

## 1. INTRODUCTION

In his 1970 monograph, Hamblin (Hamblin 1970) showed very convincingly that extant accounts of fallacy were shockingly bad; he complained that we really have no theory of fallacy; and he set to work to make one. Unfortunately, in the 36 years since then, the situation has barely been improved. Some writers suggest that it cannot be (Cummings, 2004).

For example, one may ask how many fallacies there are. One school of thought has it that there are none at all (Massey 1981), another that there is only one, ambiguity, with many subspecies (Powers 1995); Aristotle appears to claim that there have to be just 12 (or possibly 13); I have seen it written that there are “about 18” ; and many textbooks imply, if they don't quite say, that there are, well, *lots*. The logical sum of the various lists on offer has hundreds of elements (cf Fischer 1970).

Until recently, having seen that many so-called fallacies are no such thing, particularly argument from analogy and argument from authority, I tended to think there must be fewer fallacies than commonly thought. But now I think that ‘lots’ is right and that there are more fallacies than in any of the lists, and more still to come.

My main claims are

- [2] that this follows from the existence of fallacies dependent on the medium of expression,
- [1] that there do indeed exist fallacies which are dependent on the medium of expression, for which I shall argue by example, and
- [3] that accordingly an acceptable theory of fallacy will require the construction of what I call *The Book of Objections*.

## 2. DIVISION

In this paper I use three criteria of fallacy - that it involves a kind of flaw in argument or reasoning, that it has a misleading tendency, and that it is sufficiently common to deserve a label. I take affirming the consequent, equivocation, false dichotomy and begging the question as paradigm fallacies. The traditional formulation, ‘a kind of argument that seems valid but is not’, is wrong. It is better if ‘valid’ is replaced with ‘good’. A fallacy is NOT just an invalid argument; many of them, for example false dichotomy and begging the question, are actually valid. Nor is a weak argument ever a fallacy. A generalisation which is not very convincing because there is mixed evidence is not fallacious, just weak.

By ‘medium of expression’ I mean to refer to various (material, technical) means by which words, and, in some cases supplementary signs, can be disseminated. The three media discussed here are Writing, Print, and the InterNet ; others include radio, press, TV, film, etc. This list is somewhat mongrel ontologically, but that won't matter for my argument here.

The precise sense in which the fallacies under discussion are dependent on the medium will be clarified en passant, but the motivating idea is that the possibility that someone can be misled by a fallacy derives from some false assumption they make about signification. This line of thought was suggested by some ideas in (Schreiber 2003).

So I will present some examples, each of which I claim has four properties:

- [1] it instances a kind of flawed argumentation ;
- [2] it is apt to mislead ;
- [3] it is sufficiently common to deserve a label ; and
- [4] it is dependent on its medium of expression.

Fallacies dependent on writing include the fallacy of accent and the fallacy of combination and division, as well as various fallacies in using diagrams. Fallacies dependent on print include various fallacies of textual integrity, such as the titling fallacy and the elusive philosopher fallacy; and it is a consequence of my account that plagiarism is such a fallacy. Fallacies dependent on the internet include linkrot, delusory citation and phishing. I don't put much weight on these labels – my main concern is to argue for the important similarities of these patterns of discourse with paradigm fallacies.

I will argue that we can generalise from these examples, with consequences for the kind of account of fallacies which is possible and desirable.

## 3. THERE ARE FALLACIES DEPENDENT ON WRITING

Writing is the most important medium of expression, but its significance has not been properly appreciated, particularly in mathematics and philosophy, practices which could not exist without it.

Aristotle states clearly (De Soph 166b) that what we call the fallacy of accent is dependent on the use of writing. His examples are often sneered at; one of them looks like ‘X says that Homer is impious, since Homer wrote T’. The Greek T in question apparently has two different possible pronunciations in classical Greek, with different meanings, only one of

which implies impiety. Clearly here is a bad argument, someone could be misled by it, and it depends on the difference between spoken and written Greek. But is such a discourse pattern prevalent? Well, here's an example I've concocted in English: 'JEEVES SAYS THAT NO GENTLEMAN USES POLISH, SO JEEVES IS A LINGUISTIC SNOB'.

