Focus

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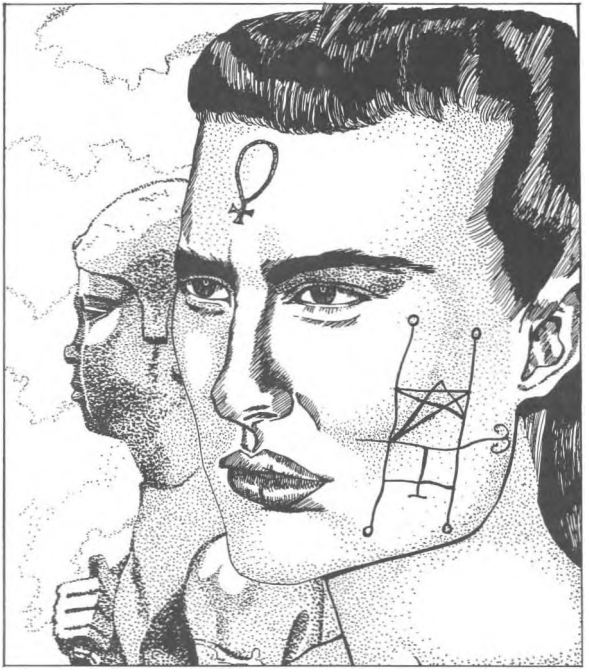

Focus 36

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Contributions to Focus are always welcome.

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Articles about all aspects of writing are always needed, up to 5,000 words
Please contact the editor if you are unsure whether the article fits the Focus remit.
Contributions should be submitted on A4 paper, double-spaced on one side of the paper only. Email contributions can be accepted, if compatible. Please check on focus.editor@cableinet.co.uk first. Disks may also be submitted – please contact the editor for more information in the first instance
Cover art, illustrations and fillers are always welcome.

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Editorial

Through a telephoto lens, finally...

Well, here we are at our 13th and final editorial. Our proposal to edit **Focus** went to the BSFA in 1992 and our first issue came out the following summer. We'd managed to get hold of a copy of every previous issue and read them vocaciously before storming the BSFA citadel and raising our flag in the **Focus** tower.

We have enjoyed producing **Focus** immensely and are grateful to our various collaborators and contributors for making it all possible. We would like to mention specifically:

Carolyn Horn whose design of number 24 has inspired all our subsequent issues and who was our layout guru for several issues.

Ian Bell for technical expertise, often in the line of fire!

Colin Greenland whose excellent Prescription has been very well received by all our readers.

Steve Jeffery for his artwork and frequent contributions to the Forum.

We would also like to thank all writers, artists and correspondents past and present, and the rest of the BSFA team.

We feel confident that Simon Morden, the new editor, will dazzle and amaze you in the issues to come. For a taster see his articles elsewhere in this issue. Over to you, Simon!

Regards

Meet The New Editor!

Lo, the clouds parted and the glory of Heaven shone down. Cherubim and Seraphim gently lowered the crown upon my noble brow to signify that I, Simon Morden, was to become the new **Focus** editor.

Well, it wasn't quite like that. I offered to help with **Matrix**, and here I am, editing a completely different magazine. By divine *fiat* or fortuitous happenstance, I'm in the driving seat for the foreseeable future. Carol Ann and Julie have done wonders with both the content and the layout of **Focus** during their tenure. Leafing through the **Focus** archive has been a real eye-opener: the magazine used to contain market information; articles contemplated whether the internet would be a useful resource for writers, and argued the pros and cons of word processors over typewriters. Layout progressed from cut and paste in an A5 booklet to the current A4 beauty.

I have plans, of course. I've a background in DTP, and armed with relatively recent technology, I intend to revamp the 'look'. It's a style thing; every editor has their own way of doing things, and I guess I'm no exception. Content is already excellent, and I'm exploring ways of making **Focus** even more relevant to those who write and write about, speculative fiction. The interview with Lesley Milner and the article 'Getting from A to B' are tasters of what's to come. Already booked for the next issue is Colin Greenland's ever-popular Prescription, and I hope to lightly grill another literary worthy.

Since this is a magazine for writers, I'd like to include examples of fresh, new fiction, both to provide a showcase for the authors themselves, and inspire those who have yet to be published. Send me something dramatic, something poignant, something uncomfortable or something fun. Poetry is always welcome, as are offers of artwork. My email address should appear somewhere nearby; talk to me.

A little bit about myself: trained as a planetary geologist before becoming [in chronological order] a school caretaker, church administrator, PA to a financial advisor, househusband looking after one, and now two kids. I've had eight short stories published or accepted for publication so far, and had been writing for eight years before my first sale in 1998. I still grimace at rejection letters.

There's not much else to say at this stage. **Focus #37** is due through your post-boxes in May 2000. I ought to say at this stage something like 'Forward with **Focus** into the new millennium!'. But I'm one of those pedants who believe (quite rightly) that the bright dawn of the 21st Century is 1st January 2001. Whatever New Year's Eve finds you doing this time around, enjoy, and see you next year.

Simon Morden
September 1999
Gateshead

Dr Greenland's Prescription

"You carry a notebook everywhere you go," says Jenny Murray on **Woman's Hour** to novelist Lesley Glaister. "What sort of things do you expect to write down?"

"I don't know," says Glaister, reasonably enough. "That's why I carry a notebook."

It might be, she says, the contents of someone's basket at the supermarket - "twenty tubes of denture cleaner and a packet of chocolate chip cookies - or something someone says - or something stuck to the sole of their shoe!"

*

Where do sci-fi scribes get their crazy ideas? At the supermarket.

And they write them down in their crazy notebooks.

Yesterday Susanna was fulminating about an article in the Sainsbury's magazine proclaiming the firmness of their new "traditional" brand of bacon. If supermarkets hadn't started pumping bacon full of water, she pointed out, there wouldn't be a problem.

"It's pathetic, the way Sainsbury's give themselves credit for resurrecting something they destroyed in the first place."

Cue for a story, I reckon. A science fiction story.

*

The genetically-engineered dodo farm.

Or mermaids killed by marine pollution.

Or Martians, a dying race. The first Martian bred in captivity. The gratitude of her parents to the kind and clever scientists from Earth. How she grows up and starts asking the questions that eventually uncover the truth: it was the humans who wiped her people out, callously, or carelessly. An accidentally imported microbe. A new twist on **The War of the Worlds**?

Or what about the first human genetically engineered by the caring, sensitive aliens that have colonized Earth. "Your people were so weak, my child. We did all we could to preserve them..."

*

As I said in **The Plenty Principle**, one idea on its own won't necessarily make a story. That's when you comb your notebook for something to combine it with.

"Tall man, dark glasses, folding magnifying glass on piece of string around neck, eating lettuce out of plastic bag."

I remember him, in the departure lounge at Heathrow. Does he belong in this story?

What about this, one of the thousand things that ought to have been in **Star Wars**?

"2-tier caste system of drones & androids - androids' devoted emulation of humanity - like Parsees vis-a-vis British."

Androids that regard themselves as custodians of the characteristics of extinct humankind. (And get everything wrong, of course, comically and pathetically.) One of them is proud to work on the experiment to reconstruct a genuine human. Its dismay at what a child actually turns out to be like.

Or this. "Bengal tiger exhibited in menagerie, London, 1791. Wm Blake goes to see it."

There's not a scrap of evidence that he did, of course. That's what makes it so *fertile*. Let's see. Time-travelling scientists from a depleted future mingle with the crowd to monitor the poet's response, in order to inform their project to rebuild one of their own.

