . . filled with . . . fables".

Letter 39, page 207: "mamma pretended to be as degagée as I, and yet I saw her blush in spite of her".
Letter 41, page 209: "My friend seemed to blush for his countrymen".

Letter 46, page 215: "when a first-rate beauty, after having with difficulty escaped the small-pox, revisits her favourite mirror . . . she no longer beholds the . . . speaking blush . . . ."


Letter 47, page 247: "those (works) of contemporary genius engage our heart, although we blush to own it".

Letter 109, page 279: "foremost to propagate their unblushing faces upon brass".

Letter 114, page 284: "The blush and innocence of sixteen".

Ibid.: "But, of late, all the little traffic of blushing, ogling, dimpling, and smiling, has been forbidden by an act".

In the miscellaneous Essays —

Essay 12, page 377: "The ingenuous blush of native innocence".

Cherry

The word "cherry" is used only once as an adjective meaning "red". In Citizen of the World Letter 46, page 215, in the passage quoted above about a beauty ravaged by small-pox, we find the word in a context which can be described
as stereotyped: "she no longer beholds . . . the cherry lip". In all the works examined, Goldsmith makes only one other reference to the colour of lips; in Citizen of the World Letter 3, page 168, he writes: "I smiled at the blue lips and red foreheads of the Tonguese". These two references to the colour of lips — one stereotyped, and the other obviously derived from his reading — offer a significant contrast to the wealth of references to redness of the complexion. The reason may well be that the most usual variations in the colour of lips in England extend through a range of different tints of red, with occasional purples which, in cold weather or other circumstances, may approach blue. To a person who lacks hue discrimination these variations would be practically indistinguishable.

Crimson

The Vicar of Wakefield, chapter 4, page 114, contains the word "crimson" in a phrase which may have come either from Goldsmith's tailor or from the conversation of some feminine relative or acquaintance, but which we can hardly credit to his personal observation: "my wife herself retained a passion for her crimson paduasoy".

A rather surprising figure of speech occurs in Citizen of the World Letter 114, page 284, in describing the ladies of Kashmir: "Their complexions were of a bright
yellow . . . while the crimson tulip seemed to blossom on their cheeks". The concluding phrase may have been lifted bodily from some other author, or it may have been concocted by Goldsmith himself in imitation of flowery Oriental style: in either case its inclusion in this letter constitutes an admission of knowledge that crimson is a principal colour of tulips. The importance of this point lies in its relation to the fact, which we have already considered on page 48, that in line 293 of The Traveller Goldsmith described the tulip-fields of Holland as "the yellow-blossom'd vale".

The collected Letters of the Citizen of the World were published in 1762, and The Traveller was published in 1764. If Goldsmith knew, at least two years before The Traveller appeared, that some tulips — if not, as the reference in the letter seems to suggest, typical tulips — were crimson, why should he leave in his well-polished poem a line describing these flowers generally as yellow? We have already in this chapter seen so many of his references to red cheeks that we may be certain that he understood crimson to be a variety of red. The evidence of his two statements regarding the colour of tulips therefore favours the conclusion that for him there was little, if any, distinction between red and yellow; and we remember again that Dalton's "yellow" included the red, orange, yellow and green of others.
The only other reference to crimson in Goldsmith's works is found in Essay 12, page 377, where he enumerates various natural charms which are neglected or despised by a depraved mind. Among these charms, whose list begins with "the ingenuous blush of native innocence" (already quoted), he includes another reference to complexion tints: "the very crimson glow of health".

Pink

Pink is mentioned only once, in Essay 10, page 373, in a "tailors' term": "they (female warriors) may be clothed in vests of pink satin".

Purple

The single instance of use of the word "purple" is in an entirely conventional context. It is found in Threnodia Augustalis, lines 94-95:

"Where, wildly huddled to the eye,  
The beggar's pouch and prince's purple lie."

Rosy

"Rosy" is a long-dead metaphor: the identification of the colour of a rose with red is at least as old as Homer's singing of the "rose-fingered dawn". Long before Goldsmith's time "rosy" had become a stereotyped epithet for fresh and healthy cheeks. Goldsmith uses it in this way in The Vicar of Wakefield, chapter 9, page 120, when he makes the Vicar mention "my neighbour Flamborough's rosy daughters"—again a complexion reference.
Ruddy

Of five instances of use of the adjective "ruddy", three apply it to the description of complexions, while expressing or implying the idea of contrast to pallor:

The Traveller, lines 18-19:

"Where all the ruddy family around
Laugh at the jests or pranks that never fail".

Letter 5, page 26: "the ruddy healthful complexion" (of Dutchmen).

Ibid.: "The one (Dutch woman) is pale and fat, the other (Scotswoman) lean and ruddy".

In the other two instances Goldsmith uses "ruddy" as a general synonym of "red". (This usage, justified by derivation and by the example of such writers as Milton and Dryden, is now mostly restricted to the description of complexions.) In both cases the application — to the redness of dawn and to the redness of lean meat — is conventional:

The Captivity, Act II, line 45: "See the ruddy morning smiling".

The Haunch of Venison, line 4: "The fat was so white, and the lean was so ruddy".

Scarlet

The Citizen of the World Letters, alone among the works examined, use the word "scarlet". Not one of the six references appears to be original. Two of them are
without doubt derived from Goldsmith's reading about Eastern countries, perhaps combined with excursions of fancy:

Letter 48, page 217: "the incomparable Nanhoa, queen of the scarlet dragons".

Letter 108, page 277: "In the most savage parts of India they are possessed of the secret of dyeing vegetable substances scarlet".

The other four references are "tailors’ terms", with some blending of information from reading:

Letter 7, page 172: "their soldiers (i.e. British soldiers) wear scarlet, which is with us (i.e. the Chinese) the symbol of peace and innocence".

Letter 52, page 221: "he in embroidered scarlet" (referring to a dancing-master or a fiddler).

Letter 57, page 227: "twenty cardinals, with all their scarlet".

Letter 90, page 262: "(a country gentleman, on his arrival in London) puts on the furred cap and scarlet stomacher".

Summary.

The principal conclusions to be drawn from analysis of Goldsmith's uses of "red" and allied terms are these:

1. Goldsmith refers more often to red than to any other colour of the spectrum. If subsidiary tints (including references to blushing) are included, the references to
red outnumber those to blue, green, and yellow combined. Actual numbers of such references are:

<table>
<thead>
<tr>
<th>Original colour</th>
<th>Subsidiary tints</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Green (excluding the meaning of &quot;grassy plot&quot;)</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Yellow</td>
<td>11</td>
<td>8 (9?)</td>
</tr>
<tr>
<td>Red</td>
<td>30</td>
<td>48</td>
</tr>
</tbody>
</table>

(The number of references to yellow is uncertain, because of the different interpretations which may be given to the expression "golden fruitage".)

2. We have already seen that Goldsmith showed some diffidence in his references to blue and green, but more confidence in his use of the word "yellow". He shows still more confidence in using the word "red" in discussion of complexions: six instances of use of "red" itself, as well as thirty of "blush", "flush", and derivatives, one of "cherry", two of "crimson", one of "rosy", and three of "ruddy", apply to the tints of the human face and hands. Among these forty-three references there are a number of cases of conventional usage (e.g. "the unblushing bar-maid of a country inn"), but apparently there can be no question that Goldsmith had often noticed blushing and facial redness and wrote of these phenomena with ease and assurance. On the other hand, among the remaining thirty-five references
to colours of the red group it is doubtful whether any can be attributed to personal observation. We may therefore conclude that Goldsmith had no hesitation in mentioning redness of complexions, but that with regard to redness elsewhere he showed less confidence than with regard to yellow. The most probable reason for this behaviour is that, in British complexions at least, redness (of varied hues) generally contrasts only with pallor, and a colour-blind person with no hue discrimination in the red-yellow-green range discerns this contrast as a distinct antithesis of light and dark shades.

3. The profusion of references to redness of the complexion is rendered more noteworthy by the fact, revealed by an earlier chapter of this study, that in all the works examined Goldsmith refers only once to the blue eyes so common in England and in his native country of Ireland, and then the source of the reference is open to doubt.

4. On one occasion Goldsmith compares red cheeks to crimson tulips. On page 48, discussing the epithet "yellow-blossom'd" applied to the tulip-fields of Holland, we had granted the possibility that, of many colours of tulips observed by Goldsmith in Holland, yellow had impressed him most; but this possibility appears to be ruled out by his stressing "crimson" as an attribute of tulips in the comparison with cheeks. It is difficult for us to avoid the
conclusion that his "yellow" included his "crimson", and therefore certainly included orange and some reds. There now appears a similarity between his colour vision, as we deduce it from the evidence so far presented, and that of Dalton.
CHAPTER IX

COLOUR REFERENCES — WHITE

It is to be expected that in most cases the "white" of colour-blind persons will correspond with that of normal observers. An exception to this rule is caused by the fact that at a certain point within the green range of the spectrum dichromatic observers cease to see colour, and therefore at that point they are liable to confuse green with white or very light grey. The occasions in ordinary life when the precise tint concerned occurs and is likely to be confused with white by a dichromat are, of course, not very frequent. Goldsmith's references to white are only slightly more numerous than those to red (excluding subsidiary tints), and examination of them in the hope of discovering any evident confusion of white with a particular tint of green is not a very promising project. All of these references are, however, listed here, in order that any significant information of this or other types may be noted; generally no comment is required.

1. Poetry.

The Deserted Village, line 227:
"The white-wash'd wall, the nicely sanded floor".

Epilogue to "The Sisters", lines 37-38:
"Yon patriot, too, who presses on your sight,
And seems, to every gazer, all in white".
The Haunch of Venison, line 4:
"The fat was so white, and the lean was so ruddy".

Threnodia Augustalis, Part II, lines 106 and 114:
"And the new blossom'd thorn shall whiten her tomb."


The Vicar of Wakefield, chapter 4, page 113: "the walls on the inside were nicely white-washed".

Chapter 10, page 121: "the hands never looked so white as when they did nothing".

Chapter 16, page 130: "a hat and white feather".

Chapter 26, page 150: "'My dear sir,' returned the other, 'it was not your face, but your white stockings, and the black riband in your hair, which allured me.'" The significance of this remark becomes evident when it is compared with an earlier passage. The remark was addressed to Moses Primrose by the stranger who had beguiled him into buying a gross of green spectacles with the proceeds from the sale of a horse. In chapter 12, page 124, the attire of Moses on that occasion is thus described: "He had on a coat made of that cloth called thunder and lightning, which, though grown too short, was much too good to be thrown away. His waistcoat was of gosling green, and his sisters had tied his hair with a broad black riband."

Why should Goldsmith consider that the white stockings (not mentioned in the original description) and the
black riband were the parts of Moses' outfit which would most attract a stranger's attention? It seems to be a reasonable answer to that question that "thunder and lightning" and "gosling green" were to Goldsmith merely terms which he had heard used by his tailor or others; that he was aware that clothes described by these terms might be worn acceptably; but that to him these hues were probably only varieties of grey, and that he either could not imagine, or would not take the risk of suggesting, that they would attract more attention than pure black or pure white. The references to white and black in the passage quoted from the stranger's remarks have therefore a definite negative value.

3. Letters.

Letter 8, page 29: "I have not yet seen my face reflected in all the lively display of red and white paints on any sign-posts in the suburbs".

4. Plays.

The Good-Natured Man, Act III, page 72: "The white and gold then" (alluding to a suit of clothes).

Ibid., Act IV, page 77: "Yet I wish you could take the white and silver to be married in. It's the worst luck in the world, in anything but white." The combination of white and silver is unusual, since silver is usually considered to be equivalent to white; but the description of
a dress as "white and silver" may be quite accurate if the silver is in the form of metallic lace or other ornaments, or if the white is combined with the tint usually known as silver-grey. The phrase does not seem to have any significance in the present study.

She Stoops to Conquer, Act II, page 90: "I intend opening the campaign with the white and gold (suit)."

5. Essays.

Citizen of the World Letter 3, page 169: "teeth of a most odious whiteness" (like the following reference, this alludes to English women as seen by a Chinese).

Ibid.; "they use white powder . . . for their hair".

Letter 8, page 173: "a set of teeth . . . whiter than ivory".

Ibid.: "one of these generous creatures, dressed all in white".

Letter 15, page 180: (a calf is speaking) "I was bled every day in order to make my flesh white".

Letter 18, page 183: "a (Chinese) lady dressed in the deepest mourning, being clothed all over in white".

Letter 27, page 194: "all my life I should either eat white bread or brown".

Letter 33, page 201: "His beard was whiter than the feathers which veil the breast of the penguin".
Letter 48, page 217: "a third (Chinese lady) did not lay white enough on her cheek".

Ibid.: "white mice with yellow eyes".

Ibid. et seq.: "white mouse" (in a fairy tale).

Letter 58, page 228: "which do you choose, white or red (wine)?"

Letter 68, page 239: "He always wears a white three-tailed wig".

Letter 76, page 248: "She received the present with one of the whitest hands in the world".

Letter 96, page 267: "The mourning colour . . . of China (is) white".

Letter 111, page 280: "White gowns and black mantles . . . were once the obvious causes of quarrel" (between religious sects).

Letter 114, page 284: "their teeth whiter than their own ivory".

The Bee, No. 2, page 318: "every folding of her white negligee".

Ibid., page 320: "The greatest part of the boys which I saw in the country (Sweden) had very white hair".

Essay 1, page 358: "The next to him was dressed in a large white wig".

Essay 4, page 363: "common sense is seldom swayed by . . . the display of a white handkerchief".
Essay 6, page 369: "our landlord's own family, wrapped in white sheets, served to fill up the procession".

Essay 8, page 371: "white gloves".

Essay 10, page 373: "their hats adorned with white feathers".

Essay 16, page 387: "it requires the most delicate taste ... to employ metaphors in such a manner as to avoid what the ancients call ... the frigid or false sublime. ... Sappho herself is blamed for using the hyperbole ... whiter than snow." It may be pointed out that in the Citizen of the World Letters Goldsmith, imitating Oriental florid style, does not practise what here he preaches; in Letter 3, page 169, he writes of the ladies of the Chinese city of Nanfew: "the snow on the tops of Bao is not fairer than their cheeks".

Pale, pallid

We find in Goldsmith's works seventeen occurrences of the words "pale" (with derivatives) and "pallid". In fifteen of these instances the word is applied to the human countenance, with contrast to rosiness or ruddiness being expressed or implied. "Pallid" is applied once to a corpse, and "pale" once, by transference of epithet, to "consumptive care", so that the usage in these cases is closely allied to that in the other fifteen. It is worthy of note that Goldsmith never uses "pale" to qualify a
COLOUR REFERENCES - WHITE

The references are listed below, individual comment being unnecessary.

The Deserted Village, line 316:
"There the pale artist plies the sickly trade".

The Captivity, Act III, lines 17-18:
"And now, behold! to yonder bank they bear
A pallid corse, and rest the body there."

The Haunch of Venison, line 109:
"A visage so sad, and so pale with affright".

Threnodia Augustalis, line 45:
"Fever, and pain, and pale consumptive care".

The Vicar of Wakefield, chapter 21, page 142: "'But alas! papa, you look much paler than you used to do.'"

Chapter 22, pages 144-145: "the unhappy victim stood pale and trembling".

Chapter 24, page 147: "he came running in, with looks all pale".

Ibid.: "I encouraged my wife, who, pale and trembling, clasped our affrighted little ones in her arms".

Chapter 28, page 152: "a fatal paleness sat upon her cheek".

Chapter 31, page 159: "His face became pale with conscious guilt".

colour ("pale blue", etc.) and never applies it to inanimate objects, where the idea of contrast may be feeble or lacking ("pale moonlight", etc.).
Letter 2, page 23: "'I think her face has a palish cast too much on the delicate order'".

Letter 5, page 26: "I take it that this continual smoking (by Dutchmen) is what gives the man the ruddy healthful complexion he generally wears, by draining his superfluous moisture, while the woman, deprived of this amusement, overflows with such viscidities as tint the complexion, and give that paleness of visage which low fenny grounds and moist air conspire to cause."

