

SOME RESEARCH 'KOAN'

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These extracts are presented for you to think about in relation to your own research and your reading of research; they are not truths or, rather, they are their own truths; for you, they are for contemplation; they are 'koan'.

$$2(P) \equiv (\exists x)(\exists y)[P(x).P(y).x \neq y.(z)(P(z) \supset . z = x \vee z = y)]$$

(Benacerraf & Putnam, 1983)

Photometric redshifts can be routinely obtained to accuracies of better than 0.1 in $\Delta z/(1+z)$. The issue of dust extinction, however, is one that has still not been well quantified. In this paper the success of two template-fitting photometric redshift codes (IMPZ and HYPERZ) at reliably returning A_V in addition to redshift is explored. New data on the 2nd Canadian Network for Observational Cosmology (CNO2) spectroscopic sample of $0.2 < z < 0.7$ galaxies are presented. These data allow us to estimate A_V values from the observed Balmer decrements. We also investigate whether the empirical value of $\gamma = 0.44$, the ratio between gas- and star-derived extinction, as determined by Calzetti, is necessarily the best value for this sample.

When comparing the two codes with the Balmer-derived A_V (Balmer $[A_V]$), a correlation between the photometrically derived A_V (Phot $[A_V]$) and the Balmer $[A_V]$ is found. The correlation is improved when the empirical value of $\gamma = 0.44$ is allowed to vary. From least-squares fitting, the minimum in the reduced χ^2 distribution is found for $\gamma \sim 0.25 \pm 0.2$. For the sample of galaxies here, the factor of 2 difference in covering factor implied by the Calzetti ratio is found to be plausible. The CNO2 galaxies with detected Balmer lines have some preference for an increased covering-factor difference, which perhaps implies that they are undergoing more rapid, 'bursty' star formation than the galaxies Calzetti used in her derivation.

(Babbedge, T.S.R. et al, 2005; p. 147)

In the case at hand, to treat the cockfight as a text is to bring out a feature of it (in my opinion, the central feature of it) that treating it as a rite or a pastime, the two most obvious alternatives, would tend to obscure: its use of emotion for cognitive ends. What the cockfight says it says in a vocabulary of sentiment—the thrill of risk, the despair of loss, the pleasure of triumph. Yet what it says is not merely that risk is exciting, loss depressing, or triumph gratifying, banal tautologies of affect, but that it is of these emotions, thus exemplified, that society is built and individuals put together. Attending cockfights and participating in them is, for the Balinese, as kind of sentimental education. What he learns there is what his culture's ethos and his private sensibility (or, anyway, certain aspects of them) look like when spelled out externally in a collective text; that the two are near enough alike to be articulated in the symbolics of a single such text; and—the disquieting part—that the text in which this revelation is accomplished consists of a chicken hacking another mindlessly to bits.

(Geertz, C., 2000; p. 449)

I take the positivist viewpoint that a physical theory is just a mathematical model and that it is meaningless to ask whether it corresponds to reality. All that one can ask is that its predictions should be in agreement with observation.

(Hawking, 1996; pp. 3-4)

In their condemnation, Gross and Levitt portray scientists as the good and virtuous defenders of rationality protecting themselves from the onslaught on the evil and misguided people of postmodern and feminist irrationality. They accuse academic groups that critique science as being guilty of 'intellectual dereliction' [...]. From now on Gross and Levitt advise scientists to be on the guard against the erosion of scientific rationality wherever it may occur. Scientists are encouraged to attend seminars given by nonscientists about science in order to set the record straight. They are invited to scrutinize the tenure decision of science critics and evaluate the science education curriculum at their respective universities to make sure it has not been infiltrated by anti-scientists [...]. Gross and Levitt's critiques go so far as to argue that if the humanities faculty were to walk out of an institution such as MIT, that the science faculty could manage to put together a respectable humanities program. On the other hand, if scientists were to walk out, the humanists would be unable to carry on the science curriculum [...].

(Ward, 1996; pp. 49-50)

Like the genre it is meant to satirize—myriad exemplars of which can be found in my reference list—my article is a *mélange* of truths, half-truths, quarter-truths, falsehoods, non sequiturs, and syntactically correct sentences that have no meaning whatsoever. (Sadly, there are only a handful of the latter: I tried hard to produce them, but I found that, save for rare bursts of inspiration, I just didn't have the knack.) I also employed some other strategies that are well-established (albeit sometimes inadvertently) in the genre: appeals to authority in lieu of logic; speculative theories passed off as established science; strained and even absurd analogies; rhetoric that sounds good but whose meaning is ambiguous; and confusion between the technical and everyday senses of English words. (N.B. All works cited in my article are real, and all quotations are rigorously accurate; none are invented.)

