

What is really red is on the contrary called by Jenner "pink" in the well-known poem upon the signs of wet weather:—

"Closed is the pink-eyed pimpernel."

To come to the very age we live in, old croquet-players persist in calling the second ball of the series "pink," although for the last ten years it has always been painted red.

Now if English should become a dead language, what will some future critic suppose *red* to have meant? a term that he finds applied to blood, to gold, to wine, to the marigold, to flame, and to bay horses; and replaced with *pink* in the case of the pimpernel and the second croquet-ball?

Φοίνιξ.

This word meant originally Phœnician, a people from whom the richly-dyed robes that they imported were called; as in an old poem we have a colour designated from Bristol:—

"Her kirtle Bristol red;"

and as a deep blue dye is called "indigo" from being first brought from India.

The same word *φοίνιξ* was applied to horses, probably Syrian ones in the first place, just as from Rouen we call those of a certain colour "roan," agreeably to a common usage in all languages. Thus porcelain is called "China," and a certain leather made of goats' skin "Morocco," although manufactured in Europe.

As to the term *φοίνιξ* being applied to the lion and the jackal, we may well suppose that Homer never saw the one or the other. It is quite as unlikely that he ever saw a live dragon. If the horses that the Phœnicians introduced were tawny, it would be no misnomer to call the lion and jackal *φοίνιξ*. We are not to presume that if Phœnician robes were crimson, everything else that was named after them must also have been crimson. A future critic might as reasonably argue that porcelain from China was of an orange colour, because there are "China oranges."

Dates were also called *φοίνιξ* as being a Phœnician fruit, just as the small grapes imported from Corinth are called "currants."

Ῥόδεις.

This term referred, no doubt, to a crimson variety of rose, the so-called Damask rose, the one usually cultivated in ancient times. Thence a comparison of its colour to blood implied by a line of Bion:—

Αἷμα ῥόδον τίκτει τὰ δὲ δάκρυα τὰν ἀνεμώναν.

Where this word is applied to oil in the account of the funeral of Patroclus (Il. xxiii. 186), it is to a heavenly oil with which Venus anoints the corpse of Hector to preserve it from putrefaction, and not ordinary olive oil:—

Ῥόδδεντι δὲ χρίεν ἐλαίω Ἀμβροσίω.

It may have meant either "rose-coloured" or "rose-scented."

Κυάνεος.

This term, which seems in so many passages to mean "dark," would have been very properly applied to the sand of volcanic islands, like those in the Ægean Sea. On the coast of the Gulf of Naples near Pompeii it is quite black, and walking over it on a hot sunshiny day I had cause to remember its colour, for my feet were roasted.

Χλωρός.

Grass in the Mediterranean countries soon withers and dries to a pale colour, and remains so the greater part of the summer. It was to this withered grass that Homer seems to have compared a pale complexion, and honey, and olive wood, and the nightingale. Our evergreen meadows are unknown in the south.

Οἶνοψ.

The houses of the ancients were unprovided with glass windows, and were very dark within, so that entertainments must have been given by lamp-light, when wine of a dark colour would have appeared darker still.

Πορφύρεος.

A vague term, but equally vague our *purple*; for while we apply it to the foxglove and many other flowers which present an equal mixture of red and blue, we at the same time apply it to a beech, the foliage of which is of a deep copper colour merging into black without any blue in it at all; and in milliners' language to a deep blue without any red in it.

Ἰοειδής.

What was the flower that the Greeks called *ιον*, is very doubtful. That which Pindar describes (Ol. vi. 91) as with *ξανθαίς*

καὶ παμπόρφυροις ἀκτίσι, with brilliant yellow and richly purple rays, cannot be our own modest violet. I have always supposed it to mean Centauries of different species, some of them, as the *C. rugosina*, of the brightest gold colour, others, as the *C. cyanus*, of a clear blue, and others of a dark purple. The late J. Hogg in his treatise upon the classical plants of Sicily most unaccountably omits all mention of it. At the present day it is the stock, *Matthiola incana*, which in Italy is called *Violetta*. In the above line quoted from Pindar it must have been a radiate flower that he intended. In this respect uncultivated nations are very inaccurate. The Illyrians at the present day call all wild flowers alike indiscriminately *rosje*, roses; and we may be sure that Jesus Christ in his beautiful apologue—"Consider the lilies"—used the language of the people he was addressing, and did not mean lilies in the strict sense of the word; plants that would not burn if cast into an oven on the morrow of being cut down.

It is very strange that Mr. Gladstone in the essay published in the *Nineteenth Century* of October, 1877, has entirely passed over *κροκόπεπλος*, saffron-robed, an epithet twice applied to Eos, the dawn of day, in the first lines of "Il.," bk. 8 and bk. 19, a word that proves that Homer saw yellow distinctly; for he never calls Eos yellow-fingered, *κροκόδακτυλος*, or rosy-robed, *ροδόπεπλος*.

In the above it has been my desire to prove that any inaccuracy in Homer's names of colours was due to the unfixed character of the language, and not to a defective vision on the part of the poet. In illustration of this view let me give a case that occurred to me about two years ago. I took to a flower show at Taunton a dahlia of a rather common variety, and such as most gardeners would call purple; a dark pink with a shade of blue over it, and requested forty-four different people to write me down what they would call its colour. In their replies I got fourteen different names for it. I sent a flower of the same kind to a lady who returned me twelve replies from members of her family and friends, and in the twelve were eight different names. How much more then may we expect diversity and inaccuracy in the nomenclature of their colours among the popular poets of an early period! and how little reason have we for believing in any gradual development of colour vision in successive generations of men!

R. C. A. PRIOR

Colour-Blindness

IN answer to Mr. Podmore's question in *NATURE*, vol. xix. p. 73, as to the appearance to me of the green of the solar spectrum, I may say that such part of it as inclines to yellow is seen by me as faint yellow, and such part of it as inclines to blue is seen by me as faint blue. The line of division, which I may call neutral green, appears simply colourless or white; there is no dark space, no pigments; neutral green appears to me gray.

When I wrote the paper for the *Phil. Trans.* I applied the descriptions to colours obtained by pigments, because that was the mode that had previously been adopted in treating the subject, and I had not, at that time, the opportunity of making any good observations on direct light. At a later period I went through a series of experiments of the kind with an eminent physicist, but I am not aware that the results have been published. I will endeavour, if possible, to supply the desideratum.

WILLIAM POLE

The Colour Sense

THE note of Mr. Grant Allen in *NATURE*, vol. xix. p. 32, induces me to state that in the year 1877 I arrived at and developed exactly the same conclusions in several articles of the German journal, *Kosmos* (vol. i. pp. 264-275 and 428-433), namely:—

1. The colour-sense manifestly appears already in insects and many of the lowest vertebrates; its complete absence could therefore hardly be supposed in the very lowest race of men.

2. The anomalies shown in the expressions of colours among the most ancient civilised nations by Gladstone, Geiger, and Magnus, may be perfectly explained, partly by the insufficiency of the primitive store of words for this subject, partly by climatic, physiological, and optical reasons, as stated at length in the above-mentioned articles.

3. The usage of telling terms for the single colours closely followed the progress of the art of dyeing. ERNST KRAUSE
Berlin, December 2