Ibid.: (comparing Dutch and Scots women) "The one is pale and fat, the other lean and ruddy".

Letter 12, page 32: "You scarcely can conceive how much eight years of disappointment, anguish, and study, have worn me down. . . . Imagine to yourself a pale melancholy visage . . . ."

Curiously enough the Citizen of the World Letters, which have been such a fruitful source of supply for references in other cases, use the word "pale" only twice:

Letter 28, page 195: "(she) grew old and ill-natured, without ever considering that she should have made an abatement in her pretensions, from her face being pale, and marked with the small-pox."

Letter 57, page 227: "he (a poor author) has grown pale in the study of nature and himself".

Essay No. 1, page 358: "a tall pale figure".
Of four uses of the word "silver" as an adjective, three apply to clothing (when the word may mean "white" or "silver-grey", or may refer to metallic silver ornaments), and the other is stereotyped.

The Good-Natured Man, Act III, page 72: "the brown and silver" (one of Honeywood's suits).

Ibid., Act IV, page 77: "Yet I wish you could take the white and silver to be married in."

Citizen of the World Letter 52, page 221: "that (personage) in green-and-silver (must be) a prince of the blood" (an allusion to fashionable English clothing).

Citizen of the World Letter 85, page 258: "in the night-time, while perhaps the moon diffuses her silver rays" (alleged to be a quotation from "Mê the philosopher").

The word "snowy", in the sense of "white", is used once, in Citizen of the World Letter 46, page 216: "As when the large, unwritten page presents its snowy spotless bosom to the writer's hand . . . ."

It is appropriate to mention here two other cases in which complexions are compared to snow, although the adjective "snowy" is not used. In Citizen of the World Letter 3, page 169, we read: "the snow on the tops of Bao is not fairer than their cheeks" — an allusion, not very
appropriate in the strict sense of colour comparison, to the charms of Chinese ladies. In The Bee, No. 6, page 343, we have a short story which, if Goldsmith's account of it is correct (he describes it as a manuscript oration spoken at the Cicalata Academia in Florence, Italy), would appear to be a translation by himself from the Italian. It contains the sentence: "The rose and lily took possession of her face, and her bosom, by its hue and its coldness, seemed covered with snow."

Summary.

Goldsmith's references to white, in themselves, offer no positive evidence for our purposes, but when taken in relation to the colours which we have already studied they provide some assistance. We may summarise our findings as follows:

1. All of the references to white appear to be such as might be made by a person of normal colour vision. We find no evidence of confusion of white with any other colour, but this is not unexpected, as the mathematical chance of such evidence existing is very small.

2. One reference in The Vicar of Wakefield is particularly significant, as it implies that to Goldsmith pure white and pure black were more striking in appearance than "gosling green" and "thunder and lightning" (the latter presumably a flashy combination of colours). From this we
may deduce that some greens and other colours, which were considered gaudy by other people, appeared subdued to him, and that he probably confused them with greys.

3. He makes free use of "pale" and allied words, practically always in antithesis to the rosy or ruddy hue of a healthy complexion. This reinforces the deduction we obtained from study of his references to red, namely, that in discriminating between pallor and flushing or redness of complexion he found himself in accordance with normal observers and therefore felt on safer ground than in discussion of other colours. The most probable explanation of this would be that to him complexion hues of pale and red appeared merely as light or dark shades.
CHAPTER X

COLOUR REFERENCES – BLACK

As with the references to white, we must not expect the references to be productive of very much direct evidence regarding Goldsmith’s colour vision. Any positive instance of confusion between black and red would be highly important, but its identification would depend on the checking of Goldsmith’s description against common knowledge or the testimony of a normal observer, so that the discovery of any cases of such colour confusion is somewhat unlikely. Analysis of the references to black must be conducted with special caution because the word "black" is used loosely with regard to colour even by persons of normal colour vision, often being applied to dark shades of brown, blue or purple (for example, "black coffee", "a black eye"), and also because the word is commonly used figuratively (as "black magic", "a black frown").

References to black appear more frequently in Goldsmith’s works than references to any other single colour. This is true even if we discard all references by the Citizen of the World to his friend "the man in black" except for the passage introducing the latter. Metaphorical uses of the word "black" are comparatively
few, and references to black clothing (again excluding all except one mention of the attire of the man in black) constitute only about one third of the total number. We may therefore conclude that Goldsmith showed a certain confidence in his description of objects as black which was lacking with regard to other colours, except, perhaps, red complexion tints.

In most cases the references do not call for individual comment; some of them have already been discussed in connection with other colours.

1. Poetry

The Deserted Village, line 318 (possibly a metaphorical use):

"There the black gibbet glooms beside the way".

Description of an Author's Bed-chamber, lines 3-4:

"Where Calvert's butt, and Parsons' black champagne,
Regale the drabs and bloods of Drury lane".

We may have in the above couplet an instance of confusion of the red colour of champagne with black, but it is equally possible that "black" is used here in another sense, perhaps as the equivalent of "adulterated" or "inferior". Goldsmith must have been familiar with the common classification of champagnes as white and red, and therefore we would not be justified in citing this as an example of error in description of colour.
Ibid., line 14:
"And brave Prince William show'd his lamp-black face".

Epilogue spoken by Mr. Lee Lewis, line 9:
"In thy black aspect every passion sleeps".

Epilogue to "The Sisters", lines 39-40:
"If with a bribe his candour you attack, He bows, turns round, and whip - the man's in black!"


The Vicar of Wakefield, chapter 8, page 118: "two blackbirds answered each other from the opposite hedges".

Chapter 8, page 119: "This sportsman . . . had shot one of the blackbirds that so agreeably entertained us".

Chapter 10, page 121: "Blackberry" (name of a horse).

Chapter 12, page 124: "his sisters had tied his hair with a broad black riband".

Chapter 26, page 150: "it was not your face, but your white stockings, and the black riband in your hair, that allured me." The significance of this passage has already been discussed on pages 74 and 75 of this paper.

3. Letters.

Letter 5, page 25: "upon a head of lank hair he (a Dutchman) wears a half-cocked narrow hat laced with black ribbon".

Letter 9, page 30: "my landlady's daughter shall frame them (maxims) with the parings of my black waistcoat."
4. Plays.

The Good-Natured Man, Act III, page 73: "He was master of the ceremonies to the black queen of Morocco" (apparently a side-show at a fair).

She Stoops to Conquer, Act II, page 95: "she has two eyes as black as sloes".

Ibid., Act V, page 104: "Do you see any thing like a black hat moving behind the thicket?"

5. Essays.

Citizen of the World Letter 2, page 168: "I have seen five black lions and three blue boars . . ." This passage has already been discussed above on pages 33 and 34 of this paper.

Letter 3, page 169: "how very black their teeth!"

Ibid.: "they use . . . black powder, for their hair".

Ibid.: "They (English women) like to have the face of various colours, as among the Tartars of Koreki, frequently sticking on with spittle little black patches on every part of it, except on the tip of the nose, which I have never seen with a patch. You'll have a better idea of their manner of placing these spots, when I have finished a map of an English face patched up to the fashion, which shall shortly be sent to increase your curious collection of paintings, medals, and monsters." This passage has been quoted here at length for its peculiar interest. Goldsmith
alludes to "various colours" and asserts that the decorations of an Englishwoman's face are worthy of being mapped by a Chinese visitor for display in a Chinese museum; but the only decoration which he describes is black patches. In the paragraph preceding the one just quoted he writes "they use . . . a red powder for the face on some particular occasions", suggesting that red was not the principal one among the "various colours", and stimulating a curiosity which he attempts to satisfy only with an account of black patches. The possibility that complexion tints and other colours appeared to him only as shades of grey, and that consequently patches of pure black would appear to him much more striking than cosmetics of other colours, offers itself as a reasonable explanation of the passage quoted, and corroborates deductions which we have previously made from certain references to other colours.

Letter 5, page 171: "there is a benevolent subscription on foot . . . to assist Black and All Black, in his contest with the Padderen mare."

Letter 6, page 171: "traversing the black deserts of Kobi".

Letter 8, page 173: "What though they want black teeth . . . yet still they have souls" (supposed to be a Chinese appraisal of English women).
Letter 12, page 176: "The bed is surrounded with priests and doctors in black".

Letter 13, page 177: "a gentleman, dressed in black, perceiving me to be a stranger, came up". This is our introduction to "the man in black", who re-appears frequently in the Citizen of the World Letters. Subsequent references to him are not quoted here.

Letter 13, page 178: "He reminded me of the black magicians of Kobi."

Ibid.: "... black coffins . . ."

Letter 27, page 193: "To be obliged to wear . . . a black coat, when I generally dressed in brown" (alleged objection to entering holy orders).

Letter 37, page 205: "an ocean, which appeared unnavigable from the black mists that lay upon its surface" (in an allegorical story).

Ibid.: "a gloomy fiend . . . his colour black and hideous".

Letter 48, page 217: "a fourth (Oriental beauty) did not sufficiently blacken her nails."

Letter 54, page 224: "round his neck he wore a broad black riband".

Ibid.: "he wore . . . a sword with a black hilt".

Letter 65, page 236: "four black servants that were stuck behind one of the equipages".
Letter 88, page 261: "she was called the black-eyed princess, from two black eyes she had received in her youth, being a little addicted to boxing in her liquor."

Letter 90, page 262: "An admiral . . . mobbed up in double night-caps . . . distinguishable from his wife only by his black beard and heavy eyebrows."

Letter 96, page 267: "The mourning colour of Europe is black."

Ibid., pages 267-8 (regarding a period of mourning ordered for the late king): "If they send me down from court the grey undress frock or the black coat . . . I am willing enough to . . . wear both; but . . . to be obliged to wear black and buy it into the bargain, is more than my tranquillity of temper can bear. . . . what sort of a people am I amongst; where being out of black is a certain symptom of poverty . . . ?"

Letter 98, page 269: "But, bless me, what numbers do I see here — all in black" (in the law-courts).

Letter 106, page 275: "Upon the death of the great . . . (the undertaker) provides the long cloak, black staff, and mourning-coach".

Letter 111, page 280: "White gowns and black mantles . . . were once the obvious causes of quarrel".

Letter 114, page 284: "Their black teeth and plucked eyebrows" (referring to Chinese beauties).
Letter 114, page 284: "the black beauties of Benin".
Letter 118, page 288: "They were covered from head to foot with long black veils".

_The Bee_, No. 2, page 321: "They feel, in short, as little anguish . . . as the undertaker, though dressed in black, feels sorrow at a funeral."

_The Bee_, No. 5, page 336: "'I got them all safe home, with no other damage than a black eye".

_Essay No. 1_, page 357: "A gentleman in a black wig".

_Ibid._, page 358: "I had an opportunity of observing the laws, and also the members of the society. The president, who had been, as I was told, lately a bankrupt, was a tall pale figure, with a long black wig; the next to him was dressed in a large white wig, and a black cravat; a third, by the brownness of complexion, seemed a native of Jamaica; and a fourth, by his hue, appeared to be a blacksmith." This passage is similar in one characteristic to the quotation concerning Moses Primrose's black riband and white stockings discussed on pages 74 and 75 of this paper, and to the quotation concerning black face patches discussed on pages 87 and 88: namely, that the blacks and whites are picked out as the salient features in combinations of these with other colours. (The third man's "brownness of complexion" need not be discussed here: perhaps Goldsmith himself would have had difficulty in giving a satisfactory
COLOUR REFERENCES – BLACK

explanation of the allusion to Jamaica.) Goldsmith's descriptions of the first and second members of the society suggest that the parts of their attire not mentioned were neither black nor white. The wearing of wigs indicates that these men made some pretensions to being well dressed and that at least some of their garments would have been coloured, in accordance with the fashion of the period. (Even if the society was entirely fictitious, this reasoning would still be valid.) Our conclusion must be, as in our analysis of the two quotations referred to earlier in this paragraph, that few, if any, colours appeared to Goldsmith to be so noticeable as pure black and pure white, and that possibly all colours except these two appeared to him merely as shades of grey.

Essay No. 5, page 366: "one of which she was reported to have killed with a black-hafted knife."

Essay No. 26, page 403: "I gave my two eldest boys ... eighteen-pence apiece to go to Sudrick fair, to see the court of the Black King of Morocco".

Subsidiary tints: Dark (of hue)

The word "dark" is not used by Goldsmith to qualify colours (as in the term "dark blue"). It is used alone twice in what appears to be a colour sense, but in the first of these instances as quoted below the use may well be metaphorical, and the other quotation occurs in an allegory, neither of them being significant for our purpose.
COLOUR REFERENCES — BLACK

The Deserted Village, line 352:
"Where the dark scorpion gathers death around".

Citizen of the World Letter 37, page 205 (an allegory: this quotation describes an ocean lying between the Valley of Ignorance and the Land of Certainty): "Its unquiet waves were of the darkest hue, and gave a lively representation of the various agitations of the human mind."

Dusky

The word "dusky" is used once to denote darkness of colour, in the sense of "blackened with smoke". It will be noted that there is a similarity of idea in this homely allusion and in the statement quoted on page 91 — "a fourth, by his hue, appeared to be a blacksmith."

The Deserted Village, line 245:
"No more the smith his dusky brow shall clear".

Summary.

1. Goldsmith uses the word "black" more frequently than the name of any other single colour. While some of his uses of the word are metaphorical or conventional, we find that he often describes objects as black from personal observation, in cases where his judgment would apparently be confirmed by persons of normal colour vision. We find no passages in his works where there is any definite evidence that he confused black with any other colour.
2. We have found three passages involving the mention of black, with or without white, which suggest that black and white were to Goldsmith the most striking of colours, with the corollary that all other colours seemed to him to come between these as various shades of grey.

3. Although Goldsmith writes of black so freely and confidently, he uses the allied term "dark" (of hue) only twice — once in a context where it might be either literal or metaphorical, and once in an allegory where it is symbolic and its precise meaning is unimportant — and the term "dusky" only once. These facts might imply some hesitation or uncertainty in dealing with dark hues other than actual blackness: if he had such a feeling, it might have been caused by the memory of embarrassments caused by his confusing of certain dark colours with dark grey or near-blackness.
CHAPTER XI

COLOUR REFERENCES — GREY

The colour grey is very commonly observed in our surroundings and mentioned in our conversation. We find it in the expanses of sky and sea, in rocks and soils, in buildings of wood and stone, in articles and materials of common use, and widespread in the animal and vegetable kingdoms; and when the appearance of objects of other colours is affected by age, fading or dirt, the alteration in hue is generally towards greyness. Since we have noted so many references to other colours in Goldsmith's works, we might expect him to use the word "grey", which would seem to be comparatively safe, with ease and confidence.

On the contrary, his references to grey are remarkably few and limited in scope. There are in all eleven such references, which are quoted below with enough of the context to obviate, in most cases, the necessity of individual comment. Five of these references directly concern the conventional idea of grey hairs as a symbol of age or venerability; two are closely allied to that idea, referring to grey wigs worn for the purpose of creating an impression of gravity or respectability; two refer in a more or less general way to clothing; one is allegorical, and may refer to hair or clothing, if indeed it has any particular
meaning of any consequence; and one, an allusion to a grey mare in the scene of *She Stoops to Conquer* where the oafish Tony Lumpkin first becomes prominent, is inserted merely as an incidental detail of character-drawing.

1. Poetry.

*Threnodia Augustalis*, lines 123-4:

"There Faith shall come a pilgrim grey,  
To bless the tomb that wraps thy clay".

The *Threnodia Augustalis* is perhaps the least meritorious of Goldsmith's poems. He himself apologises for it in the "Advertisement" which precedes it with the words "It was prepared for the composer in little more than two days; and may therefore rather be considered as an industrious effort of gratitude than of genius." The "grey" in the quoted couplet may refer to the grey hair of old age, or to the subdued (or dusty) appearance of the garments which a pilgrim would be expected to wear; or it may have appealed to Goldsmith merely as a convenient rhyme.

*Ibid.*, Part II, line 17:

"The modest matron, clad in homespun grey".

Although a reference to clothing, this obviously did not originate in the tailor's shop. It may well be attributed to personal observation, perhaps being based on recollections from the poet's youth in rural Ireland.