But why did I do it? I confess that I'm an unabashed Old Leftist who never quite understood how deconstruction was supposed to help the working class. And I'm a stodgy old scientist who believes, naively, that there exists an external world, that there exist objective truths about that world, and that my job is to discover some of them. (If science were merely a negotiation of social conventions about what is agreed to be "true", why would I bother devoting a large fraction of my all-too-short life to it? I don't aspire to be the Emily Post of quantum field theory.)

But my main concern isn't to defend science from the barbarian hordes of lit crit (we'll survive just fine, thank you). Rather, my concern is explicitly *political*: to combat a currently fashionable postmodernist/poststructuralist/social-constructivist discourse -- and more generally a penchant for subjectivism -- which is, I believe, inimical to the values and future of the Left.

(Sokal, 1996; no page nos. in the version on Sokal's site.)

'Facts', for him, are 'sentence-shaped things', a charming if shallow metaphor. One might be tempted to think that the world helps us to decide between say, 'Strychnine is poisonous' and 'Strychnine is nourishing'.

(Harré & Krausz, 1996; pp. 202-3)

All accounts have, first, to theoretically construct the world they go on to describe in various ways and, in principle, be able to demonstrate non-tautologically [...] that the world is in fact as such. What voice discourses suppress is the manner in which they covertly exempt themselves from the condition they prescribe and hold to be true for everyone else. This exemption is always a form of the basic contradiction of relativism. The truth that all truths are relative must exempt itself in order to be true; there is *one* truth that is *not* relative: the truth that all truth is relative. But then, of course, it is not true that all truth is relative. Positions that deny that anything can be 'in fact' the case (because what is the case is only ever so from a particular perspective) implicitly suppress the claim that it is *in fact* the case that the world is thus and, furthermore, can be shown to be so. In fact, we know full well that it is not!

(Moore & Muller, 1999; p. 201)

My approach here is as openly 'interpretive' as is Fairclough's. However, my aim is not to reveal, for example, power relations. On the contrary, this being a sociology, power—here, the constitution of subjectivity—is implicated in my theoretical constructions themselves and, indeed, is implied in the rhetorical form of this presentation; there is, as I hope my analysis below will demonstrate as well as exhibit, no getting away from it. Rather, my analysis consists, firstly, of an initial partitioning of my field of vision into, on the one hand my organisational language and, secondly, my object text or texts. The ensuing dialogue generates a second partitioning via the production of my commentary—the textualising of the object text, as it were. Thereafter, my autopoietic work proceeds as a productive dialogue between these three constructions; a dialogue that develops all three in respect of, at least, their internal coherence and correspondence of form. As is commonly the case, the final product—this paper, for example—elides the dialogic and developmental nature of its production.

(Dowling, 2004; pp. 6-7)

'Every civilization needs to overestimate the objectivity of its thought,' as Lévi-Strauss remarks, 'and this tendency is never absent.' The observation apparently refers to an exaggerated appreciation of the practicality and necessity of one's categories, but then it can also be taken another way. People overestimate their objectivity because they are noticing only a fraction of the empirical characteristics of things, a selective attention and evaluation that corresponds to an act of categorization. Note that we are not dealing simply with physiological sensations but with empirical judgements. The biological mechanisms of perception are not in question, nor is their universality. At issue, rather, is the organization of experience, including the training of the senses, according to social canons of relevance. These canons, and therefore the distinctions people make among objects, vary even among 'particular social groups in the [same] national society,' as the *Encyclopédie* of the philosophes had already observed ... For, things are not only perceived, they are thereby known, which is to say, they are classified. Hence people who are perceiving the same same objects are not necessarily perceiving the same kinds of things—as happens ... in discriminations of 'natural species.' And conversely, people may agree about what certain images are, while perceiving them in entirely different ways—as happens to the red-green color blind.

(Sahlins, M., 1995; p.155)

It is often assumed that the distinction between information and knowledge is merely one of 'level', that we process data to obtain information and that we process information to obtain knowledge. In our view, however, the distinction is not one of degree, but of kind. Information is the answer to a question (classically, information 'destroys uncertainty') whereas knowledge is the framework that enables the question to be asked. [...] Categories are more than data: they imply a systematization from a particular perspective. To recognize this involves knowledge. It is that knowledge which is power: it allows one to interpret the data as information. Such contextual knowledge can never be fully specified. The attempt to render it fully explicit leads to an infinite regress.

(Newman, R. and Johnson, F., 1999; p. 83)

Experimental reports may stand as an example of texts that conceal the implicit craft knowledge employed in their production. The disambiguated report that appears in a learned journal is the result of a catastrophic crystallisation [...] and does not accurately represent the craft process of actual experimentation. Similar arguments could be applied to legal decisions, medical diagnoses and professional judgement in general. Therefore, the credence given to an experimental report or a professional opinion is not entirely dependent upon the quantity of information that it embodies: its acceptance is to a considerable extent the result of a complex process of social communication and judgement, concerning the competence of the investigators and the importance of the theoretical issues which they have raised.