What they don't realise is, the menagerie itself is a device of travellers from *another* epoch, a further, hypertechno future where the art of poetry has atrophied. They have staged the whole event on purpose to record the poet's brainwaves at the moment of inspiration.

Both missions fail, but the incident directly provokes the composition of the poem.

*

Random notes like Glaister's and mine are only a larger, looser version of the notes you make for a specific scene or chapter. This is what I'd assembled by the time I came to write the principal scene in chapter fifteen of **Mother of Plenty**.

"In suit on bike T explores 'city' on high plain, airless - deserted - crazy dissociated bldgs, heaps of machinery & treasure, some definitely alien: the moons, landscape buff yellow and sienna, parched greys and whites: more of rock pinnacles she encountered at landing site - shapes even more like eroded figures standing on pillars - knew now what they remind her of."

*

The first thing I do with notes like that is pick out key elements.

"In **suit** on **bike** T explores **'city'** on high **plain**, **airless** - deserted - crazy dissociated **bldgs**, **heaps** of machinery & treasure, some definitely alien: the **moons**, **landscape** buff yellow and sienna, parched greys and whites: more of rock **pinnacles** she encountered at landing site - shapes even more like eroded figures standing on pillars - knew now what they remind her of."

"Crazy dissociated bldgs" is a stage direction, a prompt to myself to create some. Whereas "parched greys and whites" is obviously a phrase I liked in itself, ready to be inserted into the text. That word "encountered" is probably going to show up too, seeing that I took the trouble to write it rather than simply saw or *met*.

Now I can start to arrange the elements in a narrative order.

Suit and **airless** go together. I need to say from the start that there is no air. Better still, put Tabitha in the suit from the start, so you understand there is no air. It's always better to *let* your reader *understand* something than to tell them about it.

Bike gives you the asset of motion. We'll be enountering this weird **landscape** by travelling through it, which puts things into a sequence: **plain**, the general terrain; then **city** as it appears in the distance ahead, then individual **bldgs** and **heaps**: the close-up detail, when she gets in among them.

Moons is a reminder that there's more than one. I might put them in right from the start, as a useful way of making the location exotic and unearthly. Or I might have them rising to light those crazy bldgs. Hell, I might do both, if I feel like it. It's a Plenty book, so it's sure to be plentiful.

The **pinnacles** and Tabitha's recognition of them are obviously the point of the scene. The pinnacles need to be in place first, so that we can appreciate her mental jump when it comes. Perhaps she should pass some on the way, as a sort of taster, a teaser, so they can linger in her mind and ours.

I think that's everything. Now then - do we start in the ship, as Captain Jute dons her suit and departs? Or cut straight to the bike, zooming across the fractured surface of Capella 3?

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Dave Langford

Column 10, *8000 Plus 10*, July 1987*

Suppose some advanced hacker trained a high-tech electromagnetic snooper on our PCW and stole the text of your precious best-seller as fast as you could type it in. Suppose—switching to something that's actually happened to a friend of mine—your disks were nicked before you could print out your epoch-making novel **Son of War and Peace Has Risen from the Grave**. What defence do you have against anyone who, so to speak, takes the words right out of your mouth and flogs them illicitly?

Few writers seem terribly clear about copyright law, especially when computers are involved. It takes the **Writers' and Artists' Yearbook** most of a page just to list amendments to the 1956 Copyright Act (star-studded successor to the Act of 1911). I've met people who produce private newsletters or science fiction fanzines and reluctantly send six copies of each issue to the British Museum Library or the Agent for the Copyright Libraries since 'otherwise it isn't copyright'. Happily, they've got it wrong.

The 'copyright libraries' are a red herring. They've been granted the right to demand freebie copies of everything commercially published in Britain, but failure to cough up doesn't affect copyright protection—only your bank account, as the fines for non-compliance mount up. Amateur publishers have a loophole: the Act says the gratis copies must be in the same condition as those offered for sale. If you don't sell your publications commercially, you can thumb your nose at the libraries.

Copyright in printed stuff is fairly straightforward. You have the full protection of British and European copyright law the moment the story (or drawing, or limerick) is on paper. The work needn't be published or even shown to anyone else. If some low hack from the computer press sneaks a photocopy of your manuscript and snivellingly publishes it under his or her own name, the prison gates will loom—if, of course, you can prove it was originally your nicked epic. And as far as I can make out, US copyright protection is thrown in the moment you scrawl '© David Langford 1987' or its equivalent on the print-out. Apparently it has to be the real © sign: the © approximation cuts no ice in the USA.

'But,' I hear you wail, 'I haven't printed out my novel!' Of course you haven't. No sense in wasting all that paper until you've got the hideous sexual perversion scenes just right, and checked the spelling of 'formication'. Don't worry, any possible legal gap seems to have been plugged by the Copyright (Computer Software) Amendment Act of 1985. This essentially lays it down that copyright in software and thus other things normally kept on disk is identical to copyright in books. Once your golden prose or program is keyed into the new machine, it's theoretically protected against pirate publishers—though not against your failing to save the file before you switch off, so watch it.

British copyright covers arrangements of words (or notes, or lines) but not ideas. If tomorrow some other hack publishes an article strangely like this one, my chances of persuading a judge to don the black cap would depend on how many actual phrases could be traced back to this column. Merely pinching the general idea isn't enough.

I was glad of this when years ago I wrote occasional pieces for **Computer and Video Games**: at the urgent request of my bank manager. My brief was to demonstrate how science-fictional ideas could inspire simple programs. Inspiration soon ran low, since I don't remember any SF novel which could credibly have been a source for the program called **Attack of the Galactic Camels**.

This was written to annoy my wife, who at the time was keen on camels and had a collection of stuffed ones, fortunately not life size. It was the work of mere days to set another little laser-armed phosphor blot jerking around the screen, zapping rogue camels at the player's command. (I was not as sensible then as I am now.) You could have knocked me over with a three-inch disk when the anguished letter of complaint arrived.

It wasn't the RSPCA who objected, but a computer outfit I'd never heard of, called Llamasoft. They were irate about evil Langford swiping the camels idea, which was their very own, their own idea which was theirs. *Their* game was called—with rather squalid sensationalism, I remember thinking—**Attack of the Mutant Camels**. A friend cheered me up by libellously implying that said firm might be touchy about plagiarism because of this very program. In it, giant camels vaguely resembling landwalkers from **The Empire Strikes Back** lurched about the screen, as opposed to the giant landwalkers vaguely resembling camels which starred in the official **Empire Strikes Back** video game.

Armed with the Copyright Act and the **Oxford English Dictionary**, I hit back with the irrefutable fact that the first British emergence of what they called the camels idea would appear to be some time before either of our programs: in the Anglo-Saxon **Lindisfarne Gospels** circa 950 AD.

After which, my next stunningly trivial **C&VG** program being all about falling down holes, I stayed up biting my nails in fear of a midnight knock on the door from the estate of Lewis Carroll.

All the above copyright © David Langford, 1987. Fantastically lucrative offers for film, TV, mineral or fishing rights should enclose stamped addressed envelope. Any attempt to show this column to someone who hasn't paid for a copy of **8000 Plus** (or a copy of **Focus**!! – eds) will automatically cause enormous thugs to break down the door and wave industrial-strength magnets all over your disks. Have a nice day.

For more information on copyright law, ask at your local library or write to The Copyright Office, The British Library, 2 Sheraton Street, London, W1V 4BH.