*The Deser ted Village*, line 222:

"Where grey-beard mirth, and smiling toil retired".

The Vicar of Wakefield, chapter 14, page 126: "His locks of silver grey venerably shaded his temples".

Chapter 14, page 127: "'Was he not a venerable-looking man, with grey hair . . .?"

Chapter 17, page 133: "to bring your grey hairs to the grave".

Chapter 28, page 154: "curses that must soon descend to crush thy own grey head with destruction".

3. Letters.

The personal letters have no references to grey.

4. Plays.

She Stoops to Conquer, Act I, page 88:

Second Fellow. . . . To be sure, old 'squire Lumpkin was the finest gentleman I ever set my eyes on. . . . he kept the best horses, dogs, and girls in the whole county.

Tony. Ecod, and when I'm of age I'll be no bastard, I promise you! I have been thinking of Bett Bouncer, and the miller's grey mare to begin with.

5. Essays.

Citizen of the World Letter 29, page 196: "You may distinguish him from the rest of the company by his long grey wig."

Letter 71, page 242: "my friend, in superlative finery . . . a grey wig combed down in imitation of hair".

Letter 96, page 267: "If they send me down from court the grey undress frock (part of the conventional
mourning attire, on the occasion of the death of George II) . . . I am willing enough (to wear it)".

Summary

Goldsmith's references to grey are comparatively few, and in all instances are more or less conventional or general in type. It would appear that, consciously or unconsciously, he avoided frequent or specific allusions to this colour. The evidence here has a possible negative value. Why should Goldsmith avoid mention of a colour which is of common occurrence in natural and artificial environments, and which might well be called the typical colour of much of his drab life in London? A plausible answer to this question is that he may have had embarrassing memories of describing as "grey" objects to which other people ascribed colour qualities which were meaningless to him, and that he therefore took the cautious course of using the word "grey" only on occasions when he felt absolutely safe, either because he was following convention or because he was refraining from too specific an application.
Brown is a colour which is very widely distributed and which embraces a great variety of tints. None of these tints can be classified among the brighter colours. Consequently a person who is entirely lacking in the power of hue discrimination, while he may confuse brown with some of the darker colours, may learn that colours that do not look dark to him are, generally speaking, not brown. He therefore can be much more confident in using the word "brown" than the word "grey" — perhaps he may be, at times, too confident. Goldsmith's references to brown, given below, are twenty-one in number (almost twice as many as the references to grey), and they disclose on analysis some interesting facts.

1. Poetry.

The Deserted Village, line 221:

"Low lies that house where nut-brown draughts inspired".

"Nut-brown" is a stereotyped expression, and its occurrence in this line does not prove that Goldsmith actually compared the colour of ale with the varying browns of nuts; but the term is used so easily here that clearly Goldsmith had no doubt as to its correctness. The picture conjured up may have been inspired by his
recollections of youthful days in Ireland, so that it is not so incongruous as some other passages in this poem.

Ibid., line 336:
"She left her wheel and robes of country brown."

This line also seems to be based on memories of the poet's early rural background, and we have no reason to doubt that the phrase "robes of country brown" may be credited to personal observation.

The Traveller, lines 415-6:
"Where beasts with man divided empire claim,
And the brown Indian marks with murderous aim."

In 1762, two years before The Traveller was published, Goldsmith was one of the interested sight-seers who visited three Cherokees who were then in London. We may therefore believe that the phrase "brown Indian" was based on personal observation, although we may note that it is somewhat unusual, in view of the generally accepted terms "Red Indian" and "redskin".


The Vicar of Wakefield, chapter 1, page 109: "all our migrations (were) from the blue bed to the brown." It is to be noted that this phrase is taken almost verbatim from Letter 6, page 27, where the context shows that it was quoted from somebody else's letters or conversation.

Chapter 20, page 140: "I remember to have seen him (a self-styled art expert living in Paris), after giving his opinion that the colour of a picture was not mellow enough, very deliberately take a brush with brown varnish that was accidentally lying by, and rub it over the piece with great composure before all the company, and then ask if he had not improved the tints." This anecdote, which is related by the Vicar's eldest son, may have been based upon an actual experience of Goldsmith himself during his European wanderings in 1755 and 1756.

3. Letters.

Letter 1, page 22: "a loaf of stale brown bread". This letter relates in considerable detail Goldsmith's adventures on his ill-starred trip to Cork with the intention of sailing to America. Some critics have suggested that the whole story of these adventures was invented in order to pacify his mother, who was justly annoyed at his penniless return within a few weeks. In any case, the reference to "brown bread" must be accepted as correct and based on personal observation.

Letter 2, page 23 (written from Edinburgh, Scotland, in September, 1753): "this unfruitful country . . . their hills all brown with heath . . . Every part of the country presents the same dismal landscape." Goldsmith had been in Scotland about a year, and we cannot be quite sure to
what part of the country or to what season he was alluding. Many Scottish hills — especially in the Lowlands, where Goldsmith was living at the time of writing — are green rather than brown. The adjective "brown" is applicable to the heather-clad hills, but if the statement is based on personal observation of the latter, it is a very rash generalisation. In the autumn, when this letter was written, the blooming of the heather on the hills gives them a warm brownish-purple hue, which few people would describe as "dismal". We may make some allowance for Goldsmith's uncomfortable situation as a poor and personally unattractive student in exile, when we read his uncomplimentary views on Scotland and all things Scottish as set forth in this letter; in fact, he is frank about the matter a few paragraphs later: "An ugly and a poor man is society for himself; and such society the world lets me enjoy in great abundance." The word "dismal", however, may give a hint that he saw the heather hills, not as a warm brown, but as a dark and gloomy grey: he heard them described as brown and accepted that description unquestioningly, but the impression which they made on him was naturally the exact opposite of the inspiration they gave to Robert Burns only a few years later, and to many other poets before and since.

Letter 6, page 27: "Nay, all the news I hear of you is that you . . . sometimes make a migration from the blue
bed to the brown." As has been already pointed out, this is obviously a quotation.

4. Plays.

There are three references to brown in the plays, each time in association with another colour. These references have already been discussed in earlier chapters of this paper, and have been classified as "tailors' terms".

The Good-Natured Man, Act III, page 72: "the brown and silver" (one of Honeywood's suits).

She Stoops to Conquer, Act II, page 90: "Don't you think the ventre d'or waistcoat will do with the plain brown?"

Ibid.: "I think not: brown and yellow mix but very poorly."

5. Essays.

Citizen of the World Letter 10, page 174: "where the brown Tartar wanders".

Letter 11, page 175-6: "Observe the brown savage of Thibet".

Letter 27, page 193: "To be obliged to wear . . . a black coat, when I generally dressed in brown" (alleged objection to a clerical career). The origin of the idea in this passage may perhaps be traced to Goldsmith's youth, when he was preparing to take holy orders. It is
even conceivable that he is here indirectly alluding to the incident of the scarlet breeches. He must have felt himself unjustly treated by the bishop's rejection of him, and no doubt also resented the fact that common gossip picked up the story, which may have followed him to London. The quoted passage may have been written in justification of himself, both asserting that he did not really desire to become a clergyman because of the restrictions which the profession would impose on his manner of dressing, and denying that there was anything improper in his presenting himself before the bishop in clothing whose colour he described as brown. If this interpretation is correct, it would imply that Goldsmith's "brown" included at least some of the deeper shades of red.

Letter 27, page 194: "I contented myself with thinking, that all my life I should either eat white bread or brown". This reflection, which means that one should take the good with the bad, does not read as if it were original with Goldsmith. Although he has seldom been surpassed as a coiner of quotable phrases, he was not the creator of homely proverbs of general application such as this, which has the flavour of the rural Ireland in which he spent his boyhood. The present writer has searched, without success, in all available collections of proverbs and proverbial expressions for such a phrase as "one must
eat either white bread or brown", but the fact that it is
to be found only in this passage of Goldsmith's writing
does not preclude its having been current among the vil­
lagers of Lissoy both before and after his departure from
his youthful home.

Letter 69, page 240: "the brown bosom of the west­
ern desert" (in China). Ordinarily a person who has never
travelled beyond Britain and Western Europe would think of
a desert as an expanse of yellow sand, and the term "brown"
seems unusual; but it may be correctly applied, possibly
having been taken from one of the travel books which Gold­
smith used freely while composing these Letters.

Letter 114, page 284: "the naked inhabitants of
South America . . . with the seeming disadvantage of a
brown complexion." This also appears to have been derived
from a travel book, since it is unlikely that Goldsmith
ever had an opportunity of seeing a South American Indian.

Essay 1, page 358: "a third, by the brownness of
complexion, seemed a native of Jamaica". This passage is
rather puzzling. Since Goldsmith elsewhere attributes
brownness of complexion to natives of Italy, Tartary,
Tibet, Borneo, and North and South America, why should he
mention it as the characteristic by which natives of the
small island of Jamaica could be identified? He cannot
be referring to the aborigines of Jamaica, who had been
practically exterminated by the Spanish a century earlier, and who had been replaced by negro slaves, so that the majority of inhabitants of Jamaica were in his time, as they are now, negroes. It may be that the word "seemed" in the passage quoted means "looked like" rather than "apparently was", so that the whole passage may mean "a third man was so black with dirt that he looked like a Jamaican negro". This would be consistent with the satirical nature of the whole account of the society of which the man described was a member; but it would imply that Goldsmith gave the description of "brown" to an approach to blackness which most people would normally describe simply as "black".

Essay 16, page 390: in defending the poet Thomson against those who criticised him for writing "the power of cultivation . . . joys to see the wonders of his toil", Goldsmith writes: "We cannot conceive a more beautiful image than the Genius of Agriculture, distinguished by the implements of his art, imbrowned with labour, glowing with health . . . contemplating with pleasure the happy effects of his own industry." At first glance the words "imbrowned with labour" would seem to have the meaning which any person of normal colour vision would expect in the picture here conjured up, that is, "tanned by the sun". Closer examination shows that the picture in Goldsmith's mind was probably not the picture conveyed to us. Note
that he does not say "imbrowned with labour in the sun", and that he mentions "glowing with health" separately. It is significant that among all of the references to complexion tints in Goldsmith's works (and we have observed that he is lavish with them) there is not a single allusion to sunburn or sun-tan, although he mentions a number of causes of reddening of the face - walking, working after dinner, applying cosmetics, and blushing. Is it possible that the reason for this is that he was unable to distinguish between floridity or flushing and sun-tanning? In a previous chapter we have shown that there are grounds for suspecting that redness and pallor of the face were to him only contrasting dark and light shades, and it may be that sun-tan appeared to him as a dark shade practically identical with one of the red tints. If this was so, then "imbrowned with labour" probably means "dirty", as a man generally is after manual labour in the fields or elsewhere, and the reference to brownness is similar in nature to that quoted in the previous paragraph and to the use of the word "dusky" in line 245 of The Deserted Village: "No more the smith his dusky brow shall clear".

Essay 23, page 400: "a very well-looking man . . . came and asked the exciseman for his daughter in marriage. The exciseman, willing to deal openly by him, asked if he had seen the girl; 'for,' says he, 'she is hump-backed.'
'Very well,' cried the stranger, 'that will do for me.' 'Ay,' says the exciseman, 'but my daughter is as brown as a berry.' . . . 'Your description delights me,' cries the stranger; 'I have been looking out for one of her make; for I keep an exhibition of wild beasts, and intend to show her off for a Chimpanzee.'" To most people the expression "brown as a berry" conveys the idea of healthy sun-tan, usually with a pleasant connotation. Obviously that was not the idea in Goldsmith's mind when he wrote this anecdote: he listed the brown complexion of the exciseman's daughter as one of her repulsive attributes, which it might be if her skin was darkened by disease or ingrained with dirt. The conventional simile "brown as a berry" is not a very accurate one, since very many berries are not brown, but it may have seemed appropriate to him if (as the two previous references also suggest) his browns included near-blacks.

"Assay 24, page 401: "Cyrillo was a native of Padua in Italy, a little brown-complexioned man". The colour of Cyrillo's complexion is irrelevant to the story, which is, as Goldsmith specifically states, retold from another source. During his European wanderings Goldsmith spent some time in Padua, and therefore "brown-complexioned" is apparently an embellishment to the story of Cyrillo added on the basis of the writer's own observation.
The only instance of use of the colour-adjective "chocolate" occurs in The Haunch of Venison, line 95:

"'The tripe!' quoth the Jew, with his chocolate cheek".

Dark-complexioned people, such as most Jews are, usually attain a deep brown tint which may reasonably be described as "chocolate" after prolonged exposure to the sun; but the term scarcely seems applicable to a London Jew, especially one who has been introduced to us as an indoor worker in lines 75 and 76 —

"The one is a Scotchman, the other a Jew, They're both of them merry, and authors like you."

The allusion to the chocolate cheek is entirely irrelevant in the poem, and was probably inserted in order to provide a rhyme for the next line —

"I could dine on this tripe seven days in a week."

No doubt Goldsmith thought the allusion was appropriate because he had observed the darkness of the Jew’s cheek, a darkness which is observable on the shaven cheeks and chin of many black-haired men. This tint is usually referred to by normal observers as "blue" or "black" or by some similar term, but rarely if ever is it called brown. Goldsmith’s description of it as "chocolate" may be an instance of his lumping of a number of dark colours together in what he called "brown".
Hazel

_She Stoops to Conquer_, Act IV, page 101: "'I'm sure
I always loved cousin Con's hazel eyes'" (spoken by Tony
Lumpkin, while he and Constance Neville are both on stage).
We have already noted Goldsmith's diffidence in alluding
to the colour of eyes. This solitary reference to any tint
of brown in the human eye is exceptionally rash, because it
is spoken of a character in the play who is actually on
stage at the moment. Playwrights ordinarily have little
hesitation in mentioning physical features of a character
which an actor may assume by means of wig, make-up, or
dress; but they generally avoid unnecessary mention of the
colour of eyes, because otherwise realism would demand that
an actor's suitability for the part would depend primarily
on his eye-colour, or else that each producer should alter
the script, if necessary, to suit the eye-colour of the
actor chosen for the part. In this speech Goldsmith has
made an entirely unnecessary mention of hazel eyes. He
does not even have the excuse that he wrote the part for
a particular actress with such eyes, because it is on record
that he had great difficulty in finding a producer who was
willing to stage the play. The most reasonable explanation
would appear to be provided by the theory that "hazel eyes"
meant nothing specific to Goldsmith; that he had heard the
words used in tones of praise with regard to eyes in which
he could see nothing, except perhaps a high degree of
clearness and liveliness, to differentiate them from the
general run of eyes of people of his acquaintance; and
that therefore he took it for granted that these words
would apply to the eyes of any actress who was selected
for a part requiring youth and attractiveness.

Tawny

The Vicar of Wakefield, chapter 10, page 121: "The
tawny sibyl" (a fortune-telling gipsy).

Citizen of the World Letter 114, page 284: "the
tawny daughters of Borneo".

Letter 116, page 286: "cross but a mountain which
separates it (Circassia) from the Tartars, and there flat
noses, tawny skins . . . are all the fashion."

It will be observed that all the "tawny" references
are to human complexions. As tawny generally denotes a
brownish-yellow hue, the description may be considered
correct for the Tartars, doubtfully appropriate for the
gipsy woman (apparently the only case where personal obser-
vation might be involved), and incorrect for the natives
of Borneo. We have already noted the phrase "the brown
Tartar" in Letter 10 of the Citizen of the World (vide
supra, page 103), indicating that in the description of
Tartars at least Goldsmith considered "brown" and "tawny"
to be equivalent. The hue of natives of Borneo (excluding
those of Chinese descent, who presumably are not intended to be covered by this allusion supposed to be made by a Chinese) varies from the brown of Malays to the black of the aboriginal inhabitants, as Goldsmith probably had learned from travel books. Therefore his "tawny daughters of Borneo" suggests that he considered "tawny" and "brown" to be generally synonymous, possibly because he had been unable to recognise any difference between the colours of articles which he heard described as tawny and of other articles which he heard described as brown. There is, of course, the alternative possibility that he had been misinformed as to the colour of Borneo natives, but we may dismiss this as being rather unlikely.