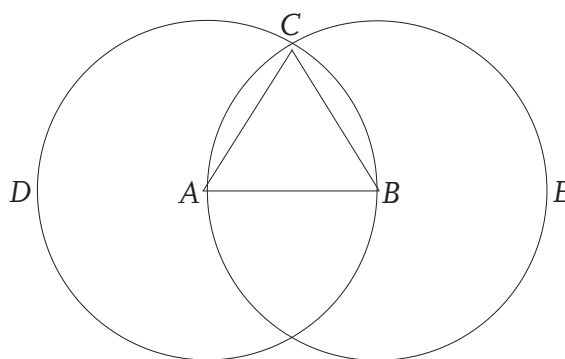
Once again, this might seem to be a good argument to someone, but not be good, if Jeeves is actually discussing boots and shoes, not languages. And it depends on the different meanings of the written sign POLISH according to pronunciation. So it's a fallacy dependent on writing. There are plenty of such ambiguities available in English, though we now use punctuation to diminish them - I had to put my example in capitals to make it possible - and it is widely claimed to be almost impossible to make up plausible examples in English. Many writers neglect this fallacy, or even suggest we drop it for lack of examples. But in fact one place they do occur frequently, is in cryptic crosswords. For example: 'large reserve of kings and queens [5]'.  
 The innocent solver, at least to begin with, focusing on the word 'reserve', thinks the answer is some combination of a stockpile, landholding or diffidence (three meanings of 'reserve' that seem plausible), with something related to monarchy, and considers answers such as 'power', 'reign', 'realm' and so on. But she has been misled: the actual word in the clue is re-serve, implying an anagram, and the answer is an anagram of 'large', 'regal', which is descriptive of kings and queens. It's true that dictionaries and manuals of style require a hyphen to distinguish reserve and re-serve, but who says we have to follow these authorities - or that people we deal with will do so? Crossword setters certainly don't!

Explanations of Accent in English tend to substitute emphasis as the source of ambiguity; for example this passage from Beckett's *Waiting for Godot*:

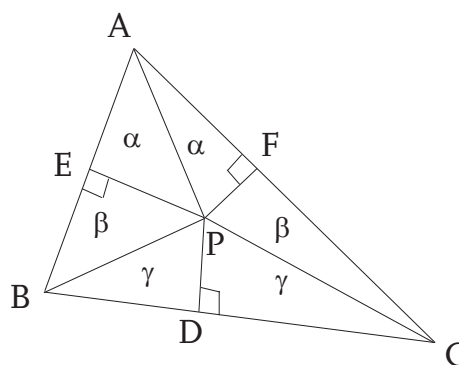
POZZO: ...The tears of the world are a constant quantity. For each one who begins to weep, somewhere else another stops. The same is true of the laugh. [*He laughs.*] Let us not then speak ill of our generation, it is not any unhappier than its predecessors. [*Pause.*] Let us not speak well of it either. [*Pause.*] Let us not speak of it at all. [*Pause. Judiciously.*] It is true the population has increased.

Some writers deprecate this kind of example as not being about accent any more, but if we go back to Aristotle we can see that this is misplaced nicety. He says that Accent is allied to the fallacy of Composition and Division, which is not the modern pair of so-called fallacies about reasoning between parts and whole (all my organs weigh less than 10kg, so I weigh less than 10kg). It's actually what I call the thin captain's biscuit problem : numerous written phrases can be given different meaning by different groupings of their words. For example : 'it's a little girl's school, so it's a school for little girls'.

The committing, though not the discussing, of fallacies dependent on the use of diagram is equally old with the fallacy of accent. At least, I am going to suggest that many notorious "paradoxes", and certain flawed arguments presented in Euclid, may be understood in that way. The very first proposition in Euclid has been criticised as, in effect, committing a fallacy. To construct an equilateral triangle on a given line segment AB one draws circles radius AB centred at A and B and joins a point at which they intersect to A and B. The problem is that the assumption that they intersect at all is unjustified - but a diagram makes it seem obvious. In this case it seems that the two-dimensional and continuous nature of the diagram is silently imputed to what is drawn.



In that case, the conclusion is actually true and the argumentation can be corrected. There is also an infamous "proof" that all triangles are isosceles, which is not true. One constructs the following diagram, and reasons to the conclusion that  $AB=AC$ , despite ABC being an arbitrary triangle.



The explanation is that one has unwittingly accepted the insinuation of the diagram that the points P E and F are inside the triangle, although it is in fact insufficient to notice that : if one draws a diagram with them outside the triangle, the same conclusion can be reached. The problem is that in actual fact P and precisely one of E, F must be outside, and the other inside. If you draw such a diagram, the reasoning cannot reach the paradoxical conclusion. Such examples are evidently argumentation which is flawed, but seems good, and they are numerous. During the 19C it became increasingly

felt that diagrams are untrustworthy. Something about the nature of a diagram, as a “written”, perhaps better graphic, sign makes for fallacy in their use.

