1 Turner P. Local formularies and good patient care. *Br Med J* 1984;**288**:348.
2 Collier J, Foster J. Management of a restricted drugs policy in hospital: the first five years' experience. *Lancet* 1985;i:331-3.
3 Crooks J. Drug epidemiology and clinical pharmacology: their contribution to patient care. *Br J Clin Pharmacol* 1983;**16**:351-7.
4 Baker JA, Lant AF, Sutters C. Seventeen years' experience of a voluntary based drug rationalisation programme in hospital. *Br Med J* 1988;**297**: 465-9.
5 Anonymous. Local drug formularies—are they worth the effort? *Drug Ther Bull* 1989;**27**:13-6.
6 George CF, Hands DE. Drugs and therapeutics committees and information pharmacy service: the United Kingdom. *World Dev* 1983;ii:229-36.
7 Feely J, Chan R, Cocoman L. Impact of a hospital formulary on prescribing habits and drug costs. *Ir Med J* 1987;**80**:286-7.
8 Swallow RD, Remington HStC, Standing VF. Ward pharmacy: a positive contribution to cost control. *Pharmaceutical Journal* 1985;**235**:722-3.
9 Plumridge RJ, Stoelwinder JU, Barbatis CG. Improving patient care and pharmacy management: the effect of hospital formularies. *Drug Intell Clin Pharm* 1984;**18**:652-6.
10 Anonymous. Local formularies—the way ahead [Editorial]. *Lancet* 1986;ii: 1078-9.
11 Petrie JC, Scott AK. Drug formularies in hospitals. *Br Med J* 1987;**294**: 919-20.
12 Green JA. The formulary system and the emperor's new clothes. *Am J Hosp Pharm* 1986;**43**:2830-4.
13 Anonymous. American Society of Hospital Pharmacists technical assistance bulletin on hospital formularies. *Am J Hosp Pharm* 1985;**42**:375-7.
14 Ferrano MC, Henman MC. A survey of drug and therapeutic committees operating in Ireland. *Journal of Clinical and Hospital Pharmacy* 1986;ii: 131-40.

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How To Do It

Write a classic paper

Anthony David

Most of this occasional series has dealt with negotiating those minor hurdles placed in the way of the busy clinician going about his or her routine. This article is about the big one—writing a classic paper. A classic paper is that elusive blend of art and science, a piece of scholarship that changes the way people think but also delights each new readership that rediscovers it. Words like elegant and lucid are the adjectives most often used to describe one. This is not to be confused with a citation classic, which need not be worthy of such accolades. These are often technical articles describing a laboratory technique (such as gas-liquid chromatography) or a rating scale (such as the general health questionnaire), or they may contain statements designed to be tendentious and annoying, stirring up colleagues to write refutations (more or less anything by Eysenck). No, classic papers are different. For one thing they tend to happen by accident. But here are a few guidelines to follow so maybe one of us will get lucky.

Getting in the mood

First of all you have to make a major finding or conduct a substantial study. This article assumes you have done that already. If you haven't, don't stop reading you may get some ideas. After all they have to start somewhere. Next are some practical hints. Get yourself a word processor. No one ever wrote a classic paper in one sitting, believe me. Some word processors can check your prose and cut out words like inasmuch and moreover, which you never find in a really important work of science. You should allow yourself to get into a writing mood. Finish the background reading, the review of the literature, and the work to date. You know it inside out. Relax. Take deep breaths. Just let it flow. Many people find music a help but choose carefully. Something light and formal not intrusive or demanding. Mozart obviously. A lot of people like Simon and Garfunkel. Avoid the romantics and counterpoint. Fugues make demands on the left hemisphere and could effectively muzzle your writing ability. Steer clear of anything Italian, especially opera. Jazz (such as Louis Armstrong or early Ella Fitzgerald) is alright so long as it is not too rhythmic and evocative; you'll end up tapping in time on the keyboard and this could slow you down or you may even start smoking again. Sonny Rollins is absolutely contraindicated for obvious reasons. And if you must drink coffee, stick to decaffeinated. Wear comfortable clothes; a sweater and jeans are fine.

The title

I cannot emphasise too much how important the title is. Colleagues of mine persevered with *Microprocessor assisted clinical assessment and management of minor psychiatric disorders* and suffered rejection from journal after journal. Someone suggested *The computer will see you now* and the *BMJ* lapped it up. Titles beginning with "On" are good such as *On the circulation of the blood* (Harvey), *On the origin of species* (Darwin), and *On aggression* (Lorenz); they suggest the monumental, something enduring. Other titles echo through the literature. In my own subject, *Sex and the single girl* became *Sex and the single hemisphere* (Witelson) and (note the twist) *Psychotherapy and the single synapse* (Kandel). Another was *What the frog's eye tells the frog's brain* (Lettvin), which became *What the mind's eye tells the mind's brain* (Pylyshyn), and many others. "Towards" is a bit like "On" in that it conveys portent without bragging. For example, *Towards a theory of schizophrenia* (Bateson), which heralded the double bind and later, *Towards an aetiological classification of schizophrenia* (Murray), a less famous but quite influential work. Question marks in titles are corny, and colons are the refuge of a coward. The authors thought of a snappy title and then spoilt it by sticking in a colon followed by "pathological findings" or "a new theoretical framework" or even "physiological studies in the newt."

