
COSMOPOLIS

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Wave 2

Suan Yong has sent out shipping information to subscribers advising them that the VIE Wave Two sets will soon be shipping. VIE volunteers currently assembled in Milan are busy packing the books. European orders will be dispatched by FedEx either in the last week of April or the first week of May. The remaining books will thereafter be warehoused until June before trans-Atlantic shipping; thus, non-European orders may not be shipped until late June. Note that Ellery Queen and other non-Wave Two orders are not included in these shipments. The EQ volumes will not be ready until late 2005.

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Disaster and Triumph in Milan

— or —

Under the Shadow of Patrick's Whip



Work gang of first week: Dustin Meano, Jurriaan Kalkman, Evert Jan de Groot, Brian Gharst, Menno van der Leyden, Josh Freeman

Packing of Wave 2 began on Tuesday, April 28, at the bindery, Torriani, in Cologno Monzese, just east of Milan in Italy. The 'week 1' crew included regulars Billy and Gale Webb, Thomas Rydbeck, Andreas Irle, and Evert Jan

de Groot (aka "E.J."), plus two of his countrymen: Jurriaan Kalkman and Menno van der Leyden. Vlad Degen, soon to be famous for his Dragon Masters internet game, was also present for two days. Later in the week we were joined by Brian Gharst with two of his countrymen in tow: Josh Freeman and Dustin Meano. The Dutch contingent took their leave on Saturday but the roster was filled out by Josh Synder (from Boston) and VIE stalwart Rob Friefeld who arrived on April 30 and May 2 respectively. Nicola de Angeli, one of our men in Milan, graced us most days with his sunny presence. Errico Rescigno (our other man in Milan, who did crucial liaison work during Wave 2 printing) stopped by to greet us. A special celebratory dinner was organized on Saturday night, at the restaurant in Pecheria we had so much enjoyed last time. The absence of 'the Dutch boys' was compensated by several of our Italian friends: Signors and Signoras Biffi and Regoldi, and Stefania Zacco. As is proper when in Italy, dinner was taken on a terrace under a blooming wisteria trellis, and accompanied by two Italian wines.



Work gang of second week: Joel Snyder, Brian Gharst, Andreas Irle, Josh Freeman, Dustin Meano, Billy Webb, Rob Friefeld, Nicola de Angeli

Under the direction of Thomas Rydbeck and Gale Webb work proceeded efficiently. They worked from, and depended greatly upon, the document prepared by Suan Yong with updated subscriber address and subscription information. This document was a precious resource and exists only thanks to years of uninterrupted, painstaking and unpaid work by Suan. Despite checks we found no instances of the famous out-of-order sections which had caused such hullabaloo post-Wave 1. As packers checked volumes the usual trickle of rejects appeared (smudged, torn or crimped pages, covers spoiled by glue, end-papers improperly attached, up-side-down spines, etc.) which had to be repaired, rejected or 'de-rejected'. Biffi, and

his helper Alexandra, saw to this, meanwhile finishing up the deluxe covers. Biffi had worked 3 months on them and, when we arrived, most deluxe books were not only finished but waxed - a process which absorbed so much of our effort last time.



Thomas lugs books from factory floor to packing room.

Wave 2 packing had its own special problems: stamping and tipping-in the limitation pages, and making packed crates correspond to recipients of the numbered and signed volume 44's. My own time was mostly devoted to book repair. Thomas ferried books from the factory floor to the packing room. Billy fetched extra books occasioned by rejects. Gale ran the packing room and handled minor repairs. Jurriaan revealed himself a champion box maker, to be replaced later by Dustin, each in a distinctive style. Both gave full reign to colorful personalities. The others were mainly involved with the core of the job: inspecting, wrapping and packing books. Stefania appeared on most days to expedite European shipments. She also folded the errata sheets which subscribers will find tucked into volume 44.



Alexandra 'tips-in' the limitation pages.

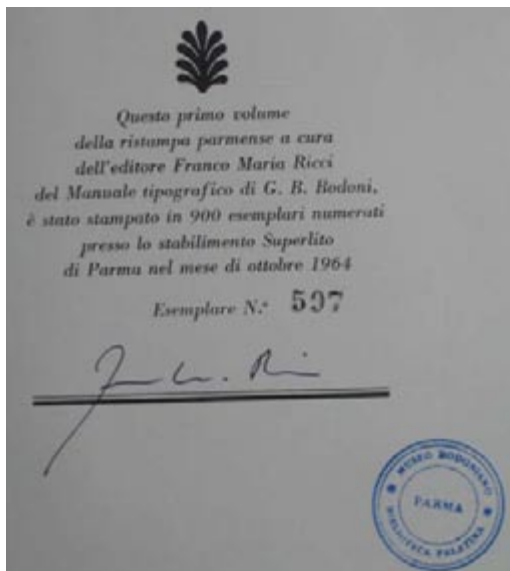
Wave 2 procedure was a modified version of Patrick's Wave 1 system. A single table was arraigned with 20 copies each of the contents of one of the four 'inner boxes'. These were checked, rejected volumes replaced, wrapped, and recounted. Then each worker took an inner box and filled it, cafeteria style, walking down the table.