Just Like A Book

My favourite software copyright licence comes from Borland International of Turbo Pascal fame. They don't muck around with copy protection (I refuse to buy software I can't back up), and merely ask that you treat the package 'like a book'. A book can be read by only one person at a time. So long as a Borland product is run only on one computer at a time you can move it between machines, make backups to your heart's content, even loan or sell the program to someone else—all with Borland's blessing. This might sound too trusting, but Borland software is so good that serious users who 'test drive' it are irresistibly compelled to get their own official copy with the fat and friendly manual(s). Being easy-going can be good business practice, it seems.

This series of articles by Dave Langford was originally published in **8000 Plus and **PCW Plus** magazines during 1986-1996. Dave has kindly given us permission to reprint a couple of those most relevant to writing science fiction.*

Getting from A to B

an overview of how to achieve interstellar flight

Simon Morden

Introduction

Interstellar travel is possible. A backward civilisation like ours currently has spacecraft heading out of the solar system and into the dark void beyond. They won't reach another star for thousands of years, but we could overtake them in a manned craft, right now if someone had the vision and the money. The science is known. All it needs is the application.

Ideas come and go. Engineering and physics chip away at the problems. But if we wanted to see Alpha Centauri before we died of old age, we'd have to build ourselves a starship worthy of the name.

General principles

Rockets work by expelling exhaust gases at high speed in a direction opposite to travel. Solid fuel (as in fireworks and the Shuttle boosters) or liquid fuels (most efficiently, the combustion of hydrogen and oxygen to make superheated steam) can be used. Chemical rockets burn quickly: large thrusts (and hence accelerations) are achievable, but for only as long as the fuel lasts.

To travel interstellar distances, accelerations need to be sustained over months and years in order to build up a high velocity. The higher the final velocity, the sooner it reaches its destination. Thus interstellar flight is all about the trade off between mass and velocity. The bigger the ship (payload plus engine plus fuel), the more fuel you need for a given velocity.

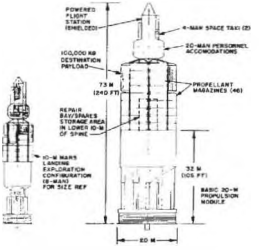
If time is not a problem, you could launch a world ship, where you acknowledge your initial crew will be worm-food long before their children's children's children reach their final destination (Brian Aldiss ***Nonstop***). Alternatively, you could freeze your crew using as yet unknown suspended animation techniques (***Alien***).

But if you wanted a crew to arrive at their destination within a couple of decades, chemical rockets won't do. Alternatives have to be used. Most, if not all of the following propulsion systems would be useful only once in orbit, and it's envisaged that construction of interstellar craft will take place there. Some of the concepts mean that your fuel is either collected as you go, or even left at home. In other cases, you can even leave the engine at home, too.

Orion

Take a steel plate, very thick. Set off a nuclear bomb underneath it. Watch the plate fly. This is the essence of Orion. It would use fission or fusion devices injected and exploded at a rate of around five per second within a reaction chamber (equipped with shock absorbers) which would direct thrust in the opposite direction of travel. Thrust would be increased by wrapping each bomb with a hydrogen jacket which would turn to plasma on ignition. A model Orion was propelled by conventional explosives some sixty metres into the air to prove the principle worked.

Acceleration is high: if required, a vehicle could launch from Earth using this method, but the local population would be none too pleased. Fuel is limited to the number of bombs on board.



Two studies of Orion spacecraft

Orion called for huge spaceships, weighing

thousands of tons. One design proposed an interstellar flight stars using a "conservatively designed" spaceship of forty million tons, powered by ten million bombs.

Refinements of the Orion system include lightweight bombs with no explosive trigger, using lasers to force the explosions.

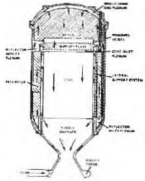
For an outrageous example of Orion in use, read Larry Niven's ***Footfall***.

Nuclear rockets

NERVA (Nuclear Engine for Rocket Vehicle Applications) was a US government programme that ran from 1963 to 1971. The engine was a fission reactor, and the reaction mass was hydrogen. The hydrogen was passed through the core of the reactor and expelled at high temperatures and velocities as exhaust.

The NERVA engine did work. It produced 4500 megawatts of power and had a record burn time of ninety minutes. It was a formidable machine, with twice the performance of the Shuttle booster rockets, but the risks of contamination and reactor meltdown was too great. The project was cancelled.

The st standard of the fusion engine involves much the same principle. Hydrogen fuses to form helium, which can either be expelled directly as exhaust, or the energy is used to heat a reaction mass.

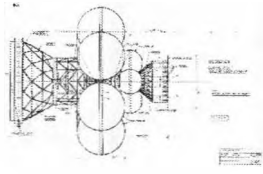


- Section through a NERVA-type rocket

Stephen Baxter's ***Voyage*** describes the NERVA in operation.

Project Daedalus

Project Daedalus was conceived by the British Interplanetary Society as a design study for sending a probe to fly-by Barnard's star in a journey taking fifty years (Barnard's star is six light years distant). Propulsion would have been from fusion 'microexplosions', caused by bombarding fuel pellets (deuterium and ^{3}He gathered from Jupiter's atmosphere) with electron beams. With pulse rates up to two hundred and fifty cycles a second in a magnetic combustion chamber, and shaping the exhaust plasma with magnetic fields, Daedalus would be orders of magnitude more efficient than Orion. Originally a two-stage design, Daedalus would accelerate for almost three years and have a final velocity of 12% of the speed of light. Once at its destination, the unmanned probe would have no chance of decelerating, or even launching an orbiter; it would be moving too fast.



- Daedalus (British Interplanetary Society)

Daedalus would work just as well within the solar system, and fuel requirements would significantly less for a hop to Mars than one to another star.

Fusion is achievable with lasers, but sustained and repeated reactions are beyond current engineering.

Nuclear-electric (Ion drive)

An energy source (nuclear reactor or solar cells) is used to ionise a gas and then accelerate the ions through an electric field at velocities greater than those achievable by the expansion of a hot gas (during combustion), without high temperatures.

The thrust achieved is tiny, but an ion drive is currently ten times more efficient than a conventional rocket, and acceleration can be maintained over a period of months or years. A potentially high final velocity is quite possible.

The good news is that ion drives really work. They are used to stabilise some communications satellites, and one is the main propulsion system for NASA's Deep Space One (DS1), launched on 24th October 1998. After initial teething problems, the ion drive has functioned continuously. It uses 85kg of condensed xenon gas as fuel and has solar panels for power. The whole craft weighs 450kg.

ESA have proposed a SMART 1 probe using a similar ion drive, and the NASA drawing board currently contains plans for the TAU (Thousand Astronomical Unit) mission for exploring nearby interstellar space: Pluto is thirty AU from the Sun.

True interstellar craft would have to be powered by nuclear reactors.

Bussard ram-jet

Robert Bussard proposed the use of interstellar hydrogen as fuel for a fusion ramjet in the 1960's. Using far-reaching magnetic fields to channel the charged particles into the engine, lasers would initiate fusion and the energy liberated by the reaction would thrust the created helium out of the rear of the craft.

It was discovered that fundamental problems would prevent the ramjet from achieving its theoretical one gravity continuous acceleration, not least of which were the neutral nature of most interstellar hydrogen, the enormity of the magnetic fields causing structural failure of the ship, and actually getting the hydrogen to fuse.

These, as such are engineering, not physics problems.

Addendum to the ramjet include the RAIR (Ram augmented interstellar ramjet), which would use the interstellar hydrogen as a reaction mass only; on-board fusion engines would accelerate the collected hydrogen using magnetic fields and expel it as exhaust.