Summary.

1. Goldsmith uses the word "brown" with ease and confidence, often with apparent correctness. There are, however, indications that he tended to include in "brown" dark shades of red and also dark shades of grey approaching black. There is some ground for suspecting that brown did not possess for him the warmth which many brown tints suggest to persons of normal colour vision; it may be that the range of colours which he called brown made on his eye the same impression as dark greys.

2. He mentions three tints subsidiary to brown — chocolate, hazel, and tawny. The single reference to
hazel (unless it can be attributed to lack of judgment as a playwright) suggests that he had no clear idea of the meaning of the word, perhaps that he did not even realise that it denoted a specific colour. The references to chocolate and tawny suggest that these words did not convey to him the same meaning that they convey to persons of normal colour vision.

3. Two interesting facts, not brought out in the discussion of individual references, come to light if we group references of certain types together.

Let us take first all references where, apparently as a result of personal observation, Goldsmith has used the word "brown" in a sense generally acceptable. These include: "nut-brown draughts"; "robes of country brown"; "a brush with brown varnish"; "a loaf of stale brown bread"; "hills all brown with heath"; "a native of Padua in Italy, a little brown complexioned man"; and possibly "I generally dressed in brown". It will be noted that all of these concern observations which were certainly or probably made in the earlier part of his life, before his return to England from the Continent in February, 1756. This fact might suggest that, perhaps as a result of embarrassing mistakes made during the period of irregular employment which immediately followed his return, he lost much of the confidence which he formerly possessed with regard to identification.
of brown. It might also suggest that his colour vision deteriorated about that time, but that possibility seems to be discounted by the facts that he had described Scottish scenery as "dismal" more than two years previously, and that he applied the term "yellow-blossom'd" to the tulip-fields which he saw in Holland either in 1754 or early in 1755.

A second significant discovery is made if we group together all references to brownness of complexion. These are: "the brown Indian"; "the brown Tartar"; "the brown savage of Thibet"; "the naked inhabitants of South America... with the seeming disadvantage of a brown complexion"; "a native of Padua in Italy, a little brown complexioned man"; "the Jew, with his chocolate cheek"; "the tawny sibyl" (a gipsy woman); "the tawny daughters of Borneo"; "tawny skins" (of Tartars); and three instances where we have suggested that the brownness had probably been caused by dirt or disease — "by the brownness of complexion, seemed a native of Jamaica"; "the Genius of Agriculture... imbrowned with labour"; "my daughter is as brown as a berry". Leaving out of the question for the moment any possible errors in colour description, we find on examination that every one of these references concerns the complexion of a non-British race or else an abnormal British complexion. All of the references to normal British
complexions have found a place in our chapter devoted to red and subsidiary tints, although Goldsmith must have seen many sun-browned faces in Scotland and England and particularly during his youth in rural Ireland. Here again the theory that he saw in complexions only light and dark shades, with no apparent difference between the red of freshness, flushing or floridity and the brown of sun-tan, affords a logical explanation. According to this theory Goldsmith would have, consciously or unconsciously, set for himself the arbitrary rule that dark shades seen by him in British complexions were to be described by the adjective "red" or some allied term, except when there was some abnormality involved, in which case the word "brown" might be safely used; whereas darker non-British complexions of all kinds might be described as "brown" (or by related terms such as "chocolate" and "tawny") unless the authority of a book of travel (e.g., in the case of the Kashmir ladies whose "complexions were of a bright yellow") or of common knowledge (as in the case of the sideshow "Black King of Morocco") made it safe for him to use another colour adjective.

4. One of the Citizen of the World Letters contains what may be a veiled allusion to the incident of the scarlet breeches, suggesting that Goldsmith thought that the scarlet fabric was brown.
CHAPTER XIII

MISCELLANEOUS REFERENCES

Under the heading of "Miscellaneous References" we may include a number of passages in Goldsmith's works where he mentions colours in general or colour effects without specifying any particular hue. In a few cases passages of this nature have already been discussed, on account of their close relation to the mention of a specific colour: for example, the statement in Citizen of the World Letter 3, that English women "like to have the face of various colours", which was relevant to the discussion of black face patches on pages 87 and 88 of this paper. Such passages will not be again quoted in this chapter.

Before commencing the study of the miscellaneous references from Goldsmith's works, it may be appropriate to consider here a verse which, according to Boswell's London Journal, Goldsmith said that he had composed once on the spur of the moment. Goldsmith and Boswell met for the first time on December 25, 1762, at dinner at the house of a Mr. Coutts. The conversation turned on the subject of poetry, and the following interchange took place:

BOSWELL. "And what do you think of Gray's odes? Are not they noble?"
GOLDSMITH. "Ah, the rumbling thunder! I remember a friend of mine was very fond of Gray. 'Yes,' said I, 'he is very fine indeed; as thus —

Mark the white and mark the red,  
Mark the blue and mark the green;  
Mark the colours ere they fade,  
Darting thro' the welkin sheen.'

'O, yes,' said he, 'great, great!' 'True, Sir,' said I, 'but I have made the lines this moment.'"

BOSWELL. "Well, I admire Gray prodigiously. I have read his odes till I was almost mad."

GOLDSMITH. "They are terribly obscure. We must be historians and learned men before we can understand them."  

While we are dependent on Boswell's powers of memory for the wording of the verse quoted in the anecdote, it is clear that Goldsmith intended it to be impressively sounding nonsense. When humorists compose such nonsense, it is not an uncommon practice for them to employ words and phrases which are outside of their own ordinary vocabulary, but which they know to be used by others in archaic, specialised, or technical writing. The phrase "welkin sheen" in the quoted verse is an example of this type of humour. It is possible that the same principle applies to the first two lines of the quatrain: that when Goldsmith thought that the occasion called for a nonsense verse impromptu, the first words of little meaning to him

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that came to his mind (possibly by association with the meaning of the name of the poet who was being discussed) were the names of colours. The verse ostensibly refers to a sunset or a sunrise: if Goldsmith had possessed normal colour vision and had meant the lines to describe one of these phenomena, he would not have spoken of blue and green "darting" through the sky, although the word might be applicable to the red appearing on cloud after cloud and to the white later replacing it. On the other hand, if, having normal colour vision, he had intended to dupe his friend with impressive nonsense, he would probably have used some less common words in the first three lines, lest the other should see through the trick immediately (although, as it turned out, his friend was such a whole-hearted worshipper of Gray that he did not question any verse attributed to his idol).

The miscellaneous references in Goldsmith's works are classified, as were the specific colour references, according to the type of writing in which they appear.

1. Poetry.

A frequently-quoted phrase occurring in line 94 of *The Deserted Village* —

"With blossom'd furze unprofitably gay" — calls to the reader's mind a picture of the dark-green furze with its bright yellow blossoms, but it does not
mention either of the colours involved, so that we cannot
tell with certainty whether it was the colours or the con­
trast between them which lingered in the poet's memory
(The Deserted Village was written more than a dozen years
after Goldsmith left Ireland). This mention of the gay
appearance of furze, which is a common plant in Scotland,
recalls that in his letter written from Edinburgh in Sep­
tember, 1753, Goldsmith said "Every part of the country
presents the same dismal landscape." There may be no
significance in the difference in opinions expressed in
the poem and in the letter, since furze is only one of the
components of Scottish scenery (although it is in bloom
for several months of the year) and since the letter was
evidently written with a marked lack of benignity towards
Scotland and all things therein.

Three passages in The Traveller enlarge on the
theme of the beauty of Italian scenery. Although they
appear to have been composed, at least in rough draft form,
while Goldsmith was actually within sight of the Italian
landscape, no colour is mentioned by name, and it is sig­
nificant that they omit entirely any mention of features
which generally appeal in the highest degree to English
travellers in Italy — the blueness of the sky and of the
Mediterranean, and the beauty of the Alpine lakes, which
is largely due to the reflection of the blue sky from
their surface. These passages include lines 105-108:

"Far to the right, where Apennine ascends,
Bright as the summer, Italy extends;
Its uplands sloping deck the mountain's side,
Woods over woods in gay theatric pride";

lines 115-120:

"Whatever blooms in torrid tracts appear,
Whose bright succession decks the varied year;
Whatever sweets salute the northern sky,
With vernal lives, that blossom but to die;
These here disporting, own the kindred soil,
Nor ask luxuriance from the planter's toil";

and lines 125-126:

"In florid beauty groves and fields appear,
Man seems the only growth that dwindles here."

While these lines were inspired by the sight of landscapes that were rich in colour, they seem to indicate that the poet's appreciation was less for the colours themselves than for the clear atmosphere and strong sunlight which give to Italian scenery a brightness often lacking in the duller climate of the British Isles. These passages are followed a little later, in line 137, by praise of Italian artists of a past generation (a single line referring to Italian painting, out of sixty lines devoted to Italy in general):

"The canvas glow'd beyond e'en nature warm'.

We cannot draw any positive conclusions from the generalised, and poetically exaggerated, statement in this line, which (because of the past tense of "glow'd") does not even affirm personal acquaintance with the works
of the Italian masters. It is quite possible that Goldsmith visited art galleries containing their paintings, both in England and on the Continent, but he never claimed to be a connoisseur of art — in fact, in the third paragraph of the dedication to The Traveller, he speaks of painting in a somewhat disparaging tone:

"Poetry makes a principal amusement among unpolished nations; but in a country verging to the extremes of refinement, painting and music come in for a share. As these offer the feeble mind a less laborious entertainment, they at first rival poetry, and at length supplant her; they engross all that favour once shown to her, and, though but younger sisters, seize upon the elder's birth-right."

Such being his attitude towards painting, the statement "The canvas glow'd beyond e'en nature warm" seems to be less a personal tribute to the older Italian painters than a condensation of their general reputation into an iambic pentameter.

Passing to the shorter poems, we find two poetic circumlocutions to describe blushes. The first occurs in line 97 of The Double Transformation:

"With modesty her cheeks are dyed".

Lines 85 to 88 of The Hermit show more freedom of imagination:

"Surprised he sees new beauties rise,
Swift mantling to the view;
Like colours o'er the morning skies,
As bright, as transient too."

This quatrain suggests comparison of the redness of a
blush and the redness of dawn (both stereotyped ideas), with an element of doubt introduced by the plural form of "colours": only one of the colours which the sunrise may display — rosy red — would seem to provide an appropriate poetic simile for a blush. Poetic licence has been used freely here; because the blush of modesty, while it is charming because of its signification, does not actually present "new beauties", but rather masks beauty which may be already present in a complexion with natural contrasts of red and white. Such a blush is often accompanied by increased sparkle of the eyes, which may be called a "new beauty", and may be alluded to in the fourth line, unless that line is merely an extension of the simile required to complete the quatrain. On the whole we may well decide that in the quatrain Goldsmith is putting poetic vesture on familiar ideas, and that the lines do not prove that the colour presented to his eyes by a blush resembled the colours of the dawn as he saw them.

In the Epilogue spoken by Mr. Lee Lewis, line 5, we find an allusion to that combination of patches of white and black known as piebald, popular in the attire of jesters since mediaeval times:

"That I found virtue in a piebald vest".

Some authorities restrict "piebald" to black and white, and apply the term "skewbald" to combinations including
other colours; while other authorities treat the two words as synonymous, covering all combinations. Because of this difference in interpretation, and because we do not know precisely what combination of colours Goldsmith had in mind, this reference is not significant for our purposes.

The Epilogue to "The Sisters", lines 15-16, contains a satiric couplet:

"Statesmen with bridles on; and, close beside 'em, Patriots in party-colour'd suits that ride 'em."

The spellings "parti-coloured" and "party-coloured" were both in use in Goldsmith's time; Johnson gave his authority to the latter, although the former has now generally supplanted it. It may be pointed out that the Jockey Club had been formed about 1750 and that the registration of the colours of owners of horses racing under Jockey Club rules had been compulsory since 1762, so that an allusion to the parti-coloured livery of jockeys was topical enough to be well appreciated. Apparently there is also a pun intended, as "party-coloured" might mean "of colours denoting political parties". Since the subject of racehorse-owners' colours would have been one of fairly wide discussion, it is possible that Goldsmith obtained his knowledge of it in coffee-houses and such haunts, because (although he gambled too much for his own good) attendance at horse races does not seem to have been one of his favourite diversions.

In *The Vicar of Wakefield*, chapter 1, page 169, we read: "as some men gaze with admiration at the colours of a tulip, or the wing of a butterfly, so was I by nature an admirer of happy human faces." This is a very significant passage. The character of the Vicar, who is supposed to have expressed this sentiment, is believed to have been drawn in outline from that of the novelist's father, the Rev. Charles Goldsmith, but in a work written in the first person it is inevitable that many of the thoughts and feelings of the writer himself should come to the surface. The concluding statement in the passage here quoted may depict partly the writer and partly his model, but the simile is almost indubitably the thought of Oliver Goldsmith himself. In it he marks a dividing line between himself and "some men" who admire colours which, in fact, are admired by practically all persons of normal colour vision and normal sensitivity. His own sensitivity to beauty is evident throughout his works: therefore this passage is almost certainly — whether or not he intended it to be so — a confession of inability to see colours as normal people see them.

Chapter 2, page 110: "Her youth, health, and innocence, were still heightened by a complexion so transparent ..." Transparency of complexion implies that the
skin is so fine, clear and smooth that the play of red and white underneath is not masked by it. This quotation is therefore allied to the many complexion references grouped under "red".

Chapter 11, page 122: "his lordship turned all manner of colours" — a not very original way of saying that his lordship flushed deep red.

Chapter 16, page 130: "The painter was therefore set to work (painting a portrait of the Vicar's family) . . . The piece was large, and it must be owned he did not spare his colours; for which my wife gave him great encomiums." Apparently this is intended as a sly dig at the economical mind of Mrs. Primrose, who was more appreciative of the plentiful variety of colours (or perhaps of the quantity of paint used to cover a large canvas) which they obtained for the painter's fee of fifteen shillings a head, than of the artistic quality of the painting. Goldsmith does not give us the Vicar's opinion (which in this case would have to be his own) of the portrait.

Chapter 23, page 145: "Such was the colour of her wretchedness" — a figurative use of the word "colour".

3. Letters.

In Letter 12, page 32, Goldsmith advises his brother Henry regarding the upbringing of the latter's son: "Above all things let him never touch a romance or
novel; those paint beauty in colours more charming than
nature". This letter was written in 1759, at which time
The Traveller was still in the process of composition and
polishing. (We see in this passage a certain similarity
to the line from that poem mentioned above, "The canvas
glow'd beyond e'en nature warm"; it is not impossible
that one inspired the other.) The device here used, of
applying to literature metaphors drawn from art (and vice
versa), is a very old one, so old indeed that many of these
metaphors have passed into current speech as literal terms,
their figurative origin being forgotten. Goldsmith actu­
ally uses such metaphors only in the letter here quoted
and on two other occasions, both in Essay 15, on pages
384 and 385. It seems more appropriate to discuss all
three passages here than to defer the latter two until we
consider references from the Essays. The two passages in
question are:

It (poetry) is a species of painting with words,
in which the figures are happily conceived, ingeniously
arranged, affectingly expressed, and recommended with
all the warmth and harmony of colouring . . .

and

The poet, instead of simply relating the incident,
strikes off a glowing picture of the scene, and exhib­
its it in the most lively colours to the eye of the
imagination.

It will be observed that there is a remarkable parallelism
in form and idea in all three passages: each of them
merely develops in a slightly different way the statement 
"the writer paints pictures with words". In other words, 
Goldsmith used this metaphor not only with the greatest 
frugality but also with rigid adherence to one simple 
basic form of it. The logical deduction is that in using 
this particular figure of speech he did not see in his 
mind's eye the picture which was selected to illustrate 
his thought; he merely used a conventional image which 
other writers had used before him, dressing it up with 
conventional details adorned with his own smoothly-flowing 
language.