(Newman, R. and Johnson, F., 1999; p. 83)

... the pre-eminent question of literary interpretation—what does this poem (or novel or play) mean?—is properly answered not by a proposition ('This poem means that war is hell' or 'This poem means that infant mortality is a national disgrace'), but by a refusal directly to answer it. Something must always be left over, unaccounted for, open to still another turn of the interpretive screw; were this not so, the work could be said to have engaged in totalizing—in telling (or claiming to tell) the truth about the world once and for all—and thereby forfeited its right to be called 'literary'.

(Fish, S. 1995; p. 34)

The generative formula which enables one to reproduce the essential features of the practices treated as an *opus operatum* is not the generative principle of the practices, the *modus operandi*. If the opposite were the case, and if practices had as their principle the generative principle which has to be constructed in order to account for them, that is, a set of independent and coherent axioms, then the practices produced everything according to perfectly conscious generative rules would be stripped of everything that defines them distinctively as practices, that is, the uncertainty and 'fuzziness' resulting from the fact that they have as their principle not a set of conscious, constant rules, but practical schemes, opaque to their possessors, varying according to the logic of the situation, the almost invariably partial viewpoint which it imposes etc. Thus, the producers of practical logic are rarely entirely coherent and rarely entirely incoherent.

(Bourdieu, 1990; p. 12)

This book was written simply in order to overcome certain preliminary difficulties. I know as well as anyone how 'thankless' is the task that I undertook some ten years ago. I know how irritating it can be to treat discourses in terms not of the gentle, silent, intimate consciousness that is expressed in them, but of an obscure set of anonymous rules. How unpleasant it is to reveal the limitations and necessities of a practice where one is used to seeing, in all its pure transparency, the expression of genius and freedom. How provocative it is to treat as a set of transformations this history of discourses which, until now, has been animated by the reassuring metaphors of life or the intentional continuity of the lived. How unbearable it is, in view of how much of himself everyone wishes to put, thinks he is putting of 'himself' into his own discourse, when he speaks, how unbearable it is to cut up, analyse, combine, rearrange all these texts that have now returned from silence, without ever the transfigured face of the author appearing: 'What! All those words, piled up one after another, all those marks made on all that paper and presented to innumerable pairs of eyes, all that concern to make them survive beyond the gesture that articulated them, so much piety expended in preserving them and inscribing them in men's memories - all that and nothing remaining of the poor hand that traced them, of the anxiety that sought appeasement in them, of that completed life that has nothing but them to survive in? Is not discourse, in its most profound determination, a 'trace'? And is its murmur not the place of insubstantial immortalities? Must we admit that the time of discourse is not the time consciousness extrapolated to the dimensions of history, or the time of history present in the form of consciousness? Must I suppose that in my discourse I can have no survival? And that in speaking I am not banishing my death, but actually establishing it; or rather that I am abolishing all interiority in that exterior that is so indifferent to my life, and so neutral, that it makes no distinction between my life and my death?

I understand the unease of all such people. They have probably found it difficult enough to recognize that their history, their economics, their social practices, the language (langue) that they speak, the mythology of their ancestors, even the stories that they were told in their childhood, are governed by rules that are not at all given to their consciousness; they can hardly agree to being dispossessed in addition of that discourse in which they wish to be able to say immediately and directly what they think, believe, or imagine; they prefer to deny that discourse is a complex, differentiated practice, governed by analysable rules and transformations, rather than be deprived of that tender, consoling certainty of being able to change, if not the world, if not life, at least their 'meaning', simply with a fresh word that can come only from themselves, and remain for ever close to the source. So many things have already eluded them in their language (langage): they have to preserve that tiny fragment of discourse—whether written or spoken—whose fragile, uncertain existence must perpetuate their lives. They cannot bear (and one cannot help but sympathize) to hear someone saying: 'Discourse is not life: its time is not your time; in it, you will not be reconciled to death; you may have killed God beneath the weight of all that you have said; but don't imagine that, with all that you are saying, you will make a man that will live longer than he.'

(Foucault, M., 1972; pp. 210-211)

Does a relativist seriously expect us to suppose that the potsherd dug up in an archaeological excavation was not there all along waiting to be found? Would its ontological status have been different if it had been lying on the surface for millennia, glanced at each day by passing shepherds?

(Harré & Krausz, 1996; p123)

Only theoretical objects may be discovered; an empirical object is merely encountered.

(Dowling, in press)



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