Style matters

Whatever you do, do not mention statistics (terms like logistic regression, factor analysis) unless you are writing about them specifically. Otherwise it is just going to alienate your audience. The same goes for code names or numbers for new drugs and the precise locus of the new gene you have just identified. Put these in parentheses or use a footnote. Some people like quotations. Be careful it doesn't come over as pretentious: French and Latin are out; anything by Shakespeare, Bertrand Russell, and Peter Medewar is safe.

What follows should not be a problem. The study itself or your new theory. Just let it come out, don't force it. Find a style that you feel comfortable with. Be a bit old fashioned, that can give the paper a sense of solidity and trustworthiness. "Notwithstanding" is perfectly acceptable in the 1990s if used sparingly, so is "with respect to." "Heretofore" is going too far and "the aforementioned" makes you sound like a lawyer. Try not to let the reader see that what you have to say is

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going to knock their socks off, let it creep up on them. Modesty and understatement is the best policy. Remember Watson and Crick and the double helix? "It has not escaped our notice that . . ." this is the most mind blowing discovery of the century. Use phrases like "it could bëargued that . . ." and "one possible explanation is . . ." you don't have to shout. The discussion is the most important part of the paper. People skip the methods and most of the results sections. Remember to criticise yourself first before anyone else gets the chance. After all in a couple of decades or centuries you may turn out to have been slightly wrong. Things like "some observer bias cannot be entirely excluded . . ." and "it remains possible that some of the responses occurred by chance . . ." go down well with the sceptics but save yourself for "however" or "nevertheless . . . steps taken in the experiment render this highly unlikely" and "this would not explain the central finding," etc. Generally keep it short and to the point. It is not a novel you are writing. If you get stuck, take a break. Leave the draft by your bedside. Sometimes a phrase just comes to you and its a shame to lose it.

Conclusion

Well, that is all the help you can get, from now on it is up to you. If it doesn't work out try not to get disheartened you will have made a contribution. Those hours or days spent listening to soothing music, daydreaming of Newton, Einstein, Darwin, and Freud have not gone to waste—you will have learnt what it means to write a classic paper.

Letter from. . . Chicago

Symposium

George Dunea

At medical dinners the conversation often drifts to shop talk about patients. Sometimes it becomes a veritable symposium. With a little wine and a long stretch of the imagination it brings to mind Plato's symposium. Missing, however, are the comfortable couches for the guests and the libations offered to Olympian Zeus.

A recent such dinner symposium turned out to be largely about strokes. One of the doctors related how a kindly 84 year old Mexican man had found one morning that he could not move his right arm without picking it up with his left. He also was dragging his right leg. His cranial nerves were normal, sensation and speech too difficult to test in Spanish, and only pyramidal signs were present. Clearly a stroke, so why not treat him at home, especially since his large family would take care of him. But somehow he ended up in the emergency room and then vanished into the immensity of a large teaching hospital for the next month.

You may well muse about cost effectiveness and the good old days when the sick were cared for in their own homes and 84 year old men did not require computed tomography. But when the patient reappeared it turned out that he had had burrholes to drain his clinically undiagnosable chronic subdural haematoma. Unlike the former president, he had not even fallen off his horse. But he remained well and enjoyed life despite calculations that computed tomography is not cost effective in people with strokes. The cost of computed tomography, incidentally, is now far less than that for one extra day spent in hospital waiting for the neurologist's opinion.

The second story was about a neurologist consulting about a woman who had been held up by a street gang. The men had revealed their unfriendly intentions by thrusting a gun in the woman's mouth and pulling the trigger. But as she had averted her head sharply to the left the bullet escaped through the soft tissues, leaving her with no more deficit than a sixth nerve palsy. The neurologist ordered computed tomography, but a utilisation reviewer said that is was not needed and that he would not approve payment. While the two doctors argued the sixth nerve palsy subsided. Nevertheless, the neurologist went ahead and obtained the scan. It showed a large aneurysm of the circle of Willis, presumably chronic, but likely to rupture without surgical intervention. The reason for the (presumably) false localising sign, however, remained unclear in this triumph of serendipity over reason and cost efficiency.

Too much time in hospital

The third case concerned the same neurologist. He had treated a doctor for a severe stroke with aphasia that had resulted in many months of hospital treatment. About a year later the neurologist received a telephone call from a health maintenance organiser reviewer about another patient with a stroke who was deemed to have spent too much time in the hospital an was to be sent home. It seemed to the neurologist that the man at the other end of the line was spending an awful lot of time trying to explain why he had reached this conclusion. He seemed to have difficulty in finding the right words. At last the neurologist realised that the man was dysphasic. Then it dawned on him that this was his old doctor patient with the stroke, who had once spent many months in the hospital, but was now ready to summarily order him to discharge from the hospital another patient suffering from the same illness.

The talk now turned to rationing health care. Someone mentioned hearing a radio programme about a community hospital that had a computed tomographic scanner, a cobalt unit, a lithotripsy machine, and a dialysis unit. A hospital of comparable size in Canada, a country that often warms the heartstrings of American health experts, had no such facilities, its complicated patients having to be transferred to a regional centre. Those familiar with such arrangements commented that this rational system was rationing indeed, remembering how in the bad old days many patients were referred too late or not at all. Cost effective indeed, but not for the old gentleman with the subdural haematoma.

Then talk turned to the young doctor who had chills and fever and was suspected to have malaria, having recently been abroad. When he became dehydrated his wife took him to the hospital where they gave him two litres of saline and then confirmed the diagnosis. There was no chloroquine in the pharmacy but the wife happened to have some in her handbag. The bill for

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