4. Plays.
The plays contain only one reference of the type 
which we are now discussing. It does not call for detailed 
discussion, as it is merely a flowery piece of declamation 
containing a simile whose aptness will not bear too close 
scrutiny. It concerns cosmetic colouring, and does not 
add anything to what we have already learned from such 
allusions. In The Good-Natured Man, Act III, page 75, Sir 
William Honeywood soliloquises: "O vanity . . . thy false 
colourings, like those employed to heighten beauty, only 
seem to mend that bloom which they contribute to destroy."

5. Essays.
We have already considered two references from 
the Essays while discussing a passage in the personal
letters. Other references in the Essays are diverse, and, in some cases, of unusual interest.

Citizen of the World Letter 7, page 172: "the priests (in England) are dressed in colours which we are taught to detest". Goldsmith is not very helpful to us here: perhaps he had vaguely in mind some statement which he had read in a travel book but which he did not trouble to verify in detail before writing this. The colours to which he refers are presumably black and white, but he more than once indicates that blackened teeth are a mark of beauty in China, and in Letters 18 and 96 he states that the mourning colour in China is white, so that neither black nor white would seem to be among the colours which the Citizen of the World was taught to detest. Perhaps this is one of the many passages which Goldsmith wrote hastily and without verification and which, if challenged, he would be unable to explain satisfactorily — although he might defend it stubbornly against all rational argument.

Letter 39, page 208: "He (a Chinese wooer) was no sooner got home than he sent me a very fine present of duck-eggs, painted of twenty different colours." This sentence may be a product of Goldsmith's fancy, or it may be derived from an account of Chinese customs in a travel book. In either case it tells us nothing about his colour vision, since the number "twenty" might equally well have
been given as "ten" or "a hundred", and our study so far has not given us any reason to believe that Goldsmith could distinguish as many as twenty different hues.

Letter 44, page 212: "The different colours which suit different complexions, are not more various than the different pleasures appropriated to different minds." We find a similar idea in Essay 1, page 356: "no coquette was ever more solicitous to match her ribands to her complexion, than I to suit my club to my temper." The parallelism of these allusions to matching clothing and complexion — the only two such allusions in Goldsmith's works — reminds us of his treatment of the painting and writing metaphor (vide supra, pages 125 to 127). Here again we have an idea, probably obtained from an external source (in this case either the conversation of Goldsmith's female acquaintances or common talk about feminine ways), which could have been developed in several widely different ways by a writer of Goldsmith's versatility and lightness of touch; but its use only twice, in closely-related similes, suggests diffidence about leaving the beaten path, as if he did not really understand what he was writing about. The variety of coloured garments in his own wardrobe, which exposed him to the ridicule of his friends (see the anecdote quoted on page 17 of this paper), is sufficient evidence that the idea of different colours
suiting different complexions meant nothing to him as a guide to tasteful selection of clothing materials.

Letter 44, page 212: "If I find pleasure in dancing, how ridiculous would it be in me to prescribe such an amusement for the entertainment of a cripple! — should he, on the other hand, place his chief delight in painting, yet would he be absurd in recommending the same relish to one who had lost the power of distinguishing colours." Of all the references which we have to examine, this is the most significant. During Goldsmith's lifetime the phenomenon of colour-blindness was unknown, except perhaps to a few people who may have been aware that they suffered from an abnormality of vision in this respect but who neither understood it nor disclosed it. One case\(^2\), which came to light three years after Goldsmith's death, was considered so extraordinary that an investigator travelled more than two hundred miles from London to interview the person affected and to prepare a report for the Royal Society; and the first detailed study of colour-blindness to be published was that by Dalton, in 1794, twenty years after Goldsmith died. It is obvious that Goldsmith could not have learned from the writings of others that it was possible for any person to lose,

\(^2\) See Appendix I.
or lack, the power of distinguishing colour; and it is highly improbable that he learned it from conversation with, or about, a colour-blind person, since the mere fact of such conversation taking place would doubtless have led to the case becoming as well known as that of Harris, the Cumberland shoemaker. Consequently the reference to "one who had lost the power of distinguishing colours" presents us with practically incontrovertible evidence that Goldsmith was referring to himself, that he had come to realise that his colour vision was defective in comparison with that of others.

The words "had lost the power" open up another line of speculation: do they imply that Goldsmith's colour-blindness was acquired, and, if so, when and how did that happen? Here we have less solid foundation to build upon. It may be that Goldsmith recollected that he had been able to discern colours in early life, and knew that he had lost the faculty, in whole or in part, at some particular time; but if that was so, it would seem logical to expect that a writer whose work covered such a great variety of subjects, including the natural history of man and other animals, would have described such a remarkable occurrence, although he might have attributed it to some person other than himself.
It is rather more probable that when Goldsmith realised — apparently about 1760, when the Citizen of the
world Letters were written — that he lacked the faculty of distinguishing colours, his vanity refused to let him
admit, even to himself, that he had a congenital defect that made him apparently inferior to the rest of humanity.
He may have inserted the allusion in this published essay for the definite purpose of testing the reaction of his
readers and of finding out whether loss of colour discrimination was in fact a common occurrence. Apparently the
readers of the day were uncritical in this respect (as the readers of these Citizen of the World Letters continued to be for nearly two centuries afterwards, including a century and a half after the existence of colour-blindness received public notice); and, hearing nothing more about the subject, Goldsmith decided to keep his secret for the rest of his life.

It is unfortunate, for this among other reasons, that Goldsmith never wrote his autobiography, which would have been a much more valuable document than the compilations which occupied so much of his later years; or that Johnson or Boswell did not think it worth while to write his biography while he was still alive. We might then have enough basic information to decide whether his colour-blindness was congenital or acquired. As matters stand,
we know of only one serious illness in the early part of his life, an attack of smallpox at the age of six. Smallpox may seriously affect the eyesight and even lead to blindness, but there is no evidence that it may destroy colour vision without otherwise injuring the power of sight; and Goldsmith's strength and acuity of vision seem to have been about normal, judging by the amount of literary work he accomplished, by the detailed observations recorded directly and indirectly in his various works, and by the absence of references by Boswell and others to any manifestation of poor sight on his part.

Returning to our list of miscellaneous references, we find in Citizen of the World Letter 94, page 266, a metaphor which gives us no new information: "Fancy had dressed the future prospect of my life in the gayest colouring".

In Citizen of the World Letter 114, page 284, we read: "The lily and the rose contended in forming their complexions" (referring to Circassian beauties). In the discussion of references to white, on page 82 of this paper, the following passage (in a story stated by Goldsmith to have been taken from the manuscript of an Italian oration) was quoted: "The rose and lily took possession

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3 See Appendix IV.
of her face, and her bosom, by its hue and its coldness, seemed covered with snow." This passage appeared in The Bee, No. 6, which was published in 1759, the year before Goldsmith began writing the Citizen of the World Letters; and it is therefore safe to assume that the reference to Circassian complexions was based on a recollection of the metaphor used by the Italian orator.

There are two other miscellaneous references in The Bee, of no present significance. In No. 1, page 314, Goldsmith writes:

If his (a writer's) merits are to be determined by judges, who estimate the value of a book from its bulk, or its frontispiece, every rival must acquire an easy superiority, who, with persuasive eloquence, promises four extraordinary pages of letter-press, or three beautiful prints, curiously coloured from nature.

In No. 4 (published three weeks later), page 328, he tells some of the expedients he had considered for improving the sales of the magazine, but apparently does not credit his readers with long memories:

All this, together with four extraordinary pages of letterpress, a beautiful map of England, and two prints curiously coloured from nature, I fancied might touch their very souls.

An allusion to cosmetics in Essay 5, page 364, has not been included under the heading of "red" because woad was not red and because carmine is primarily a substance, although its name has been transferred to a colour. Part of the allusion was, of course, derived from historical
reading, and the remainder probably from common knowledge, less probably from personal observation: "It is the same vanity, that formerly stained our ladies' cheeks and necks with woad, and now paints them with carmine."

There is one allusion (possibly two) to the colours of the spectrum obtained by the breaking up of white light. The positive allusion is in Essay 12, page 376: "As well might a man distinguish objects through a prism, that presents nothing but a variety of colours to the eye". The writer here confuses two separate ideas: first, looking through a prism of glass at objects, which cannot then be clearly seen on account of internal reflections; and, second, the breaking up of white sunlight or other light from a strong source of illumination when it passes through a glass prism, a phenomenon ordinarily exhibited by letting the light fall on a white surface after passing through the prism. The confusion of those two entirely distinct ideas, in a sentence suggesting that one is cause and the other effect, indicates that Goldsmith was unfamiliar with both of them in actual practice, and that he had learned of the Newtonian experiment of breaking up white light into a spectrum with a prism only by reading about it; or else that he had tried, or seen tried, one or both experiments, but, being unable to see in the spectrum the variety of colours which others claimed to be able to see
there, he assumed that the difficulty of seeing an object clearly through a prism was due to the inability of the prism to transmit anything but a pattern of multi-coloured light. Consequently this reference, which at first glance might seem to prove that Goldsmith appreciated the colours of the spectrum, on close analysis indicates that the opposite was the truth.

A more doubtful reference to spectral colours is found in Essay 16, page 387: "Every day produces poems of all kinds, so inflated with metaphor, that they may be compared to the gaudy bubbles blown up from a solution of soap." Since the simile is based on the word "inflated", the adjective "gaudy" is superfluous here, unless Goldsmith, writing in haste, thought that he had also used some such word as "decorated" in describing the poems. If he was alluding to the play of colours on soap bubbles, we may have here a recollection of childhood, giving some support to the possibility that his colour-blindness was acquired. Recent personal observation is less likely, since blowing bubbles is an amusement of children, and Goldsmith spent little of his adult life in the company of children. Other possibilities are that he used "gaudy" (which normally implies the presence of bright colours) in the sense of "glittering", which a colour-blind person might well do; or that he borrowed the whole idea from
the conversation or writing of somebody else. We cannot make any positive deduction from study of this sentence.

The word "gaudy" is also used in Essay 12, page 377, where Goldsmith writes scornfully of "eyes that will turn with disgust from the green mantle of the spring . . . to contemplate a gaudy silken robe, striped and intersected with unfriendly tints, that fritter the masses of light, and distract the vision, pinked into the most fantastic forms, flounced and furbelowed, and fringed with all the littleness of art unknown to elegance." One may wonder how much of the essay which contains this passage, and which is entitled "Taste", is original. This stern criticism of people who prefer artificial gaudiness to natural simplicity comes oddly from Goldsmith, whose notorious lack of taste in clothing was brought out by Boswell in the anecdote quoted on page 17 of this paper. He may have borrowed most of the material for this essay from other sources, without thought of — or with disregard for — its application to himself; or it may have been composed in all sincerity, in the belief that his clothes (so long as each piece was all of one colour) were modest and subdued in appearance. The latter hypothesis seems more acceptable when we observe that his condemnation of the robe which he contrasts with the green mantle of spring is founded, not upon its colour, but partly upon
the way in which colours are combined in it and partly upon its structural decorations, as if his imagination was unequal to the task of describing an artificial object in those colour terms which would complete the antithesis properly.

Our final reference is found in Essay 21, page 398 — a simile applied to an ornamental garden whose design had been changed several times by successive owners: "The colour of the flowers of the field is not more various than the variety of tastes that have been employed here". This is one of those indefinite references which give us no assistance in our present project.

Summary.

1. Two of the miscellaneous references are of outstanding importance: a passage in *The Vicar of Wake-field* which tells us that Goldsmith, speaking in the character of the Vicar, did not share with others the pleasure of admiring the colours of a tulip or of the wing of a butterfly; and a passage in a Citizen of the world Letter, which proves that Goldsmith was aware of the existence of colour-blindness some sixteen years before a case of the defect was recorded for the first time, and more than thirty years before the first detailed description of colour-blindness was published. There can be no valid explanation of the latter passage except that
Goldsmith had, at or before the age of thirty-two, realised that there was some defect in his own colour vision.

2. Not being scientifically-minded, he neither investigated the peculiarities of his colour vision (as far as we know) nor informed anybody else that such peculiarities existed. On the other hand, he apparently tried to find out indirectly whether information about any similar case would be volunteered by any reader of the Citizen of the World Letters. No such information being forthcoming, he did not venture to bring up the subject again, probably from fear of exposing himself as some kind of freak: consequently the scientific discovery and study of colour-blindness was delayed by more than thirty years.

3. The wording of the second of the references mentioned above ("had lost the power of distinguishing colours") suggests that Goldsmith believed, or wished to believe, that his defect of colour vision was acquired and perhaps temporary. This was natural, since, having no knowledge of a similar condition in any other person and being notoriously vain, he would resent the idea that he suffered from a unique congenital defect. Our lack of a detailed history of his life and of any of his early writings (apart from a few letters) prevents us from forming any definite opinion as to whether his colour-blindness was acquired or congenital: it does not appear that his
only recorded serious illness in youth, smallpox, could have caused it.

4. His single reference to the variety of colours resulting from the transmission of sunlight through a prism proves, on examination, either that he had never seen that experiment or that, having seen it, he could not distinguish the spectral colours. A related allusion to the gaudiness of soap bubbles may imply that he saw the colours in such bubbles as a child, or that he was using a conventional or second-hand idea, or that he was merely referring to the play of light and shade on the surface of soap bubbles.

5. He wrote a number of lines in The Traveller on the subject of the scenery he observed in Italy, but without mentioning any specific colour in that scenery. The omission of any mention of blue skies, lakes and sea is noteworthy. He seems to have been impressed by the clear air and strong sunlight, as contrasted with duller British conditions, rather than by the colours of the landscape.

6. His metaphorical references to colour effects, although often couched in beautiful language, generally are conventional in idea or derived from other sources.

7. Two passages show that he was aware that some people matched their dress colours to their complexions,
but he gives no specific examples; his phrasing, however, suggests that he considered the custom reasonable, if not laudable. In an essay on "Taste" he extols natural simplicity in opposition to gaudy and ornate artificiality. On the other hand, the colours which he chose for his own clothing were neither matched to his unhappily-disfigured complexion nor modestly subdued. We can draw no positive conclusion here from the discrepancy between precept and practice, which might be due either to unwillingness (resulting from vanity combined with lack of taste) or to inability (resulting from colour-blindness) to apply the principles of harmony and simplicity to his own wardrobe.
CHAPTER XIV

"HISTORY OF THE EARTH
AND ANIMATED NATURE" ¹

It is proper to give special treatment in this paper to Goldsmith's History of the Earth and Animated Nature, alone among his compilations, for two reasons. In the first place, it differs from such compilations as his History of Rome and History of England in that the material contained in those works was necessarily entirely derived from the writings of earlier authors, whereas it was possible for him to draw to a certain extent on his own observations and knowledge in writing of current natural history. In the second place, the scope of this work includes descriptions of animate and inanimate objects, of many of which colour is an important characteristic: there is therefore a possibility that Goldsmith, in describing some familiar object, gave a clue to his colour vision by an error or an omission, or by some peculiarity in his phrasing or mode of discussion.

In this work Goldsmith sometimes indicates, by enclosure within quotation marks, passages in a particular

¹ Oliver Goldsmith, A History of the Earth and Animated Nature, Glasgow, Blackie and Son, (1840), two volumes, lx + 564 and viii + 663 pages.
chapter which he says he himself has added to an account taken from another writer, and occasionally he includes anecdotes written in the first person. The presumption in such cases is that the material in question is original, but we cannot be absolutely certain that it was not adapted from other sources. Even when the subject should have been perfectly familiar to him, there may be evidence that he is copying from another writer, as in the notorious passage about the shedding of horns by cows:

At three years old it (the cow) sheds its horns, and new ones arise in their place, which continue as long as it lives; at four years of age, the cow has small pointed, neat, smooth horns, thickish near the head; at five, the horns become larger, and are marked round with the former year's growth. Thus, while the animal continues to live, the horns continue to lengthen; and every year a new ring is added at the root; so that allowing three years before their appearance, and then reckoning the number of rings, we have, in both together, the animal's age exactly.