Nicola de Angeli and I worked together for an afternoon



Thomas organizes the 200 signed numbered Readers volumes for packing.

stamping numbers into the signed pages, numbered 1 to 200 for the Readers volume 44, and A to Z for Deluxe volume 44. A few years ago I had made a special stamping font and had had rubber stamps made which, naturally, I forgot to bring to Milan. Despite a general opinion that writing, not stamping, was the proper method to inscribe such numbers, I prevailed upon Ennio* to allow me the use of a drawer of cover stamping fonts, and procured red ink. The tiny bronze letters were not easy to manipulate, and did not work as well as rubber stamps would have, but Nicola and I did our best.† I am vindicated in my insistence upon stamping for, in no less a book than a recent facsimile edition of Bodoni's *Manuale Tipografico*, stamped numbers are used to the same effect.



Bodoni edition numbered with stamp.

* Ennio Regoldi, Torriani foreman.

† For those interested in such things: Nicola stamped the Readers volumes 115 to 200 after my fingers wore out.

Our horizons, however, were darkened from the beginning. The first day it was discovered that volumes 3 and 43 were marred by a strange printing defect. The next day the same problem was discovered in volume 44, and the third day a similar problem was found in volume 32. Later this problem appeared sporadically in a few other volumes. The reason these discoveries were spread out was that, with the new system of packing, there was no occasion to check all volumes the first day, only those destined for the 2 inner boxes packed that day.

As upset as everyone was, in fact the problem does not impede legibility. I, therefore, was not overly alarmed, but the proud professionals, Stefania and Biffi, were scandalized. New pages were ordered from Global Print and a laborious process began of removing offending pages and gluing in good ones. I was therefore kept busy pre-checking volumes 3, 43 and 44, with the help of 'EJ' and Menno, prior to the page change, as well as assisting Biffi and Alexandra by moving to-be repaired, and then repaired, volumes to and from their work area. Biffi, meanwhile, had to 'tip-in' signed pages for volume 44. The result was an unavoidable logistical nightmare since it was important to finish packing the crates for European delivery and local pick-up in time to clear them off the floor to make room for subsequent crates.



Thomas readies crates for shipping.

I will not attempt to evoke the crisis atmosphere generated, or detail the packing work which had to be undone in consequence. Suffice it to say that the problems were dealt with as expeditiously as possible, and we were even able to learn the full story behind the problem. It was the 'fault' of Global Print (who, within hours, provided replacement pages and will also pay for the extra work at Torriani) and, in a reaction corresponding to that of Stefania and Biffi, they were nearly out of their mind with remorse. But saying this does no justice to the situation. In fact, as far as I am concerned, Global Print is no more guilty than Torriani, or the VIE, of this problem—and

even the ‘true culprits’ are guilty of no more than accidents inevitable to our brave new world of digital printing and internet—which, lest we forget, make the VIE possible in the first place.



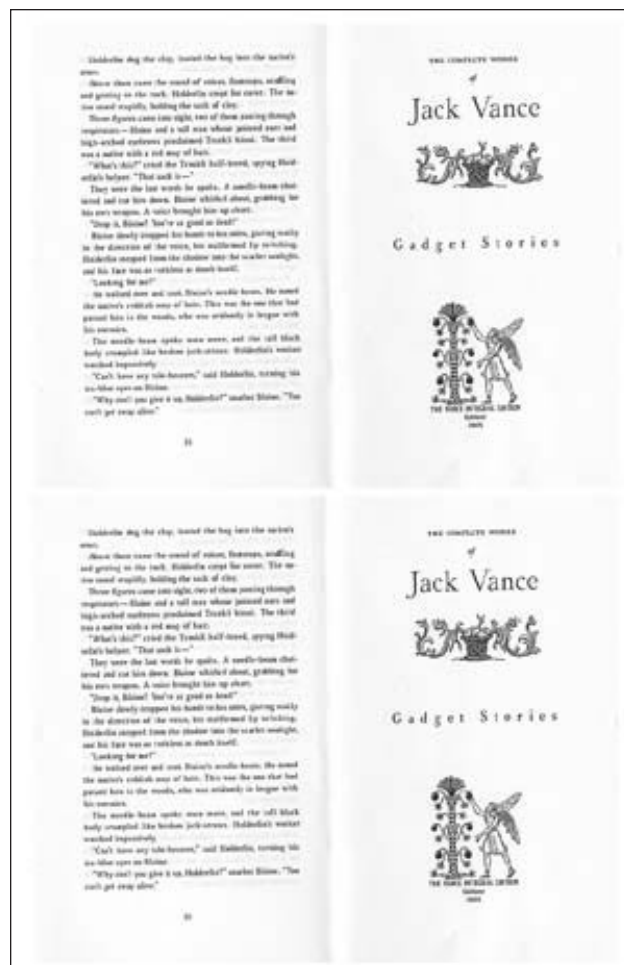
Stefania Zacco

Poor Global Print was already struggling with a paper problem—largely the fault of the VIE—before they were over-taken by a software problem. As *Cosmopolis* readers may recall printing had been scheduled to begin in late October. