the manner d'huppe was a dupe. A very interesting derivation is $o s=$ face, hence oscillum=little face: the masks of Bacchus, hung in vineyards as scarescrows, oscillated.

For all their erudition, they admit defeat over a few words, for example drake; they say little about some others, and omit a few interesting ones altogether. Thus ladybird gets three lines --you could fill twice that space with its aliases. Why did that insect excite our inventive faculties so greatly? Nostoc is not mentioned. According to the Authorised Version the Israelites said, "'It is manna': for they wist not what it was". A marginal note says that manna $=$ Hebrew man $h u=$ what is it. Paracelsus probably turned that into dog-latin and contracted (as was his habit) getting noste hoc and so nostoc, for he thought that was what they ate. Potter and Sargent follow the OED into error in deriving Jerusalem artichoke from girasole. Salaman argued that the etymon was the Netherlands town Ter Neusen. They comment on the layman's preoccupation with hares in naming plants, but not on the systematist's preoccupation with wolves: for instance, lycopodium=wolf's foot, lycoperdon=wolf's fart, and lycopersicum =Persian wolf. Why is the last a suitable name for the tomato?

As well as discussing derivations, they discuss linguistic trends. Transposition, or metathesis, is common in all languages. In English, bridd became bird, hundert hundred and wops wasp. This happened to carmine (from the kermes insect) when it became crimson while passing through the Near East. The original root ter $=$ to rub is still there in termite and teredo, but metathesised into trypsin and trypanosome. They comment on the tendency of early forms of language to stress the actions rather than the appearance of animals, and to use names to relate organisms on the basis of rather slender resemblances, whereas we use names divisively. On the basis of the first trend they comment on the paucity of names for colours in Greek, and say that Phryne was so called because of her golden-brown skin. Nowadays, most whores would resent being called toad regardless of their colouring. There is a real difficulty here. The Greeks painted their statues, and that group of our contemporaries, which we arrogantly call primitive, often have an enthusiasm for colour that surpasses our own. Perhaps initially you just use colour and do not waste time talking about it.

Although they comment on some interesting inconsistencies in the use of plurals they do not mention beans, oats and peas. These are consistently plural, presumably because they appeared on the table as individual pieces, like turnips and potatoes, unlike
flour from such cereals as wheat. They comment on the old double plural kine, for the i (originally y) has already made cow plural, and on the use of horse in both singular and plural. Apropos of horse: the sudden replacement of equus by caballus is an old puzzle. A philological wit suggested that the new word was part of an erotic joke, few things spread through a community so fast. The suggestion here is that caballus, the root of most horse-words in Romance languages, has a Celtic origin.

It is clear from this excellent book that spelling used to be fluid but meaning fairly rigid. Artistry put the intrusive $b$ into limb and thumb, and pseudoclassicism the $h$ into ailanthus, the $p$ into ptarmigan and the ridiculous ph into sulfur. Since Dr Johnson, at whom fun is from time to time poked. spelling has been rigid and meaning fluid. Misuse is so common that a careful writer must avoid many words. Americans have invented new meanings for careen and watershed. On both sides of the Atlantic enormity and vicarious are losing their meaning. So long as it is spelt with $z$, if that is the "house style", modern editors allow visualise to mean "to make visible". We should heed T. S. Eliot's warning: Words strain,
Crack and sometimes break, under the burden,
Under the tension, slip, slide, perish, Decay with imprecision, will not stay in place,
Will not stay still.

> N. W. Pirie

## No Faith in Figures

The Numbers Game: The Bland Totalitarianism. By Harry Hopkins. Pp. 310. (Secker and Warburg: London, March 1973.) $£ 2.80$.
This is a view-with-alarm book. The "numbers game" so viewed consists essentially of doing one or more of the following misdeeds: counting or measuring things that should not be quantified; doing so most inaccurately; trumpeting, or brooding over, or acting upon those figures to a degree unwarranted by their worth. Here is the world our author views.
The stock market plunges on announcement of a preliminary estimate of a balance-of-trade figure. Such is the power of a number carried to two decimal places that no one stops to ask how precise such an estimate can be, or what produced the change from the preceding period, or even just what the quantity being measured represents anyway.
Or a teacher acts on the evidence of a single magic number-because no verbal description of a child, or subjective knowledge from personal acquaintance, has the hypnotic quality
of an officially entered IQ 113 in his record.

Through sampling methods, every hour of every major American television programme is "Hooperated". This guarantees that if detectives and horror figures are popular at the moment, there will shortly be nothing else on the air.

Scientific method falls upon British Rail. Measurement and calculation reveal that one third of the route mileage is carrying a mere $1 \%$ of the traffic and inevitably doing so at a loss. The all-too-obvious sequel threatens the comfort, convenience, and possibly the livelihoods of no negligible number of persons, because even $1 \%$ of passenger journeys is $9,384,330$ journeys.

And what of the magical GNP? A drop, not in the gross national product but merely in the rate of its growth as measured by a mysterious index, is enough to precipitate financial panic. Yet the GNP figure is so incomplete that it can show a drop when there has in fact been a rise in true production. (If I pay a tilesetter $\$ 100$ to improve my bathroom, that amount finds its way into the GNP. But if I tile the room myself, adding equally to what has really been produced, not a cent is added to the index. The tile might as well lie unused in the box.)

In pointing out these abuses, Mr Hopkins is on the soundest of ground. We do talk too much in numbers. We do use figures that are more or less irrelevant or badly put together. But not all the abuses our author parades for us really have to do with numbers. It may well be that substitution of blood purchase in America for a former system of reliance upon charitable-minded (and healthy) donors has increased the prevalence of hepatitis among transfused patients. But it is stretching terms a bit to call commercialization, however deplorable, a numbers game.

Since Mr Hopkins is not entirely prepared to abandon index numbers and sampling studies and censuses (he does not hesitate to use them in pursuit of his own ends here) and the other methods in which he finds abuses, we should like him to tell us where to draw lines. Which numbers should we abandon? How can we persuade publicists to stop shouting at us the figures that favour their particular causes? How are we to keep casual readers from taking at face value headlined numbers that do not, in fact, mean much of anything?

Mr Hopkins does not give us much help at this point, though he does suggest that a little schoolroom practice by children in manipulating statistics might meet their need to be "inoculated against numerical neuroses as well as against smallpox and diphtheria"; to which almost anyone, particularly after reading The Numbers Game, would say amen.

Darrell Huff