Since Goldsmith must have seen scores of cattle of all ages during the first seventeen years of his life, which were spent in a country district, and must have had frequent opportunities of observing cattle in several countries in later years, one would have thought that it was impossible for him to have included this absurdity in a serious work. It shows, however, that even when we might imagine him to be writing from personal observation

he may actually be copying uncritically from another writer. When the copied material is correct, it does not follow, of course, that Goldsmith possessed the same correct knowledge independently; but when the copied material contains errors (as in the passage concerning cows' horns), it is evident that either Goldsmith did not have the knowledge necessary to make corrections, or he did not trust such knowledge as he did possess. Consequently — unfair as it may seem — Goldsmith can claim little credit for correct statements in his *History of the Earth and Animated Nature*, but must accept responsibility for all the errors.

In such a comprehensive work on natural history, one of the first items which we look for in investigating the author's colour vision may well be his account of rainbows. This account appears in chapter 21 of the section entitled "History of the Earth", and is reproduced in Appendix V. It begins with an account of three concentric rainbows seen by Ulloa in Peru; one might suppose that a more logical order would be to describe the familiar phenomenon first, and then to proceed to the distant and unfamiliar. Perhaps the reason for his arrangement is that to him rainbows meant little or nothing, and that he might even have overlooked them altogether if the quotation

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from Ulloa had not decided him to look up and insert an account of them. He combines with this account a description of an experiment with a glass globe filled with water which is almost certainly copied from another source, as he did not have the scientific experimenting type of mind; and there is therefore reason to believe that the greater part, if not the whole, of his description of a rainbow is also second-hand and not derived from his personal observation.

A very striking fact is that Goldsmith devotes four chapters of the *History of the Earth* to atmospheric phenomena, as follows:

Chapter 18: A summary account of the mechanical properties of Air;

Chapter 19: An essay towards a natural history of the Air;

Chapter 20: Of Winds, regular and irregular; and

Chapter 21: Of Meteors and such appearances as result from a combination of the Elements, but in all of these chapters there is not a single allusion to the blueness of the sky. Such allusions are common in English literature, and it would seem incredible that they should be entirely absent from the sources which he consulted while compiling these chapters. If, however, to him the blue of the sky was indistinguishable from the grey of a cloud, he may have thought that it was unnecessary to mention it.
It is a fact of common knowledge that distant mountains look blue. Goldsmith's account of this phenomenon indicates that he confused blue with grey, because, while he mentions no specific colour, he compares the hue of distant mountains to that of clouds, not to that of a clear sky:

It needs scarcely be said, that, with respect to height, there are many sizes of mountains, from the gently rising upland, to the tall craggy precipice. The appearance is in general different in those of different magnitudes. The first are clothed with verdure to the very tops, and only seem to ascend to improve our prospects, or supply us with a purer air: but the lofty mountains of the other class have a very different aspect. At a distance their tops are seen, in wavy ridges, of the very colour of the clouds, and only to be distinguished from them by their figure; which, as I have said, resembles the billows of the sea. As we approach, the mountain assumes a deeper colour; it gathers upon the sky, and seems to hide half the horizon behind it.4

The penultimate sentence of this passage would be quite acceptable with regard to snow-clad peaks, which at a distance are indeed similar in colour to clouds; but the words "As we approach, the mountain assumes a deeper colour" show that the writer has snow-free mountains in mind. We inevitably deduce from this that far-off mountains looked grey instead of blue to him.

In chapter 3 of the History of the Earth, which is entitled "A view of the surface of the Earth", he

The most obvious beauty that everywhere strikes the eye is the verdant covering of the earth, which is formed by a happy mixture of herbs and trees of various magnitudes and uses. It has been often remarked, that no colour refreshes the sight so much as green: and it may be added, as a further proof of the assertion, that the inhabitants of those places where the fields are continually white with snow, generally become blind long before the usual course of nature.

Goldsmith might well have mentioned the refreshing effect of green on the eyes without sheltering himself behind "It has been often remarked". This consideration, added to the illogicality of the statement which he offers as "further proof of the assertion", suggest that Goldsmith himself had never consciously experienced the soothing effect of green as compared with other colours.

There is an interesting passage in chapter 7 of the introductory section of the part of the work entitled *A History of Animals*. The chapter is entitled "Of Seeing", and a footnote by Goldsmith states: "This chapter is taken from Mr. Buffon. . . . What I add is marked, as in a former instance, by inverted commas." After quoting Buffon at length concerning the way in which experience, including use of the sense of touch, enables us to interpret the messages conveyed to us by the sense of sight, he adds his
own comment within inverted commas:

"But not the feeling only, but also the colour and brightness of the object, contribute, in some measure, to assist us in forming an idea of the distances at which it appears. Those which we see most strongly marked with light and shade, we readily know to be nearer than those on which the colours are more faintly spread, and that, in some measure, take a part of their hue from the air between us and them. Bright objects also are seen at a greater distance than such as are obscure, and, most probably, for this reason, that being less similar in colour, to the air which interposes, their impressions are less effaced by it, and they continue more distinctly visible. Thus a black and distant object is not seen so far off as a bright and glittering one, and a fire by night is seen much farther off than by day."

It is to be noted that in his first sentence he places colour and brightness together as means of estimating distance; in his second sentence he contrasts "strongly marked with light and shade" with "on which the colours are more faintly spread", an antithesis which is illogical unless colours were to him merely gradations of light and shade. One might expect him to mention some coloured object as an illustration of his theory, but instead he refers to contrasts between "bright" and "glittering" objects on the one hand and "black" and "obscure" objects on the other hand. His references to the hue of the interposing air lead one to look in vain for some reference to blue; the whole argument is rather vague, but it suggests that Goldsmith believed that the colour of

the air is grey, if not black.

Chapter 5 of *A History of Animals* is also largely translated from Buffon. It includes some paragraphs on the human eye, one of which is particularly interesting because of Goldsmith's additions enclosed between inverted commas:

The vivacity, or the languid motion of the eyes, give the strongest marks of physiognomy; and their colour contributes still more to enforce the expression. The different colours of the eye are the dark hazel, the light hazel, the green, the blue and gray, the whitish gray, "and also the red." These different colours arise from the different colours of the little muscles that serve to contract the pupil; "and they are very often found to change colour with disorder, and with age."

The addition by Goldsmith which concludes the paragraph makes one wonder whether he really understood Buffon's description of eye colours. There is no mention at all in the chapter of the different appearances of the white of the eye (sclerotic), the iris, and the pupil; the colours enumerated are those of the iris, but the change of colour with disorder and with age would seem to apply principally to the sclerotic. It may be that Goldsmith wished to insert a reference to the common occurrence of a bloodshot or yellowish condition of the white of the eye, which would appear to a colour-blind person as a darkening of hue, but that he would not take the risk of

7 *op. cit.*, vol. 1, page 168.
being too specific. The addition "and also the red" does not refer to bloodshot conditions, but to the pink eyes of albinos, as we discover from two other passages, one of them in the same chapter:

This variety, which is found in the colour of the eyes is peculiar to man, and one or two other kinds of animals; but, in general, the colour in any one individual is the same in all the rest. The eyes of oxen are brown; those of sheep of a water colour; those of goats are gray: "and it may also be, in general, remarked that the eyes of most white animals are red; thus the rabbit, the ferret, and, even in the human race, the white Moor, all have their eyes of a red colour." The statement within quotation marks is much too sweeping, as it makes no distinction between normal white animals and the albinos cited as examples. Goldsmith could have checked the data which he gives here without much difficulty, and the fact that he made the statement as quoted is evidence at least of incomplete and inaccurate observation. The "white Moor" reference is expanded in chapter 11, "Of the varieties in the Human Race":

I have seen in London, at different times, two white negroes the issue of black parents . . . upon examining that negro which was last shown in London, I found the colour to be exactly like that of an (sic) European: the visage white and ruddy, and the lips of the proper redness. . . . The iris of the eye was yellow, inclining to red . . . .

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In the observations recorded above, which appear to be his own, Goldsmith definitely refers to the colour of the iris, which he strangely omitted to mention in the passages quoted previously. His description of the colour in this instance — "yellow, inclining to red" — is at variance with the generally accepted description. In the eye of an albino there is a lack of pigment in the iris, the retina, and the choroid, so that the iris is apparently pink because of the visibility of the blood-filled capillaries in the iris and the choroid.

Earlier in the present study we have found that Goldsmith used "yellow" to cover a wide range of bright colours, apparently extending into the brighter reds; that he used "pink" only once, in a fanciful reference to the clothing of imaginary female warriors; and that he was most assured of "red" when it was contrasted with pallor in the human complexion (as in his use of the words "ruddy" and "redness" in the last quotation). It appears probable that he actually looked closely at the iris of an albino, which others would describe as pink or red, and which he expected, on the basis of knowledge acquired from reading, to be red. He would make a comparison with the red of the cheeks, which looked to him much the same as in a British face; but he would be perplexed to find that the bright colour of the iris, which he himself would
describe as yellow, did not match the dark cheek colour. He therefore played safe by describing the albino iris as yellow on the strength of his own observation and adding "inclining to red" in order to forestall criticism. Thus he maintained consistency with what he had written some chapters earlier, and also was in a position to claim to be approximately correct, whichever colour proved to be acceptable to his readers.
CHAPTER AV

GOLDSMITH'S TYPE OF COLOUR VISION.

We have now examined a total of 318 separate colour references in Goldsmith's works, excluding his compilations. Of these 285 are specific, and 33 miscellaneous (naming no particular colour). This enumeration excludes instances of the use of "green" in the sense of "grassy plot". The many references to "the man in black" have been treated as one for this purpose, and one or two other cases of repetition have been similarly treated. The 318 references may be tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th>Pure colour</th>
<th>Subsidiary tints</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>20</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Green</td>
<td>18</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>Yellow</td>
<td>11</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Red</td>
<td>30</td>
<td>48</td>
<td>78</td>
</tr>
<tr>
<td>White</td>
<td>37</td>
<td>22</td>
<td>59</td>
</tr>
<tr>
<td>Black</td>
<td>51</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td>Grey</td>
<td>11</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Brown</td>
<td>21</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>33</td>
<td>-</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>232</td>
<td>86</td>
<td>318</td>
</tr>
</tbody>
</table>

In the "Pure colour" column, black and white account for the largest numbers of individual references.
This accords with one of the conclusions derived from our study, namely, that black and white were to Goldsmith the most outstanding of colours. We have found in our detailed analysis that Goldsmith referred to blue and green with some diffidence; that he was more confident with regard to yellow, but that perhaps he confused a fairly wide range of bright colours with yellow; that he used "red" and allied terms with considerable freedom, but principally in expressed or implied contrast to complexion pallor; that he was extremely diffident in mentioning grey; and that he mentioned brown freely, but sometimes in a manner which suggested that his "brown" included much more than the hues which are normally described as brown.

Under the heading of "Subsidiary tints" we have included in the above table only colours differing entirely in name from the eight colours we have called "pure". For example, "tawny" is shown as a tint subsidiary to brown, but "nut-brown" is included in the "Pure colour" column. This classification, adopted merely for convenience, does not cause any difficulties, because Goldsmith rarely qualifies his colour descriptions. He never describes a colour as "light" or "dark", and uses other qualifying words with colour-adjectives on only nine occasions. On two of those occasions ("our gowns of mazarine blue" and "his waistcoat was of gosling green") the probable original source of the
reference was a tailor's bill or some other written or spoken allusion to coloured fabrics. In another case ("peculiar green" of pickles) the phrase seems to be an echo of the writer's mother or of her neighbours. Three allusions (to Chinese jars "of the right pea-green", to Kashmir ladies' complexions "of a bright yellow", and to Swedish boys' "very white hair") evidently came from the travel books which supplied Goldsmith with much of his material. Another phrase containing a qualified colour-adjective ("trees of a mournful green") may have been as vague in meaning to Goldsmith as it is to us. Finally we have two conventional compound colour-adjectives in the poetic references to the "lamp-black face" of a soiled portrait and to "nut-brown draughts" of ale. None of these qualified colour terms indicates that Goldsmith used it in order to convey to his readers a shade of colour which he himself observed and appreciated.

The terms listed under the heading of "Subsidiary tints" are sometimes synonyms (as "snowy" for "white"), sometimes words of allied meaning (as "blush", treated as subsidiary to red), and sometimes words denoting a hue which is different from, or which is a specific form of, the pure colour (as "pink" or "scarlet"). In all instances of the third type, there is either certainty or strong presumption that Goldsmith derived the colour reference
from a source other than his own observations.

In our study of the specific colour references, therefore, we find no evidence that Goldsmith possessed the ability to distinguish minor variations in hue; but we do find grounds for doubting whether he could at all times positively identify, without some external basis for comparison or contrast, any colour except white and black.

In one of our miscellaneous references we found that Goldsmith was aware of the existence of colour-blindness many years before the first known recording of a case of the condition, which is almost conclusive evidence that he had discovered that his own colour vision was defective. In the passage in question he speaks of "one who had lost the power of distinguishing colours", without elucidation. The word "lost" suggests, but without affording any proof, that his colour-blindness was acquired; there is at least equal probability that the defect was congenital. If it was congenital, it would be likely to occur also among his near male relatives, but we have no information about the quality of their colour vision, and it may be regarded as beyond all possibility that any such information should come to light now or in the future. On the other hand, if the defect was acquired, that fact could be proved only by the
production of evidence that his colour vision in early life was normal, and no such evidence is known; and there would require to have existed an illness or condition, prior to his discovery of the defect in 1760 or earlier, which would be capable of destroying his colour vision. There are grounds for believing that he was colour-blind when he was in Holland in 1754-55, and perhaps when he was in Scotland in 1753. We have refrained from quoting the incident of the scarlet breeches, the starting-point of our investigation, as an indication that he was colour-blind; but now that we have discovered so much evidence in favour of his colour-blindness, we may take that incident as showing that the condition existed as early as 1751.

The determination of his type of colour-blindness is difficult, because of the lack of precise information. We have, however, certain deductions made from the evidence in his writings that help us. The facts that in his original works he has only one (apparently derivative) reference to blue eyes, and only one (incongruous) reference to blue skies; that in the *History of the Earth and Animated Nature* he writes four chapters on atmospheric phenomena without a single allusion to the blueness of the sky; and that he compared the hue of distant mountains to that of clouds, not to the blue of the sky, indicate that he had no power of hue discrimination at the blue end of
the spectrum. His references to green appear to be all conventional or derivative, and suggest that he could not appreciate that colour. We have found reason to believe that his "yellow" included orange and some brighter reds, and it may also have included green, as in Dalton's case. His "brown" appears to have included the darker reds and the darker greys. It would appear, then, that he had no power of hue discrimination over any range of colours in the spectrum: he may have seen dark grey at both ends, grading into light grey near the centre (about the green-yellow area).

This diagnosis of his defect as monochromatism is borne out by the passage in the first chapter of The Vicar of Wakefield which suggests that he took no pleasure in admiring such variegated objects as tulips and butterfly wings, and also by the unqualified wording of his allusion to colour-blindness — "one who had lost the power of distinguishing colours". It is also supported by the consideration that if his colour-blindness had been of the more common types in which hue discrimination and luminosity are reduced only to a limited extent, a man so vain and so lacking in the scientifically-critical spirit would not be likely to discover (especially by the comparatively early age of thirty-two) that there was anything wrong with his colour vision, when even the scientist Dalton did not make
a similar discovery until he was twenty-six years old.

There are two types of monochromatism, one known as rod monochromatism and the other as cone monochromatism. The first of these is associated with other eye defects such as nystagmus, photophobia and loss of visual acuity. If Goldsmith had suffered from nystagmus (a twitching of the eye) it would probably have been mentioned by the observant Boswell and others; his appreciation of the brightness of Italian scenery (in The Traveller, lines quoted on page 120 of this paper) is perhaps sufficient evidence that he did not suffer from photophobia; and there is no trace, in all his writings and in what we know of his life, of any noticeable lack of visual acuity. We may therefore regard it as probable that his defect was the very uncommon one of cone monochromatism, which, it has been suggested, consists of the co-existence in one person of protanopia and tritanopia — that is, lack of power of hue discrimination throughout the entire length of the spectrum and reduced luminosity at the red end; but this condition is so rare that little research on it has been possible.
CHAPTER VI

LITERARY SIGNIFICANCE

What significance does the fact that Goldsmith was colour-blind have with regard to his literary work? The answer to this question is not simple; it must of necessity be based on logical deduction and rational conjecture; but it may suggest that the defective colour vision of this outstanding writer profoundly influenced English literature of the latter part of the eighteenth century.