#### 4. THERE ARE FALLACIES DEPENDENT ON PRINT

The massive effects of printing on western thought and society have been convincingly shown by several authors, particularly Elizabeth Eisenstein (Eisenstein 1979). Texts presented in the medium of print have some characteristics which differentiate them from written texts. One of these is that typically the primary author of a text no longer has control over all the presented features, sometimes not even all the content presented; the process of publication introduces a zone of shade between Author and Reader in which various other agents may take a hand, whereas someone receiving a manuscript can see that other hands have made interpolations or that different sections have different writers. Another difference is that strata of uniformity and contrasts between them can be strongly marked. Such characteristics introduce many new possibilities for deception and mistake, and so for fallacy. Some of these I call “fallacies of textual integrity”. Here are some examples.

There is also the false title fallacy. An exercise I commonly give to students is to locate and paraphrase the main point, or main claim or main conclusion, of a short text. They frequently draw the wrong conclusion as to the main point of a letter to the editor of a newspaper, because they are guided by the title. For example :

*No immunity to workplace stress  
IT is not surprising that the number of Australian workers experiencing depression is continually increasing (“Sales staff plagued by depression but bosses mostly immune”, 3/5) as employees work longer hours than ever before, and also take fewer holidays, as also reported this past week.  
Surely the Government should make some effort through advertising or by other means to encourage workers to maintain a sensible work-life balance for the sake of the economy, as well as the wellbeing of Australians.*

Students who’ve not had much practice are likely to say that the main point is something like ‘Everybody is stressed at work now.’ In fact, the right answer is more like ‘The Government should encourage sensible work/life balance.’ This letter is not really about stress per se – it actually comments on the incidence of depression; but unwary readers are misled by the title, which paraphrases the quoted title of the report on which this letter comments. They overlook the fact that these titles are typically not written by the same person as the letter. Once you think about it, it is obvious that the sub-editor of this publication has missed the letter writer’s point – and as a result, so has the student. Such students are making the false assumption that an integral text has an integral source. That this need not be so is a consequence of properties of print. As a result they have drawn a conclusion from the data which is not really warranted, though it seems to be.

Plagiarism as fallacy: Student S presents to marker M a text T; M reads T and concludes that S has made a case of a certain value V for some thesis, and gives a S a mark representing V. But really, some of T does not originate with S, and so M is mistaken in this conclusion. That’s to say, M’s reasoning seems good but is not, and M has fallen for S’s use of the default assumption that all of a text has the same source, so that M’s fallacy depends on the medium of print.

The elusive philosopher fallacy: most works on “big” philosophers, seems to be based on the presumption that there exists an interpretation of the text which makes the thought it expresses entirely self-consistent and correct. The innumerable attempts to find it out, and successive layers of commentary on commentary on commentary on such attempts seem to me to be a strong inductive ground for abandoning that presumption. Underlying it there are twin delusions: the fallacy of textual integrity, and everyone’s idea that they at least have a consistent position.

#### 5. THERE ARE FALLACIES DEPENDENT ON THE INTERNET

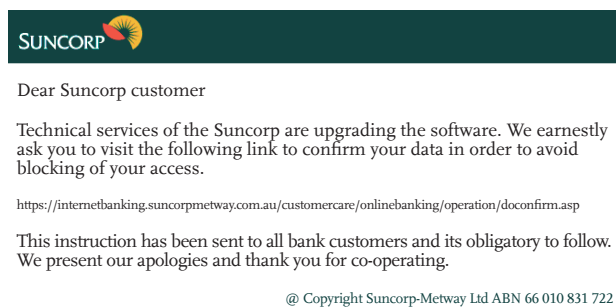
On June 1 2005 I noticed that Jakob Nielson, website design guru, had made the common mistake of confusing the words ‘flout’ and ‘flaunt’. ‘Flout’ means to mock, scorn, treat with contempt; ‘flaunt’ means to parade ostentatiously. One flaunts oneself, thereby flouting propriety. The meanings are wildly different, the etymologies too. ‘Flaunt’ is cognate with planet, ‘flout’ comes from the Dutch for playing the flute. I really don’t know why people mix them up, but they do. Here’s Jakob: ‘Internet managers have become more willing to follow design conventions rather than flaunt them and thus annoy their users.’ This appeared on his website, url