The interstellar pellet stream is another idea, accelerating fuel pellets ahead of the space craft from its point of origin, long before launch. Using a magnetic rail gun to give the pellets relativistic velocities, it is proposed to lay down a 'runway' of fuel a following ramjet could collect and use. Such streams may be half a light year long, making accuracy essential.

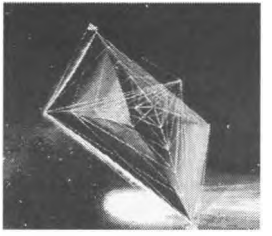
See Poul Anderson's ***Tau Zero***; also almost anything by Larry Niven; the aforementioned ***Footfall*** ***World out of Time*** ***Protector*** (especially recommended for interstellar warfare), and throughout the ***Known Space*** series.

Light sails

Light sails (and the similar technology of microwave sails) make use of the pressure exerted by photons. By using a very large (tens, possibly hundreds of kilometres), very thin (measured in microns) collector, enough photons will strike the surface to produce a significant force. The light sail would then pull a payload.

The significant advantage of the light sail is that there is no on-board fuel or engine. A ship would consist only of the sail and the payload. Accelerations would be tiny, but initially constant, 0.00001g for one year leads to a final velocity of 40% of the speed of light.

As the ship moves further away from the source of light, the force will decrease in proportion to the square of the distance. Robert Forward proposed using a laser to make a light sail a viable interstellar propulsion system. This laser must be of tremendous power (ten million gigawatts), and highly directional (able to hit a target just



- Artist's rendition of a light sail in flight

a couple of hundred kilometres across at distances of a light year).

Microwave sails would consist of a microwave-opaque fine wire mesh rather than reflective material, and would be powered by microwave lasers. They are of similar efficiency to light sails.

Problems for both versions include how to brake: for light sails this would involve diving into the target sun.

An ingenious alternative to direct propulsion is to convert energy collected by the sail to power an ion drive.

A working light sail has already been demonstrated: Leik Myrabo has managed to push a foil disc 20m into the air, propelled only by light.

For a beautiful description of light sails in use, see Arthur C. Clarke's short story, ***The Wind from the Sun***. A more abrupt encounter can be found in Larry Niven's ***A Mote in God's Eye***.

Matter-antimatter rocket

The matter-antimatter reaction gives the most efficient rocket possible. Mutual annihilation leads to total conversion of mass to energy, even though not all of the energy is released in useful form.

There are two ways in which the energy from antimatter could be used to drive a rocket. Firstly, charged annihilation products could be directed in a magnetic field and produce thrust, and secondly, the reaction could be used to heat a reaction mass which would then be expelled to produce thrust. This second case turns out to be the more efficient use.

A magnetic chamber would be needed to contain the reaction, and a method devised of transferring the heat to the reaction mass. Whatever problems these cause pale into insignificance when confronted with: where do we get the antimatter from?

The antiproton collector at CERN, if worked continuously for a year, would make less than one millionth of a milligram of antimatter. A proposed dedicated antiproton factory could make a milligram a year. To send a Daedalus-type mission would take over eight tonnes of antimatter. Current technology puts this scenario beyond our capabilities.

Star Trek famously uses antimatter to power the Enterprise warpdrive.

Laser powered rocket

The laser powered rocket has no energy on board. It carries only an inert reaction mass which is heated by distant lasers and expelled as exhaust. By leaving the engine at home, a significant weight saving is achieved, and because of the direct conversion of power to thrust, it is an immensely more efficient use of energy than making antimatter fuel.

The problems with the system are similar to those of light sails; keeping an enormous laser trained on an interstellar object.

For an example in fiction, it's Larry Niven's ***Footfall*** again, I'm afraid.

The Far Future

The 'new physics' of chaos and exotic particles may mean that interstellar travel is easier than we thought. Warp drives would revolutionise starship design in the same way radio revolutionised communications. New insights into existing physics may yield dramatic advances. Here are some possibilities, based on what we know about the universe.

The Differential Sail: If one side of the sail is perfectly reflecting, the other perfectly absorbing, then a difference in radiation pressure will exist between the two sides. Since space is supposed to contain a uniform background (vacuum fluctuations or the cosmic background radiation) which will impinge on all sides of the sail, a pressure difference will produce motion.

The Diode Sail: Analogous to a diode or one-way mirror, space radiation passes through one direction and reflects from the other creating a net difference in radiation pressure.

The Induction Sail: Like creating a pressure gradient in a fluid, the energy density of the space radiation is raised behind the sail and lowered in front to create a net difference in radiation pressure across the sail.

Diametric Drive: This concept considers the possibility of creating a local gradient in a background property of space (such as gravitational potential) by the juxtaposition of diametrically opposed field sources across the vehicle. A large positive mass could be extended beyond the space ship, which would then 'fall' down the slope created by the large negative mass behind. The diametric drive can be considered analogous to creating a pressure source/sink in a space medium as suggested with the Induction Sail.

Pitch Drive: This concept entertains the possibility that a localised slope in potential can be induced across the vehicle which causes forces on the vehicle (the falling down the slope idea). But in contrast to the diametric drive, it is presumed that such a slope can be created without the presence of a pair of point sources.

Bias Drive: The vehicle alters the properties of space itself, such as the gravitational constant, G, to create a local propulsive gradient. By modifying Newton's constant to have a localised asymmetric bias, a local gradient similar to the Pitch Drive mechanism results.

The possibilities may also exist for using wormholes to join distant points together so that travel is instantaneous, or utilising hyperspace, where values such as the speed of light and properties like distance may be variable in a useful way.

Conclusion

We don't need knobs and whistles to power an interstellar starship. Voyager has made it simply by using a slingshot approach of Jupiter. Ion drives are already powering spacecraft in our own solar system. Light sails do work. Orion, God forbid, is well within our capabilities, and NERVA technology is almost thirty years old.

Whether we have the will to achieve that first flight is a different matter. That is the very stuff of stories.

Sources and futher reading

Main sources:

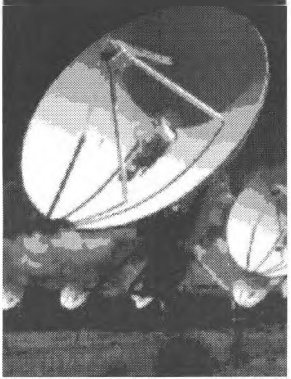
Crawford I. (1995) **Interstellar Travel: a review,** *in* **Extraterrestrials: where are they?** eds. Zuckerman B. and Hart M.H. pub. Cambridge University Press

Dyson F. (1995) **Interstellar Propulsion systems,** *in* **Extraterrestrials: where are they?** eds. Zuckerman B. and Hart M.H. pub. Cambridge University Press

Millis M.G. **Warp drive when?** http://www.lerc.nasa.gov/WWW/PAO/warp.htm

There exists a phenomenal amount of information on the Internet. Key search phrases include Interstellar travel, Orion, Project Daedalus, Ion drive. Individuals, government organisations and commercial companies all have interests in both the concept and technologies involved in space propulsion systems. The NASA main site is a jumping off-point for fruitful study: http://www.nasa.gov

Interview



Simon Morden

For my inaugural Focus interview, I had the pleasure of talking to Lesley Milner, Literary Editor of **Noesis**. Lesley wrote in the last Focus how she and colleague Robin Waddling set up the magazine. This time, we concentrated on writing, reading, and the art of editing.

Can you remember the first sf/fantasy book you read? How old were you? If you can remember, what particularly grabbed you?