One obvious consequence of the condition, of course, was its effect upon details of his style of writing, whereby we have been provided with most of the evidence which we have considered in this study. His references to colour are fewer than might have been expected in a writer of poetry and lively imaginative prose; they tend to be conventional or derivative; they are occasionally incorrect; and they do not show appreciation of delicate variations of hue or the power of making striking original comparisons based on colour.

Colour-blindness would also affect his writing indirectly through his career and environment. If, as now seems highly probable, his rejection in his bid for a clerical appointment was due to his wearing scarlet breeches which he thought to be a sober brown, the entire course of
his subsequent life may have been affected by the error. (We say "may have been", because it is not certain that his temperament was equal to the tasks of serious study and deportment required of a clergyman.) Had he settled down, like his father, to a quiet life in an Irish parsonage, with a wife to keep him steady and a small but assured income, he might still have become a noted literary figure, but the nature of his writings would have been different. We might still have *The Vicar of Wakefield* (without the passages based on his continental wanderings), and perhaps *The Deserted Village* in a consistently Irish setting, but we would not have *The Traveller*; we might have *She Stoops to Conquer*, but probably not *The Good-Natured Man*; we might have more scholarly histories and essays, but it is most unlikely that the *Letters from a Citizen of the World* would have been written in anything like their present form. There would be a fair chance that Goldsmith's life would not have been cut off short at the age of forty-six, as it was, largely on account of hardships and dissipations; on the other hand, he would have lacked the stimuli of his varied experience, of the struggle with poverty, and of the companionship of Johnson, Reynolds, Burke, Garrick, and other eminent men in different walks of life in London, so that in a longer life he might have produced less of permanent value.
His abortive medical studies at Edinburgh and Leyden may have been seriously handicapped by his colour-blindness. Certainly he would have been at a disadvantage in diagnosis and in the identification and the compounding of drugs. In a letter to the Rev. Thomas Contarine, written in Edinburgh on May 8, 1753, he describes his professors thus:

Plume, professor of Chemistry, understands his business well, but delivers himself so ill, that he is but little regarded. Alston, professor of materia medica, speaks much, but little to the purpose. The professors of Theory and Practice (of Physic) say nothing but what we may find in books laid before us; and speak that in so drowsy and heavy a manner, that their hearers are not many degrees in a better state than their patients. You see then, dear sir, that Munro is the only great man among them . . .

It would be interesting to set against these remarks, which some biographers have held to be evidence of a keenly observant mind, the opinions of the professors about Goldsmith. Since the University of Edinburgh must have been producing an annual crop of qualified doctors, can we believe that all of the professors except one were of inferior calibre? Professors vary greatly in teaching ability, of course; but Goldsmith's inability to derive adequate profit from the lectures of so many makes us suspect that the fault was not in them, and may have been due at least in part to his colour-blindness. His academic year in Edinburgh, if it advanced his learning but little, encouraged him to go to Leyden in search

of further medical training; but his studies at Leyden ended in tacit acknowledgment of failure, as he left that university without a degree and became for a year a home­less wanderer living by his wits and on charity. His claim to have subsequently obtained a doctor's degree (of which no official record exists) from another European university may be written off as a fabrication: if he could not obtain a degree from either of the two universities which he entered with some standing and where he studied for a period with some measure of respectability, it is improbable that he would have been granted one by another university after only a few weeks' stay in its neighbourhood as an alien mendicant.

In 1758 he had high hopes of getting a position as surgeon with the East India Company; he was recommended by a Dr. Wilmer, the head of a school in which Goldsmith had served as usher, who apparently believed his claim to a foreign medical degree; and on failing in this, he tried to become a surgeon in the navy. Standards of qualification in those days cannot have been excessively high, but the navy also rejected him. No details of these incidents have been preserved, but if the examinations included practical tests of diagnosis or knowledge of drugs, colour-blindness may have caused him to make mistakes which led to his rejection in each case.
If he had succeeded in continuing his studies diligently to the point of obtaining a recognised medical degree and entering upon a career as a surgeon or doctor either in Britain or in India, the course of his life and his literary activities would have been greatly different from what they actually were. We would almost certainly have lost *The Vicar of Wakefield*, but we might have in its place novels based upon more extensive knowledge of life and humanity. *The Traveller* and perhaps *The Deserted Village* would never have been written: whether Goldsmith would have written other major poems is doubtful, since these two represented to a great extent an escape from literary drudgery. He might have written essays with a different flavour. If he had prepared any compilations, they would have tended to be more original, more scientific in their approach and accuracy, and more restricted in scope. His plays, if he wrote any, would probably have been truer to life and might have avoided the hackneyed theme of mistaken identity in favour of greater originality of plot.

The psychological effects of his colour-blindness must have been extensive, but it is difficult to define them precisely. As a child he no doubt occasionally incurred ridicule by making mistakes in naming colours or in distinguishing between objects whose identification
depended largely on colour. This ridicule would heighten the self-consciousness resulting from his disfigurement by smallpox, and would help to develop that anxiety to shine in company which, as we have suggested on pages 15 and 16 of this paper, was a major cause of his conversational absurdities.

Of more serious and far-reaching importance would be the tendency to distrust observations made by himself and to accept those made by others. This tendency naturally resulted from the embarrassment and perplexity caused by making mistakes in colour perception and by finding that apparently everybody else could distinguish in many objects characteristics which he could neither discern nor understand. The tendency would have become well established long before he began to realise that there was something faulty in his colour vision, and it would therefore not be restricted to observations in which colour alone was involved.

This self-distrust manifests itself in his writing in various forms. The most obvious expression of it is to be found in passages where he evidently discards his own observations or deductions in favour of an opposing opinion propounded by another. We have an excellent example of this in his description of the cow in the *History of the Earth and Animated Nature*, where, in defiance of his
own first-hand knowledge, he repeats the absurdity about the shedding of cows' horns.

Another method of expressing his distrust of his own observations is by taking refuge in conventional ideas and generalisations. Several times during our study we have noted instances of this; but the habit is not restricted to his handling of colour terms. His experiences in Europe provided him with material which could have been worked up into a dozen fictional and non-fictional masterpieces; instead, we have very little record of them except in The Traveller, which is almost entirely a series of generalisations. As a specific example, we may quote the second couplet of that poem:

"Or onward, where the rude Carinthian boor
Against the houseless stranger shuts the door",

an inaccurate and unfair generalisation from perhaps a single incident, which, if reported by a Sterne or a Smollett, might have produced one of the gems of English literature. We may also point out that the outstanding defect of The Deserted Village is precisely this same feature of generalisation — Goldsmith's failure or refusal to recognise as specific the diverse characteristics of a deserted village in Ireland and of a living village in England. It is only when carried to such extremes, of course, that generalisation is a defect in poetry:
when skilfully handled, it is one of the most valuable tools in a poet's equipment.

Biographers and critics have been puzzled by the apparent paradox in the composition of Goldsmith's literary works. He wrote two major poems which were widely acclaimed, but never followed up his success with more great poetry. His one novel was a masterpiece, but instead of writing another he returned to hack-work and the making of compilations. Two of the finest plays of the eighteenth century came from his pen; but he wrote only two plays in a lifetime of forty-six years. In some of his Citizen of the World Letters he showed himself to be a first-class essayist and a keen-witted satirist, but in many of the Letters he merely rewrote or copied verbatim material from other writers; and during the dozen years of his life that followed the publication of these Letters, he did not develop further the talents which they disclosed.

When we survey his works in the light of our discovery that he was colour-blind, and that consequently he came to distrust his own observations, particularly after he realised his defect in 1760 or earlier, we see a clear pattern emerging, and the apparent paradox ceases to be puzzling.

The Vicar of Wakefield portrays to a large extent the character of Goldsmith's father and the circumstances
of his youth, before he left Ireland for good in 1752. The Deserted Village is largely based on recollections of Ireland, with some incongruous blending of English village characteristics, possibly remembered from the late seventeen-fifties before Goldsmith settled down to be a hack writer in London. The Traveller is generalised from his experiences in Europe from 1754 to 1756, with some passages harking back to Ireland. The Good-Natured Man satirises his own improvident benevolence, which he inherited from his father and which was made evident in the earliest of his writings now extant, a letter to his mother dated 1751. She Stoops to Conquer is based upon one of his own early adventures before he left Ireland. The best and most original of his essays appear in the Citizen of the World Letters, most of which were written in 1760. To summarise, practically all of his greatest work of every kind, no matter when it was written, developed from ideas that originated not later than 1760; and we have found that by 1760 he had definitely realised that his colour vision was abnormal.

In the 1751 letter to his mother\(^2\) he relates the adventure of his trip to Cork with a freedom of description and briskness of narrative style which are hard to

find in most of his later work. In 1753 we find him setting down his impressions of Scotland\(^3\), with the habit of generalisation, accurate or otherwise, already well in evidence. Two years later he has begun to compose *The Traveller*, generalising even as he looks on the scene he is describing. By 1760 he has largely ceased to depend on his own observations, and — at the age of only thirty-two — is padding out his writings with an ever-increasing proportion of second-hand material. In the privacy of his lodgings he escapes from the hard reality of this dependence on others by going back for inspiration to the days when he could still believe in life as he saw it himself, and completing and polishing *The Traveller*. He then finds his best lodes of poetic ore depleted, but four years later he returns to the rich source from which he extracted lines 405 to 410 of that poem:

"Have we not seen at pleasure's lordly call
The smiling long-frequented village fall?
Beheld the duteous son, the sire decay'd,
The modest matron, and the blushing maid,
Forced from their homes, a melancholy train,
To traverse climes beyond the western main",

and re-works it into another major poem; but the mine is near exhaustion, and he has done little prospecting for new wealth.

In the same way, while turning out reviews, prefaces, and compilations to order, he delights himself by recalling

\(^3\) *Op. cit.*, pages 24-25.
memories of ten or twenty years earlier and perpetuating them in *The Vicar of Wakefield*; but when the last chapter is written, he possesses no new observations of life which he can confidently use as the foundations of a second novel, and he must go back to compilations to make his living. Feeling the frustration of inability to repeat his success, he turns to another field and puts himself on the stage in *The Good-Natured Man*, which meets a mixed, but on the whole favourable, reception. The public looks for more comedy like this; but a writer of good plays must observe life through his own eyes, and Goldsmith had not fully trusted his own eyes for nearly ten years. At last he tries again with *She Stoops to Conquer*: it is a hit, but the inspiration for it has been lying dormant in his mind for more than half of his lifetime.

Perhaps *She Stoops to Conquer* used up the last remnants of the pre-1760 ideas from which Goldsmith could develop worth-while efforts in any field of literature. He could see nothing before him, although he was one of the greatest writers of his day, but the drudgery of transferring ideas from other authors' works to his own. In desperate efforts to escape from the net that was closing about him he gambled feverishly, and ran heavily into debt. At forty-six years of age he was ailing, bankrupt, and old. The doctor who attended his last illness was puzzled by
his symptoms, and asked "Is your mind at ease?" Goldsmith answered "No, it is not" — his last recorded words.

We have suggested above that Goldsmith's career would have been entirely different if his colour vision had been normal; and it is not being too fanciful to say that the tragedy of his life and his literary frustration might have been largely averted if he had had the modesty and scientific impersonality of Dalton. In that case, when he realised that there was something unusual in his powers of colour perception, he would have studied his peculiarity and confided in personal friends. Sir Joshua Reynolds especially, as an artist and a warm-hearted friend of Goldsmith, would have been keenly interested and sympathetic. Once the existence of the condition became known, other cases would come to light, and the stigma which Goldsmith's vanity feared — that of being a unique freak of nature — would disappear.

If he knew the precise extent of his limitations, it would be possible for him to re-adjust himself accordingly, and to recover confidence in himself and the ability to produce original work; and the changed outlook might have helped to lengthen his life. While we might not have another contemporary, intimate novel such as The Vicar of Wakefield, we might have other works of imaginative fiction, improving progressively with experience
in this type of literature; we might have major poems written after the appearance of *The Traveller* and *The Deserted Village*, perhaps even epics; we would have, perhaps, no more comedies based on his own life, but instead plays set in distant countries and periods, expressing his often erratic but always lively and entertaining thoughts. In exchange for such wealth we could very well dispense with his histories of England, Rome, and Greece, and permit some less talented plodder to translate and enlarge upon the natural history of Buffon.
BIBLIOGRAPHY

A survey of the subject for the educated layman rather than for the specialist. Describes experiments and presents lucid diagrams, graphs and tables. Basic treatment sound, but some conclusions have been modified by subsequent extension of knowledge.

An intimate day-by-day record of Boswell's life in London during the period mentioned.

This is not a title.

The standard biography of Goldsmith; painstaking, detailed, and scholarly.


A compilation, largely derived from the works of Buffon and others, attempting to describe all animate and inanimate nature. Footnotes by editor (1840) exceed the original text in bulk.

Based chiefly on Forster's biography and on Goldsmith's writings. No new biographical facts.


APPENDIX I

EARLY RECORDS OF COLOUR-BLINDNESS

Abney summarises the earliest records of colour-blindness as follows:

In former days, not much more than a century ago, the existence of colour blindness, as it is now named, was a matter of great curiosity, and in the Philosophical Transactions of the Royal Society of 1777, the case of a shoemaker named Harris is described by a Mr Huddart, who travelled all the way from London to the Midlands on purpose to see if all the alleged facts regarding the patient were true. Harris mistook orange for green, brown he called black, and he was unable to distinguish between red fruits and the surrounding green leaves. At first, colour blindness was called Daltonism, from the fact that the great chemist Dalton suffered from it, and investigated the variation which he found existed in his vision from that of the majority of his fellow-creatures. It was in 1794 that Dalton described his own case of colour blindness. He was quite unaware of the defect till 1792, when he was convinced of its existence from his observations of a pink geranium by candle-light. "The flower," he says, "was pink; but it appeared to me almost an exact sky-blue by day. In candle-light, however, it was astonishingly changed, not having any blue in it; but being what I call a red colour which forms a striking contrast to blue." He goes on to remark that all his friends except his brother (mark this relationship), said: there was not any striking difference in the two colours by the two lights. He then investigated his case by the solar spectrum, and became convinced that instead of having the normal sensations, he only had two or at most three. These were yellow, blue, and perhaps purple. In yellow, he included the red, orange, yellow and green of others, and his blue and purple coincided with theirs. He says, that "part of the image which others call red, appears to me little more than a shade or defect of light; after that, the orange, yellow and green seem one colour, which descends pretty uniformly from an intense and a rare yellow, making what I should call different shades of yellow. The difference between the green part and the
blue part is very striking to my eye, they seem to be strongly contrasted. That between the blue and purple much less so. The purple appears to be blue much darkened and condensed."

Dalton said a florid complexion looked blackish-blue on a white ground. Blood looked like bottle green, grass appeared very little different from red. A laurel leaf was a good match to a stick of sealing-wax. Colours appeared to him much the same by moonlight as they did by candle-light. By the electric light and lightning, they appeared as in day light. Some browns he called red, and others black.

The same writer later refers to Dalton's wearing of the robe of a Doctor of Civil Laws, whose scarlet colour would be objectionable to Dalton's fellow-Quakers:

"So perfect evidence (sic) was the colour blindness, that the most modest and simple of men, after having received the Doctor's gown at Oxford, actually wore it for several days in happy unconsciousness of the effect he produced in the street."

It is unnecessary to stress the parallel between this anecdote and the story of Goldsmith's presenting himself before the bishop in scarlet breeches.

A slightly different version of the above early records is given on the next two pages, to indicate that authorities are agreed that the existence of colour blindness was not publicly recognised until after Goldsmith's death in 1774.