<http://www.useit.com/alertbox/20050601.html>

But if you try to verify my claim you won’t succeed: there it says ‘Internet managers have become more willing to follow design conventions rather than flout them and thus annoy their users.’ It would be natural for you to conclude that I am a liar or a fool, or confused. That would be a mistake, however. What actually happened is that I emailed him on June 1 pointing out his error (possibly with more sarcasm than respect); his terse reply was ‘Thank you. I changed to flout.’ Your mistaken reasoning was caused by misunderstanding of the nature of a link. If anything is at the other end, so to speak, it is a location, not a document. There may or may not be a document in that location, and it may or may not be the one advertised, or what was there a minute ago. Linkrot is common. Such semiotic instability is characteristic of the InterNet. The fallacy you committed depends on that medium to work.

Such a fallacy is actually very common, being promoted as good practice by librarians: I mean, it has become accepted that to cite internet resources you basically need to give not just the URL but also the date accessed – but how does that really help a reader to check up on the use you have made of the resource for fairness and accuracy?

Another variation is the prevalent phishing scam. Here there is generally a malevolent deceptive intention on the part of someone who sends you an email purporting to be from your bank [or, at least, a bank]. Here's one I received:



You are told you need to “verify” your details to keep your account open, so click here and fill them in the spaces ... If you do, you find that all your money rapidly disappears from your account.

Why is there a fallacy here? Well, [1] you have certainly drawn the wrong conclusion from the premises [you have a bank account, this email says such and such]. [2] The aim is to mislead. If it were from the bank then you would be right to act so. [3] This is sufficiently common to already have a name, though not the special label ‘fallacy’. [4] This can only work because of the way the Internet works: “letterhead” is simple to fake; the origin of an email is easy to disguise, etc, and of course it depends on the existence of on-line banking. The false assumption that links point to documents is compounded in these scams by disguising the location to which they actually point.

#### 6. THEORISING FALLACY, OR WHAT WE SHOULD SAY ABOUT FALLACIES

The examples in the preceding are all, I claim, fallacies because they consist in argumentation which seems good but is not; and they depend on the medium of communication because in each case the seeming depends on a false assumption about the nature of signification via that medium. Now there are many media, and there are marvellous new media being developed as we speak [so to speak]. It seems to me that it is inevitable that the specifics of how signification is achieved in any novel medium are going to become more complex and less familiar, and will therefore make possible increasingly numerous false assumptions about signification mediated that way. Such assumptions provide a fertile breeding ground for an ever-growing swarm of new fallacies.

It follows that ‘fallacy’ is not a natural kind term, and so there is not going to be any very satisfactory neat definition and no simple recursive enumeration of the species of fallacy. It's not that it's bizarre to claim that there are ‘about 18’, although it is, but that to do so makes the false assumption that there is some fixed number at all. So I agree with the conclusion some have drawn that no theory of fallacy can be

had. We are stuck with making a list of fallacies, or rather with repeatedly updating a changing list.

This may seem a bleak prospect. But such a view lacks historical perspective. After all, many popularly recognised fallacies have been discovered since Aristotle. The fact that some of these are not really fallacies – virtually all those called argumentum ad X for some X are not fallacies at all – should not blind us, as it blinded me for some time, to the plain fact that new fallacies are discovered. For example, there are numerous fallacies available to the unwary user of statistics, fallacies which were unknown in a simpler world before statistics was invented.

What kind of theory of fallacies do we really need? Not every theory worth the name has precise definitions and classifications. Freud's theory has been widely dismissed on a variety of grounds, but not because it is not a theory – rather, because it's a bad theory, or an unscientific theory, or an unfalsifiable theory. It's good example of a theory even if it is not an example of a good theory. I think that the model that should be adopted is the catalog, dictionary or encyclopedia. Parallel to works like Dupriez's *Dictionary of Literary Devices* (Dupriez 1991) – a fat volume with 2000 alphabetically arranged entries from ‘abbreviation’ to ‘zeugma’ - we need *The Book of Objections*, which lists alphabetically all the large number of possible kinds of criticism which can be made of argumentative texts.