I can't recall the first sf book I ever read, but I know that I found the series by Hugh Walters (**Expedition Venus**, **Destination Mars** etc) very early on. I do remember exactly what turned me on to sf - Neil Armstrong walking on the Moon on my 9th birthday - that impressed me a great deal! Also, every Saturday, my Dad took us to the local library which had a very good children's section with a lot of sf/fantasy.

*From your article in the last **Focus**, I take it you're an amateur astronomer. Did the science feed from the sf, or vice versa?*

The interest in science and especially astronomy arose directly from reading sf, though I never acted on that interest in school, only since. The spare time I have left over from Noesis is devoted to a series of very good distance learning courses in astronomy run by The University of Central Lancashire. I'm also heavily involved in the West Cornwall Astronomical Society and am a trustee of our bid to build a Planetarium and Observatory in Falmouth.
(http://www.ndirect.co.uk/~rwaddling/index.html)

*The decision to set up **Noesis**: how difficult did you find it, compared with how you thought it was going to be? Would you have done it differently now you know?*

We didn't find it difficult to set up **Noesis**. I knew a lot of the right contacts just by subscribing to various magazines over the years and David Pringle (**Interzone**) and Chris Reed (**NSFA**) have always been very helpful when we've asked questions. The really difficult bit for me was actually taking the plunge and sending off the first adverts asking for submissions. I felt that we were really committed then and there was no turning back! The only different thing I'd do if we started over would be to research printers more thoroughly so that we started off with the printer we're with now, which happens to be a school reprographics department.

How important is it to you that the science in science fiction is accurate?

I think that the science should at least be plausible, a believable extrapolation of current knowledge. However, we don't want to be blinkered by this view, I'm open to stuff that seems like 'magic' now. Just look back into recent past - no-one predicted the proliferation of home computers. I bet people didn't think that one was plausible back in the Thirties.

What to you is the epitome of a good short story? What do you look for when you rip that envelope open?

A short story should be succinct, in my opinion. Too many potentially good stories drown themselves in waffle or unnecessary subplots. One thing I would really like to find in an envelope is a really good fantasy short story. I've been sent a few, but none have come close to acceptance. My current favourite authors are CJ Cherryh (I loved **Foreigner**, **Invader** & **Inheritor** and the **Merchanter** books) and David Brin (all the **Uplift** books). I like these because they give a real sense of satisfaction at the end & an almost unbearable longing to read more... Trouble is, when I pick up one of their books I'm lost to the world and absolutely nothing beyond the bare minimum gets done until I've finished! When it comes to stories for Noesis, we're definitely after ripping yarns. We want

to encourage people to realise that sf is more accessible and readable than they think it is.

Conversely, what don't you want to see? How often do you see it?

What makes me cringe is when I open an envelope and inside is a letter explaining what the story is about. In my experience, this almost always means that the story turns out to be not worth reading! And of course, bad spelling, grammar etc. etc. Though I have to say that there have only been a few truly appalling ones! Most people do make considerable effort to present their work well.

What influenced your decision to use reviewers other than you and Robin? I certainly appreciate the short crits I get back, but who gets the casting vote?

We felt that just two people reading submissions is really quite limiting. I belong to Falmouth Writers Group and I co-opted a couple of friends from there (who have that rare ability to criticise constructively) along with two other sf friends to do the reviews. There's a bit of bribery involved (free copies etc!) but in the end, Robin and I have the casting votes.

Do you sometimes feel compromised by the pressure to fill the magazine as the deadline approaches? Have you been in the position where you haven't bought enough stories before you have to go to print?

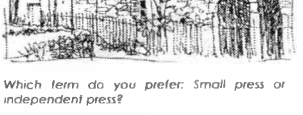
So far we've been very lucky. The right stories have turned up at the right time. We get around twenty-thirty submissions a month and buy two or three of those. We don't have specific plans in advance, but we do try to avoid having stories that are too similar in the same issue. The science angle is far easier to sort out as Robin deals with that himself and we're not reliant on submissions.

You get a story from, say, Arthur C. Clarke. It's okay, but not one of his best. Do you publish it?

Yes! If it was Arthur C. Clarke. But there are degrees of authors. We have brushed up against this problem briefly. An author (whose stories I had read elsewhere and enjoyed most of them) sent us a story and we dithered and dithered over it and eventually decided to reject it because we just didn't like it. It was a tricky decision though, as I'm well aware that established authors will probably want to sell their stuff to a magazine that can pay more than we can so it's not likely we'll get their best stuff.

Do you commission your artwork, or wait for contributors to send you samples?

For the first issue, we commissioned artwork and then we found a local artist, Mike Donovan, who has done our artwork ever since. He's moving away shortly though, so while we'll still commission some pictures from him, we'll be looking for other artists too. So if there's anyone out there who is interested, contact us! We're into black & white line art (it photocopies well). Here's a sample drawing (not sf) showing the sort of style I like. It's sketchy, but effective. (The sample is by Sue Lewington)



Which term do you prefer: Small press or independent press?

If I had to choose, I'd go for 'independent', mainly because we'd rather not be limited by being called 'small'. However, whatever the name, it's the product that counts in the end.

*Have you deliberately positioned yourself in the market to be different from **Interzone** and other sf zines?*

Yes, we do want to be different. I don't see how we can possibly succeed without being different. I like **Interzone** very much and have no wish to compete against it, that's one of the reasons why we introduced a science fact content as well as the fiction. I feel we're looking for a slightly different type of story too. I would like to see us as attracting people into sf, with stories that are easily readable and accessible, without a lot of science jargon. the gap between sf readers and non-sf readers is wider than you think - I once gave a neighbour (smart, reads lots of contemporary stuff) a very lame story of mine to read, a story that had very little sf content in my opinion, and she gave it back to me a few days later with the comment that it was all a bit too weird for her. It's that sort of attitude I'd like to conquer.

How easy (or difficult) do you find distribution?

This is a tricky topic. So far, in our first year we've tended to concentrate on setting up and producing a quality magazine. We've sold copies and acquired most of our current subscribers by advertising in **Interzone**, **Matrix** and **Writer's News**. We've dabbled a little in

bookshop sales, our local Ottakers has a few copies on trial and we had some in Heffer's in Cambridge for a while. We have been warned about sale or return though, return copies can come back in a very tatty condition. The other place we've signed up to is the **New Science Fiction Alliance** which deals in postal and internet sales. In our second year, we want to attack the distribution problem. We're hoping to apply for a local arts grant to fund a leaflet drop in a national magazine.

Give me your opinion on the state of British sf. Is there a stigma to the label sf/fantasy?

Unfortunately, I think there is. Critics seem to dismiss sf and fantasy as mediocre, whereas the genres are stratified exactly the same as all other types of fiction, ranging from the superb to the rubbish. Terry Pratchett has gone a long way (via the best seller lists) to convincing people otherwise, without discarding the fantasy label. Hopefully, many others will follow, thereby removing the stigma. There'll always be critics though, who think it 'cool' to despise genre fiction and maybe marketing books as thrillers is the only way to call their bluff.

Do you write yourself?

Yes, at intervals. I had a story accepted a few years back by **Auguries**, which has since disappeared. I also once had a half hopeful reject slip from **Interzone**! Currently though, I'm so caught up with **Noesis** and studying that it's all fallen by the wayside.

*Where do you see **Noesis** in five years time?*

Hopefully widely read & glossy! As for the publishing empire, we've only just begun... We've called ourselves Percepant Press and have a few ideas as to what's next. Robin has a track record in educational publishing and intends to put out teachers' resource packs and I have a few ideas of my own..... We want to learn to walk before we can run though.

Where were you on August 11th?