2 Ibid., page 61.
Earl
count gives the following account of early

records of colour blindness:

First Recorded Case.— The first definite record of a case of colour blindness dates from 1777, and is that of a shoemaker named Harris who lived at Maryport in Cumberland. His first suspicion that other persons saw something in objects which he could not see arose when he was about four years old. Having by accident found in the street a child's stocking, he carried it to a neighbouring house to find the owner; he observed the people called it a red stocking, though he could not understand why they gave it that name, as he thought it completely described by being called a stocking. The circumstance, however, remained in his memory, and together with subsequent observations led him to a knowledge of his defect.

He observed also that, when young, other children could discern cherries on a tree by some pretended difference of colour, though he could only distinguish them from the leaves by their difference of size and shape. He also observed that by means of this difference of colour they could see the cherries at a greater distance than he could, though he could see other objects at as great a distance as they, when the sight was not affected by the colour.

He had two brothers who were afflicted with the same defect and two other brothers and sisters who, as well as the parents, were quite normal. One of these brothers when shown coloured ribbons called a light green "yellow", but he was not very positive; he said, "I think this is what you call yellow." Of an orange yellow he spoke very confidently, saying, "This is the colour of grass; this green."

Dalton.— A celebrated case of colour blindness was that of the famous chemist, John Dalton, who founded the atomic theory of modern chemistry. For a time the defect was called Daltonism after him, especially on the continent, but there was a strong feeling in this country against remembering our distinguished fellow-countryman by his defect, so on the initiative of Sir David Brewster the name "colour blindness" was adopted instead.
Dalton was first distinctly convinced of his peculiarity of vision in 1792, when he was 26 years of age, by the discovery that the flower of a geranium which appeared to others pink in all lights, appeared to him blue by day, and what he called red by candle light. All his friends except his brother said there was not any striking difference in the colour by the two lights. This observation led him to examine the peculiarities of his vision; he then found that the pure colours, red, orange, yellow, and green were practically all alike to him, and that he called them all yellow, but that he could distinguish blue and purple, and that he called these colours by the correct names. Dalton said that blood appeared bottle green to him, grass appeared very little different from red. A laurel leaf was a good match for a stick of sealing wax.

APPENDIX II

LIST OF WORKS EXAMINED

1. Poetry: the poems examined are those included in the section "Poems and Plays" in Griffin's edition of Goldsmith's works. They are listed below in alphabetical order, with the longer poems (those over 100 lines in length) indicated by showing in parentheses the number of lines in them.

- The Captivity (302 lines); The Clown's Reply; Description of an Author's Bedchamber; The Deserted Village (430 lines); The Double Transformation (104 lines); Elegy on a Mad Dog; Elegy on Mrs. Mary Blaize; Epigram on a Beautiful Youth Struck Blind by Lightning; Epilogue spoken by Mr. Lee Lewis; Epilogue intended for Mrs. Bulkley; two Epilogues to She Stoops to Conquer; Epilogue to The Good-Natured Man; Epilogue to The Sisters; Epitaph on Dr. Parnell; Epitaph on Edward Purdon; The Gift; The Haunch of Venison (124 lines); The Hermit (160 lines); The Logicians Refuted; A New Simile; Prologue by Laberius; Prologue to Zobeide; Retaliation (with Postscript, 174 lines); three Songs; Stanzas (on Myra); Stanzas on the Taking of Quebec; Stanzas on Woman; Threnodia Augustalis (252 lines); The Traveller (438 lines).


3. Letters: addressed to—

- Mrs. Anne Goldsmith (1751?); Robert Bryanton (1753); Rev. Thomas Contarine (1753 and 1754); Daniel Hodson (1757); Edward Will (1758); Robert Bryanton (1758); Mrs. Jane Lawder (1758); Daniel Hodson (1758); Ralph Griffiths (1759); Rev. Henry Goldsmith (1759?); Mr. Newbery (1762); the Printer of The St. James's Chronicle (1767); George Colman (1767); David Garrick (1767); Sir Joshua Reynolds (1770); Bennet Langton (1771); Joseph Cradock (1771, 1772, and 1773); George Colman (1773); David Garrick (1773); the Public (1773); John Nourse (1773); Thomas Cadell (1773?).


5. Essays: Letters from a Citizen of the World (123 letters supposed to be written by and to a Chinese traveller); An Inquiry into the Present State of Polite Learning; The Bee, Nos. 1 to 8; and miscellaneous Essays, Nos. 1 to 26.
APPENDIX III

Extracts from the Ledger of William Filby, Tailor, at the Sign of the Harrow in Water-Lane.

Mr Oliver Goldsmith, Dr.

Brick Court, Temple, No. 2, up two pair of stairs.

<table>
<thead>
<tr>
<th>L.</th>
<th>s.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1767</td>
<td>Brought from fol. 26</td>
<td>25 19 2 ½</td>
</tr>
<tr>
<td>March 4</td>
<td>To superfine suit complete</td>
<td>6 0 9</td>
</tr>
<tr>
<td>June 19</td>
<td>To suit complete</td>
<td>6 1 6</td>
</tr>
<tr>
<td>Sept. 8</td>
<td>To superfine cloth breeches</td>
<td>1 2 0</td>
</tr>
<tr>
<td>Oct. 2</td>
<td>To suit of state mourning</td>
<td>6 8 9</td>
</tr>
<tr>
<td>Dec. 26</td>
<td>To black thick-set breeches</td>
<td>1 1 0</td>
</tr>
<tr>
<td>28</td>
<td>To superfine frock suit</td>
<td>5 12 0</td>
</tr>
</tbody>
</table>

£52 5 0 (sic)

(Paid by a draft on Mr. Griffin, Feb. 6, 1768.)

<table>
<thead>
<tr>
<th>L.</th>
<th>s.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan. 21</td>
<td>To Tyrian bloom satin grain and garter blue silk breeches</td>
<td>8 2 7</td>
</tr>
<tr>
<td>March 17</td>
<td>To suit of clothes — colour, lined with silk, and gold buttons</td>
<td>9 7 0</td>
</tr>
<tr>
<td>June 16</td>
<td>To suit of mourning</td>
<td>5 12 6</td>
</tr>
<tr>
<td>July 22</td>
<td>To two yards of green livery cloth</td>
<td>1 2 0</td>
</tr>
<tr>
<td>Aug. 29</td>
<td>To suit cleaned</td>
<td>0 6 0</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>To coat and waistcoat cleaned and made up</td>
<td>0 14 0</td>
</tr>
<tr>
<td>30</td>
<td>To fine worsted breeches</td>
<td>1 2 0</td>
</tr>
<tr>
<td>Nov. 29</td>
<td>To suit of grain mixture</td>
<td>5 14 6</td>
</tr>
<tr>
<td>To man</td>
<td>0 1 0</td>
<td></td>
</tr>
</tbody>
</table>

(Paid Oct. 9, 1769, by a note on Mr. Griffin, three months after date, for £33.)
### APPENDIX III

#### 1769.

<table>
<thead>
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<th>Date</th>
<th>Description</th>
<th>L.</th>
<th>s.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 6</td>
<td>To calico waistcoats</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Feb. 9</td>
<td>To suit of clothes</td>
<td>8</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>To altering two pairs of breeches for man</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To mending ditto</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Sept. 19</td>
<td>To pair of silk breeches</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Oct. 16</td>
<td>To making a half-dress suit of ratteen lined with satin</td>
<td>12</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To a pair of silk stocking breeches</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To a pair of bloom-coloured ditto</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

#### 1770.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>L.</th>
<th>s.</th>
<th>d.</th>
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</thead>
<tbody>
<tr>
<td>April 21</td>
<td>To Bath coating surtout</td>
<td>1</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To dress suit</td>
<td>9</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>May 3</td>
<td>To suit</td>
<td>5</td>
<td>17</td>
<td>7-</td>
</tr>
<tr>
<td>July 4</td>
<td>To suit</td>
<td>7</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Sept. 8</td>
<td>To suit of mourning</td>
<td>5</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>164</td>
<td>6</td>
<td>0</td>
</tr>
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</table>

(Paid £40 February 8, 1771, by a note of hand on Mr. Thos. Davies; and £23 October 2, by part of a note of hand on Griffin.)

#### 1771.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>L.</th>
<th>s.</th>
<th>d.</th>
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</thead>
<tbody>
<tr>
<td>Jan. 3</td>
<td>To clothes scouring and mending and pressing</td>
<td>0</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To pair of best silk stocking breeches</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To suit of clothes, lined with silk, gold buttons, &amp;c.</td>
<td>9</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Feb. 8</td>
<td>To best silk breeches</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>April 11</td>
<td>To frock suit, lined with (illegible)</td>
<td>8</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>half trimmed with gold sprig buttons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To Queen's blue dress suit</td>
<td>11</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Oct. 3</td>
<td>To suit, plain</td>
<td>5</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Dec. 5</td>
<td>To silk breeches</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>To jobs, mending, &amp;c.</td>
<td>0</td>
<td>5</td>
<td>0</td>
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</tbody>
</table>
### 1772.

<table>
<thead>
<tr>
<th>Month</th>
<th>Items</th>
<th>£</th>
<th>s.</th>
<th>d.</th>
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<tbody>
<tr>
<td>Jan.</td>
<td>4</td>
<td>5</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To half-trimmed frock suit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>5</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>March</td>
<td>18</td>
<td>3</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>April</td>
<td>28</td>
<td>1</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>May</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>May</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To jacket</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>June</td>
<td>8</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>To altering two coats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>19</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Nov.</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dec.</td>
<td>17</td>
<td>1</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

### 1773.

<table>
<thead>
<tr>
<th>Month</th>
<th>Items</th>
<th>£</th>
<th>s.</th>
<th>d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To Princess stuff breeches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>April</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To mending, &amp;c.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>7</td>
<td>0</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>To velvet waistcoat, cleaning, &amp;c.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>0</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>To altering suit, and for serge de soy for waistcoat and shirts, &amp;c.</td>
<td>0</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>June</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Tamboured waistcoat cleaned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To green half-trimmed frock and breeches, lined with silk, &amp;c., &amp;c.</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>To silver-grey silk tamboured waistcoat</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Mr. Hodson's bill to order</td>
<td>35</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Bill delivered

£158 4 4 1

---

Mr. J. M. MacLennan,
110 Frank Street,
Ottawa 4, Ontario,
Canada.

Dear Mr. MacLennan,

Thank you for your letter. In answer to your questions, I am afraid I have no knowledge about the effect smallpox has on colour vision, but I have not heard that it has any adverse effect. I think a good deal more research is required into the relation between acquired and congenital colour blindness but my impression is that it has characteristics of its own and is probably closely tied up with some loss of absolute light sensitivity. It is, however, high time someone measured the colour mixture curves and hue discrimination curves for observers with the acquired defect.
With regard to tritanopia, we are at the moment engaged on studies on a number of tritanopes, but it remains to be seen whether they show any significant loss of red sensitivity. Data recorded so far suggest there is little diminution at this end of the spectrum. Rod monochromats, of course, have poor red sensitivity, cone monochromats are so rare that it is impossible to generalise. Acquired colour-blinds probably do show poor red sensitivity, but this may be part of their general loss of light sensitivity.

I hope this information is of some help to you.

Yours sincerely,

(signed) W. D. Wright

---

1 Dr. W. D. Wright is author of the work Researches on Normal and Defective Colour Vision, from which much of the information used in preparing Chapter 1 of this paper has been extracted.
To these meteors (fire-balls), common enough southward, we will add one more of a very uncommon kind, which was seen by Ulloa, at Quito, in Peru; the beauty of which will, in some measure, serve to relieve us, after the description of those hideous ones preceding. "At day break," says he, "the whole mountain of Pambamarca, where we then resided, was encompassed with very thick clouds; which the rising of the sun dispersed so far, as to leave only some vapours, too fine to be seen. On the side opposite to the rising sun, and about ten fathoms distant from the place where we were standing, we saw, as in a looking-glass, each his own image; the head being, as it were, the centre of three circular rainbows, one without the other, and just near enough to each other as that the colours of the internal verged upon those more external; while round all was a circle of white, but with a greater space between. In this manner these circles were erected, like a mirror, before us; and as we moved, they moved, in disposition and order. But, what is most remarkable, though we were six in number, every one saw the phenomenon with regard to himself, and not that relating to others. The diameter of the arches gradually altered, as the sun rose above the horizon; and the whole, after continuing a long time, insensibly faded away. In the beginning, the diameter of the inward iris, taken from its last colour, was about five degrees and a half; and that of the white arch, which surrounded the rest, was not less than sixty-seven degrees. At the beginning of the phenomenon, the arches seemed of an oval or elliptical figure, like the disc of the sun; and afterwards became perfectly circular. Each of these was of a red colour, bordered with an orange; and the last bordered by a bright yellow, which altered into a straw colour, and this turned to a green; but, in all, the external colour remained red." Such is the description of one of the most beautiful illusions that has ever been seen in nature. This alone seems to have combined all the splendours of optics in one view. To understand the manner, therefore, how this phenomenon was produced, would require a perfect knowledge of optics; which it is not our present province to enter upon. It will be sufficient, therefore, only to observe, that all these appearances arise from the density of the cloud, together with its uncommon and peculiar situation,
with respect to the spectator and the sun. It may be observed, that but one of these three rainbows was real, the rest being only reflections thereof. It may also be observed, that whenever the spectator stands between the sun and a cloud of falling rain, a rainbow is seen, which is nothing more than the reflection of the different coloured rays of light from the bosom of the cloud. If, for instance, we take a glass globe, filled with water, and hang it up before us opposite the sun, in many situations it will appear transparent; but if it is raised higher, or sideways, to an angle of forty-five degrees, it will at first appear red; altered a little higher, yellow; then green, then blue, then violet colour: in short, it will assume successively all the colours of the rainbow; but if raised higher still, it will become transparent again. A falling shower may be considered as an infinite number of these little transparent globes, assuming different colours, by being placed at their proper heights. The rest of the shower will appear transparent, and no part of it will seem coloured; but such as are at angles of forty-five degrees from the eye, forty-five degrees upward, forty-five degrees on each side, and forty-five degrees downward, did not the plane of the earth prevent us. We therefore see only an arch of the rainbow, the lower part being cut off from our sight by the earth's interposition. However, upon the tops of very high mountains, circular rainbows are seen, because we can see to an angle of forty-five degrees downward, as well as upward or sideways, and therefore we take in the rainbow's complete circle.  


APPENDIX VI

AN ABSTRACT OF

Was Oliver Goldsmith Colour-blind? ¹

The theory that Oliver Goldsmith was colour-blind first offered itself as a possible explanation of an incident in his early life. As it also appeared to afford a clue to many of the puzzling features of Goldsmith's life and writings, a detailed investigation of the question "Was Oliver Goldsmith colour-blind?" was carried out, and is reported in this paper.

More than 300 specific and general references to colour in Goldsmith's works (exclusive of compilations), as well as certain significant passages in his History of the Earth and Animated Nature, are analysed. A number of relevant items in Forster's biography of Goldsmith and in Boswell's Life of Samuel Johnson and London Journal are examined. A brief outline of modern knowledge of colour-blindness, as it affects the problem, is included.

The significance of the fact that Goldsmith was aware of the existence of colour-blindness more than thirty years before the condition was first studied and

¹ J. Munro MacLennan, Was Oliver Goldsmith Colour-blind?, thesis (unpublished) submitted to the Faculty of Arts of the University of Ottawa, 1951, xiii + 192 pages.
described by Dalton is pointed out. Goldsmith's diffidence in mentioning certain colours, his errors in identifying colours and in comparing the colours of different objects, his tendency to rely on conventional or second-hand phrases involving colour, and other peculiarities in his references to colours are noted, and deductions are made therefrom. It is pointed out that classification of his type of colour vision is difficult because of lack of precise evidence, but that apparently his condition was the rare type known as cone monochromatism.

The effects of the condition on his career, on his attitude towards life, on his eccentricities of dress and behaviour, and on his literary style and production are worked out.

Appended to the paper are: historical references to the earliest known cases of colour-blindness; a list of Goldsmith's works examined in this investigation; a copy of his tailor's bills from 1767 to 1773; a letter from Dr. J. D. Wright, British authority on colour vision, answering questions asked by the author; Goldsmith's account of the phenomenon of rainbows; and an abstract of the paper Was Oliver Goldsmith Colour-blind?

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