I might seem to be advocating more of the rubbish you find so commonly on the ‘Net. “Mr X's list of the fallacies” - there are lots of them. Horrifying examples can be found on many university websites. But it's a mistake to assume that because many lists of fallacies are rubbish, that any listing of fallacies must be rubbish. I say it's not the listing, it's the listers at fault. The reason existing lists of fallacies are so bad is that they are mostly uncritically copied from one another. The faults infecting fallacy lists currently on offer are: an incoherent characterisation of fallacy; or inconsistent application of the characterisation stated; or examples which don't exemplify, or which are ludicrously artificial; or calling non-fallacies fallacies, for example ad baculum; or collapsing the explanation of a fallacy into mere invalidity, or several or all of these.

*The Book of Objections* will not have these faults, but wait, there is more: it is called *The Book of Objections* because it will include ad baculum, but not as a fallacy. Appealing to force is objectionable and it is perfectly reasonable to make an objection to such an appeal, just don't call it fallacy – call it resorting to threat instead of argument. There are many reasons to object to discursive moves. ‘Fallacy!’ is one charge which can be applied to discourse, which must be complemented by a choice of justification R predicating from the range of canonical fallacies such as BQ, AC, FD etc. But it is not the only charge that might be made. Numerous people have objected to the writings of Hegel or of Lacan on the grounds of obfuscation – an excellent objection too – but few have tried to call obfuscation a fallacy. ‘Obfuscation’ is a perfectly good term of criticism in its own right.

So, though I am giving with one hand – there are lots of fallacies as yet unbaptised – I am taking with the other – not everything that has been traditionally called a fallacy should be. *The Book of Objections* is not a mere list of fallacies; it deploys a coherent set of critical categories among which fallacy has a secure but not bloated place. Its entries are nuanced descriptions of the various factors which work for or against the effectiveness of a particular trope, and as does Dupriez', its entries not only give real examples from pre-existing texts, they constantly compare and contrast different critical tropes via extensive cross-referencing. It includes an analytical index and an annotated bibliography in which all the errors in the other treatments are exposed and refuted.

Some old favourites will have big entries in *The Book of Objections*. Begging the question, false dichotomy, affirming the consequent – all these will be listed as fallacies. But others of the usual suspects, such as all the arguments ad and argument from analogy, will be listed as plausible arguments subject to characteristic kinds of weakness and flaw, or as objectionable moves, not as fallacies.

Many standard muddles will have to be cleared up for *The Book of Objections*. Thus, we will have to give a suitable name to the fallacy that Aristotle called composition or division – what I call the thin captains' biscuit – and point out that most people use the term fallacy of composition for something completely different. It may be that we also need a new term for the kind of fallacy that composition can exhibit: such an argument (every ingredient in this stew is delicious, so this stew is delicious) rests on the false assumption that what is true of all the parts of something is always true of the whole. But really, the assumption that what is true of the parts of X is true of X is very often true. Similarly, there are true dichotomies. Again, I can accept that we can talk of a fallacy of false expert – but this does not license treating argument from authority as a part-time fallacy.

Once we accept that we are stuck with listing, and resolve to do it well we can see some supplementary advantages in

the project of *The Book of Objections*. First, some use could be made of the various elaborate conflicting classifications of fallacy like Whateley's by taking over their categories as descriptive terms for other objections, while dropping the procrustean hierarchy under the concept fallacy forced on them. Why not simply list 'digression' as a term of criticism (which it is) rather than 'fallacy of digression'?

Secondly, using a model which is agreeable to rhetoric will foster the widely appreciated rapprochement of rhetoric and informal logic. Indeed I think perhaps *The Library of Criticism*, of which *The Book of Objections* is just one volume, will include works like Dupriez' and involve much cross-reference, even overlap.

And thirdly, keeping in mind the semiotic assumptions underlying mediated fallacies makes it much easier to accommodate the common use of 'fallacy' for attractive but false claims, because most or all fallacies can be seen to rest on them. Perhaps this can help dispel the apparently ambivalent status of false dichotomy caused by the hankering for explanation of fallacy to concern only the inference of an argument. Some people won't call it a fallacy for that reason. But that hankering is a symptom of the constant tendency for informal logic to collapse back into the formal mode. Going formal prescind from questions about the truth of claims because no actual claims are discussed. This is not a very good reason for the common claim that truth is not business of logicians, unless you think logic simply is formal logic. Which it is not.

## 7. CONCLUSION

To sum up, I have argued that there are many fallacies dependent on their medium of communication, mostly as yet unnamed; that this shows we should abandon any idea of a fixed list of fallacies, but we are stuck with listing; and that consequently we should be looking for a theory of the kind which *The Book of Objections* would provide.

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