Well, my day was partly spent achieving that pinnacle of female ambition - a spot on **Woman's Hour** Radio 4. I first packed my family and guests off to the clifftop fields where a huge TV screen had been set up and then went down to a local sea front hotel where the BBC had set up camp. Radio 4 had contacted me via a circuitous route of local astronomical societies & Jill McGroarty (who did a story for us in **Noesis** #2) as they wanted a 'local amateur female astronomer' and apart from my friend Jenny who turned them

down point blank, I was the only candidate! So I answered Martha Kearney's questions on what was happening in Falmouth at 10.40am that Eclipse morning. Friends say I sounded fine, but I was shaking like a leaf really! Afterwards, I compared the experience to a visit to the dentist for treatment the previous day and decided I'd had more nerves sitting in the waiting room than talking on radio. After that, I rushed up to find the family, couldn't find them as it was so crowded there, so I ended up on the cliff path. It was total cloud cover and starting to rain, but I had a view through a gap in the hedge to the big screen and a superb view over Falmouth Bay. I could see the shadow rushing towards us and it went far darker than I expected. Though I was disappointed to miss seeing the eclipse with my own eyes, the atmosphere was great. There was an enormous cheer as it first went dark and there must have been people on every available bit of coastline as it sparkled with camera flashes as far as I could see. It was over far too quick. I have to say, the entire experience has just whetted my appetite to see an eclipse in clear skies!

Lesley Milner is 39, married to Dick and has two children at junior school. She works at the same school as a part-time classroom assistant.

Noesis is published four times a year, and is available at £2.75 single issue/£10.50 annual subscriiption, from: Noesis Science Fiction Magazine, 61, Pengarth Rise, Falmouth, Cornwall, TR11 2RR. Further information and author/artist guidelines are available from Lesley (at the above address) or from the Noesis website at http::/www.ndirect.co.uk/~rwaddling/Noesis/

Slicing the Hamburger: Some thoughts on writing non-fiction — part three

Andrew M. Butler

Of all the cants which are canted in this canting world, – though the cant of hypocrites may be the worst, – the cant of criticism is the most tormenting!

Lawrence Sterne, Tristram Shandy, Vol. iii. Ch. 12

A great deal of contemporary criticism reads to me like a man saying: 'Of course I do not like green cheese. I am very fond of brown sherry.'

G K Chesterton.

It came out of the blue: a commission to write for an encyclopaedia. Someone I used to know (only slightly) was asked by the editor if he knew anyone capable of writing on sf, which he figured made a fitting subject for the millennium edition (this being almost two years ago, it didn't seem quite as corny then). For want of knowing anyone better, my acquaintance sent me a postcard and I dropped a line to the editor, along with a brief c.v. and an example of my work. This clearly didn't put him off, so I got a phone call from him to discuss the piece: 2000 words on the history of science fiction, a guide to the current scene, and predictions for stars of the future.

It's a tall order, especially since Brian Aldiss's definition of sf would probably take up the best part of ten per cent of the total. I had to assume my readers knew nothing, needed sf defining for them, needed an outline of the history, needed a gentle introduction. I started with the back of an envelope and jotted down half a dozen ideas: space opera, the golden age, the fifties and Bester, the New Wave, the seventies feminists, cyberpunk. A thumbnail sketch of sf from the 1920s to the present day, but also taking into account **Frankenstein** and Wells. And then I jotted down the twenty names that sprang to mind when I thought of contemporary sf. Most of them were blokes. Scratched head, scoured shelves, and then I added a dozen female writers to redress the balance, and figured that a separate section on women writers would both note a growth area and exorcise the ghost of thirteen year old boys.

There were still some names missing: John Wyndham being the most obvious, as neither contemporary nor part of my thumbnail history. I had a brain wave: have a section devoted to types of sf. Alternate history, time travel, alien invasion, big dumb objects. That would seem to mop up a lot of writers. I transferred to the keyboard and roughed out something more substantial:

100 words	Introduction: definition of Science Fiction
700 words	History of Science Fiction: draws on European utopian and dystopian roots within a predominantly American market. Situated in pulps 1926 – c. 1950. Gains literary values in 1950s. Becomes 'modernist' in 1960s. In retreat in 1970s – but also age of feminism. 1980 and after: cyberpunk
200 words	Typical SF scenarios: time travel, alternate worlds, big dumb objects etc
500 words	Names to watch: newly established writers likely to be worth following
100 words	SF criticism – a note on fandom / BSFA, awards and journals devoted to SF

In part the final section appeared as promotion of the BSFA, in part because it illustrates the extra-literary context of sf. But this was an outline that got me to aim at 1600 words, the lower end of my word limit, and allowed me space to expand – a rough guide would be to aim at ten pecent under the total.

Working section by section, I began to flesh out the bones and turn it into sentences:

Introduction: 'The definition of science fiction:

> Science fiction is the name given this century to a class of narratives set within an imagined environment with [sic] differs from its author's environment in revisions to scientific knowledge, a development through scientific knowledge, an alternate course of historical events or a combination of the three.' The term derives from the editorial of **Amazing Stories**, April 1926, in which editor Hugo Gernsback desribed [sic] a new genre: 'By "scientfiction" I mean the Jules Verne, H G Wells and Edgar Allan Poe kind of story – a charming romance intermingled with scientific fact and prophetic vision.' Whilst it drew upon European roots, sf was predominantly a magazine-based form, and remains dominated by writers from the United States.

On the first draft I try not worry about spelling too much, although any typo I spot does get corrected – there were a couple of mistakes in my thesis which survived eleven generations of drafts. At this point I probably don't have a particularly strong sense of the whole article, and the computer screen is too small to give you this. At first you need to work on paper. (For many years my first drafts were in fact always hand written, often late at night, since the all-day prevarication and desire for some sleep concentrated the mind.)

So for the encyclopedia piece I printed the 1700 word article and scribbled initial revisions onto the paper. The first sentence became a bit more schematic: 'Science fiction is the name given to narratives set within an imagined environment which differs from its author's environment by a) a revision in scientific knowledge b) new technology, c) an alternate course of historical events or a combination of the three.'

Two drafts later I printed the file out with each sentence on its own line, allowing me to work on each individual phrase in isolation, making sure each sentence did its job. This of course is time consuming, but worth it in a piece that is likely to get wide readership or to stay around for years. Actually this sentence remained as it was, indeed, apart from "any combination of the three" it stayed like this to the seventh draft. In the eighth draft I clearly made a logical leap:

> Science fiction is a kind of popular fiction, which exists in written, visual and aural

> forms: books, films, comics, television and radio. The term developed from 'scientifiction', a coinage of editor Hugo Gernsback in **Amazing Stories**, April 1926, to denote 'the Jules Verne, H G Wells and Edgar Allan Poe kind of story – a charming romance intermingled with scientific fact and prophetic vision.'

The three elements were transmuted, and expanded on, in a passage which doesn't seem to appear in any earlier draft:

> For much of this century sf has been dismissed as simple entertainment, but this is unfair. Science fiction poses the question 'what if?', and the answer tells us much about the world that we live in by depicting one which we do not. At its best it is not about the future: it is in fact about the present.
>
> One form of the 'what if?' question is to examine the impact of new technology upon a society, and the behaviour of its inhabitants. Another is to suggest a possible revision or advancement in scientific knowledge, and extrapolate the way the world would change. Again by observing how different it is from the world we know, we can learn about the real world. Finally an alternate course of historical events might be suggested: what if the Reformation never happened or John F Kennedy was not assassinated? This is perhaps the most respectable of the three. In practice sf can employ different combinations of the three types of 'what if?'.

I can't reconstruct where this came from, nor how many times I ran the seventh draft through a spell checker to get to this point. It's certainly a gentler way to utter the schematic.

Other changes included the shifting around of the up and coming writers, grouping British or American or women writers together, and figuring which ghettos seemed most contrived. The position of the 'Sf Scenarios' shifted from after the history to before and back. In similar cases of revision I have literally cut and pasted materials, spreading the draft across the floor or kitchen table. Of course, this can be done with computer control-x and control-v, but there's only so much of the draft you can see at once.

This article as finished, ends up like this in skeleton:

300	Introductory Definition
200	Some Science-Fiction Scenarios
1000	Science Fiction: A Brief History
500	The Future of Science Fiction
200	The Science Fiction Community

In other words, in eight drafts I'd acquired six hundred words, most obviously in the introductory and historical material. In early drafts I'd gone through alternately trying to say things in fewer words and smoothing out the gnomic, to find that it stayed around the 1800 word mark. Much of the extra wordage was information I realised I couldn't leave out, and dates.

I'd shown drafts to various friends and to the editor who offered some very constructive comments, as someone who didn't know sf. This feedback may well be the source of the hundred new words which appear in the introduction. Again this is all time consuming, but if you do have someone who will save you from later embarrassment it is time well spent.

Unusually, I did get a set of proofs to read over. One mistake I didn't correct: one of the novels mentioned in passing isn't quite as I present it, but, confession time, I don't actually recall ever reading it and I was dependent on my memory of what others have said. Not an ideal situation, but some corners have to be cut. Even so, memory is a treacherous resource to rely on, and can so easily get confused. (Say, for example, the film **Eraserhead** might get confused, particularly in a trans-Atlantic crossing, with something called **Erasurehead**. But only an idiot would do that, yes? If you have a sympathetic and knowledgeable editor, hopefully they will save you: an editor's job is to save you from yourself.)

The subheadings got confused with the headings, so they needed attention, but most embarrassingly "Delany" became "Delaney". Since I'd sent a disk, this should not have happened. I can only conclude that the article was keyed in from scratch, or that someone, erroneously, corrected it. Of course there are many such moments of hesitant spelling, all the Macs that may be Mcs (MacCaffery, MacAffery, McAffery or McCaffery?), Stevens that may be Stephens (Steve Baxter and Gallagher, but Stephen), and as for John Courtny Gnmwade. As I mentioned in an earlier article, if you mistake a character's name or misspell the author, and your reader notices, it's going to shatter their confidence in your other judgements. It's worth having a list of difficult names, so that you only have to get it right once. After all the encyclopedia error of Philip Kendred Dick for Philip Kindred Dick has impacted on articles and copyright data for thirty years.

On the other hand, at least I got proofs. The tightness of the editorial schedule in **Vector** means that there is usually no time for the other editors to read proofs, let alone get back to the authors of the original articles. Our practice, and no one has complained thus far, is to correct for style (one recent piece contained gratuitous expletives and felt too chatty for the journal we want) and for error (dates, titles of films and books, spellings), and increasingly to reparagraph as some paragraphs head toward the thousand word mark. If that correction begins to impact upon the argument, or seems to be getting over ten per cent of the total, we will send our draft back to the author for approval. A number of regular contributors seem to be happy to give us *carte blanche* in editing; that's the pay off for the editors promising not to have heart attacks when contributors hand things in on the day of the deadline.

The other thing that editors do is edit for length. Actually, we don't in **Vector**, trusting that Tony Cullen has enough white space to shift around to fit it all in. With exception of two short articles, it always has fitted in, although he does often hold reviews over. If an editor gives you a length, unless she indicates that it is a ballpark figure, then hit it. When I've gone over, in paid markets, I've always had to negotiate, and successfully so far. A five hundred word filler in a newspaper, however, should be as near to five hundred words as possible. One piece I wrote came in just under the five thousand word region asked for. Reports came back from the book's referees (readers, often experts, who provide a quality check for the editor) and of course the author I was surveying published another book, which I needed to cover, and the total leapt to nearly six thousand. The editor began shaving, and now it's down to 5,600. I daren't check to see what has been lost. This article aimed for the 2,900 words of the last piece (but the first in the sequence, admittedly written tightly to the deadline, was 2,300) and this draft ended up around 3,100.

*

I suggested in my first article in this sequence that non-fiction should be as well written as fiction. Looking back

over the first two articles I'm hoping that the editors of **Focus** corrected some of my *mal mots*, supplying the words I left out and cutting those I left in. Learn from my mistakes. I noted that it's tempting to overwrite, and this is nowhere more so than in the academic sphere. Take this paragraph, moreorless at random:

> Either of these fetishized fantasized technomasculinities can be read as *supplements* to their normative genders the (male) cyborg displaying a terminal hyper-masculinity and the console cowboy being feminized through his relationship with technology.

(Actually, I've rewritten it, but the sense and flavour is the same). In context there is nothing wrong with this paragraph, and in fact it is a part of a fascinating argument but... it's still a bit chewy.

There is a trend in academic writing to take a theorist, say Lacan, Benjamin, Derrida, Deleuze and Guattari, and throw them at a text (read: novel, play, poem) to see if the banana sticks. The theory comes before the text. In fact, articles which lack that theoretical reading risk being pilloried as naïve, unsophisticated, and so on.

I removed all the theory from one article I wrote, since it didn't actually need it: after the thinking process through the genesis of the piece (which was designed to be a twenty minute conference paper where there was no time to do theory and textual exegesis) I left the theory behind. This article contains no theory, came back the response from the referees, and so the Foucauldian theory (actually all very noddy and passe at the time, although now more problematic, but that's another story...) got shoe-horned back in. Then they rejected it after all, because of the balance of "pre- and post-twentieth-century material necessary for the volume". So it goes.

*

My second precept is to **tell a story**. From the opening paragraph, the reader should know roughly what the article is going to be about. Even if you are one of those people who can begin with painstaking notes, spider diagrams, structures and skeleton drafts, it may be better for you to leave the opening paragraph until last, when you know what it is you are introducing. It's also worth being alert to whether the opening after that notional first paragraph is doing the job you wish it to. I often find that the first five hundred words or so is a kind of throat clearing, material which is necessary to have produced, but not part of what you end up needing to say. Cut to the chase. Set up the problem you want to solve, the conundrum you wish to elucidate: the aesthetics you wish to appreciate. And then, step by step, with evidence, set out the case you wish to make. As you reach two hundred or so words under your target length (with a ten percent margin, say, for rewrites) begin to sum up, draw the threads together, and conclude. And *then* go back and write that introduction.

Try not to get bogged down in subplots, in endless minutiae, the basically interesting but irrelevant. Remember that this is not *the* last word on the subject, but one entry in an on-going exchange about the subject. Take into account what others have said, quote (briefly) with approval if it supports your argument, perhaps more generously if you are kicking against that earlier critic. It is curiously easier to write on something a few people have written on than a new topic, in the latter case you are having to set up all the argument and terrain for discussion yourself, whereas in the former you are responding to and correcting an earlier statement. Of course if too many people have written on a subject, it can be difficult to find something new to say. If you can't say it new, and you still have to say it, at least say it interestingly.

*

Patience is a virtue, they say, and nowhere more so than in the writing of non-fiction. In **Vector** our deadline for copy is something like six weeks ahead of the time when the magazine is meant to appear. At times a backlog of material can build up, waiting for an appropriate context for publication. In other words you sweat buckets to get an article finished off, and then the bastard editors sit on it for six months. Aye, but you had it lucky.

From first draft to publication of my encyclopedia entry took two years. Aye, but you had it lucky. The five thousand word piece eluded to above reached its penultimate form in 1998, and mentioned the author's latest novel, in 1997. My proposal was written when there were just two novels, which suggests it was in 1995. Assuming it is published this year (and we're at proof stage here) that will be four years from pitch to print. Publishers go under, editors leave, you move and lose track of the publication.

Still, a steady nerve is necessary, and your reaction on seeing such dusty material on publication could be as easily depression that once you were able to write that well as embarrassment that such callow naïvete is in print.

At the same time, someone may well read it, and begin thinking, yes, I see; I understand, I... Or, no she's wrong, it really is... Or best of all, for you, for the author who inevitably you are parasitic on: that's interesting, I must go away and read the book, see the film, hear a concert... And the conversation that is non-fiction comes full circle, and moves on.

Critical Mass

Dave Langford

Column 85, *PCW Plus 118*, July 1996*

So there you are, staring alternately at the PCW screen and a tall stack of rejection slips, and wondering about a change from sending out the stories and articles about which editors are so wilfully obtuse. How about... writing book reviews? It seems so straightforward: read a book (if you don't read lots of books anyway, the writer's life is not for you), say what you think of it in a few wittily trenchant words, and *get paid* for this.

Of course there are complications. Most newspapers and magazines find unsolicited book reviews approximately as welcome as the Great Beast 666 at a vicarage tea-party. Unless you have some kind of literary clout (a published book or two helps, as does being a well-known DJ or serial killer), the way is hard and stony. Judging by how I got my one stint of regular reviewing in a national newspaper, the best bet is to buy lots of drinks for pals with literary connections, in case one day **The Guardian** rings and asks them to recommend a reviewer.

One friend believes in wearing down magazine reviews editors by camping in their office until they give you a review

book just to make you go away – but this technique should be used with caution. It's the old Catch-22 of publishing work must be pursued with savage persistence (if you don't ask, you don't get), but this very persistence can easily make editors so tired of you that they pronounce a technical term of literary criticism which goes, "Sod off!"

But suppose you have at last acquired a coveted review copy. Do you rush eagerly to read it? Problem one is that the reviews editor has probably assigned you some ghastly volume you'd never normally dream of reading. Problem two is that even if it's a novel you coveted, the book is no longer just a book. It has become homework. Afterwards there will be a test, whose single essay question counts for 100% of the marks.

Right, you've read it. With any luck you feel a surge of joy and energy at the discovery that you actually have a few opinions about the thing. You switch on the PCW... but hang on, here's this commissioning letter that came with the book. Better check the arrangements. A cold shock of horror afflicts your innards as you discover that the finely judged essay you planned to write, lovingly examining all aspects of style and content, has got to be crammed into 150 words.

It is advisable to do the cramming. Reviews editors hate writers to go over length. They also hate writers who deliver under-length copy. But they do show their appreciation of those who write exactly to length, by cutting it some more. You think it's impossible to cut your perfect, condensed prose any further? Fear not: the hellish skill of a trained editor can always find a way, usually by removing either the one phrase without which a sentence becomes meaningless, or the punchline of your favourite joke.

So – at last the work is done! A polished, gemlike review, for which you will receive a tiny but gratifying sum of money. In exchange you assign the publishers... blimey, what's this? Full world rights in perpetuity, denying you the right to reprint the thing even in your own Collected Reviews? Time for an enjoyable argument with the reviews editor, who will point out that the publishing company needs world rights because they might want to reissue the magazine on CD-ROM or the Web anywhere in the world. Fine, you say, but why insist on exclusive rights forever? Why is it necessary to debar you from ever re-using the piece yourself? The reviews editor mutters something about having to follow Big Multinational Company Policy, as enforced by Mr Genghis Khan of the Contracts Division. Be afraid. Be very afraid.

(Toadying footnote: our very own **PCW Plus** publishers, Future Publishing, have a substantially more humane approach. Well, slightly. Well, a bit.)

At last the review is delivered, and with any luck at least 80% of it will be published, with several of the sentences appearing in the order you wrote them. Congratulations: you have become a professional reviewer. Now it is time to send in your invoice and try to get paid. This is where the fun *really* starts!

*See note p5

The Plotting Parlour

Steve Jeffery:
The cover first, and Woody (how apt!) Patrick's competition winning 'The Caressing Tree' because it's so striking. And leads me to wonder whether Woody, and you, Carol Ann and Julie, were also strongly affected by those nightmarish illustrations to Grimm's fairy tales as a child, with those gnarled, twisted trees with half hidden faces and grasping, finger like branches. There's a strong sense of that, and also of Aldiss's **The Saliva Tree** in this.

"Which words do you use most often?", ask Dr Greenland in this issue's prescription, and I think for a bit (not too long) and realise that, apart from 'the' and 'and', I do tend to use certain words a lot. I'm a bugger for prevarication, hedging my bets and fence sitting, on the page as in life. I've caught myself using the phrase "on the other hand" so often that someone counted them in a letter to a fanzine and asked if I really had three hands. Cathe Cary, when editing **Vector** used to go through my reviews and blue pencil all the woolly qualifications and instances of "quite" and "is likely" and "appears to" (a hangover from the way I was trained to write formal research reports: never commit or state absolutely, only indicate a likely probability) making me sound a lot more forceful and committed than I actually was.

Overusing a word is the sort of thing that gives rise to the fannish sport of 'clench racing' in readings where three or more fans and an equal number of copies of Stephen Donaldson's **The Illearth War** are gathered together with too much alcohol. Fortunately it is a rare combination (at least, the one that also includes the Stephen Donaldson books). The rules are simple: On the count of three everyone open the book to a random page and reads until they come across the word 'clench'. The first one to do so is the winner. The game has been known to last as long as 31 seconds. This may be an extreme example. At the other end is Donaldson's obvious love of the less visited recesses of the thesaurus (a tendency, you feel, that ought to make John Clute love him but, strangely, doesn't) so that he could coin a sentence like the one Joseph Nicholas once immortalised in a review.

"They were lambent and telic, like walking gangrene, they looked hornbly like children."

But it is hard to beat the Lovecraft school for stuff like this. Here (albeit from an homage anthology to Clarke Ashton Smith's Zothique stories) the first few pages of the opening story yield fulgurant, bartizan, chatoyant, catachothian, eidolon, nenuphars, noctambulous, alcade, brumal, bathelc, nugatory, nitid.

The Small (or Independent) Press feature was much enjoyed. Neal Asher's collection, **The Engineer**, which he mentions in the course of his 'Getting There' article, was also reviewed in **Vector** 205.

John Lights 'Small Press Voyager' is amazing. That's an average of two titles per line, which is something I've not seen (or heard) since comedian Les Barker managed to embed the names of some 74 authors (usually via a series of outrageous puns) into a short story monologue.

Andrew Butler's second slice of the Hamburger, on reviewing, was both useful and informative, particularly in what he has to say about the structure of reviews and how to move, more or less gracefully, between the component parts of context, situation and evaluation. Like all pieces of writing (especially shorter forms) the opening should hook or intrigue you enough to make you want to continue, and while I agree that a concluding summary can wrap up a review neatly, I'm less enamoured (take note, reviewers) of those that merely take the form "In summary I enjoyed and can highly recommend this book", and tend to cut them on the basis that fifteen repetitions of that phrase in a single reviews column can get a bit much. I'm looking forward to the next of these articles on, as it turns out, articles. "[A] way of starting a conversation about a book?" Certainly, in the context of apas, that sounds right.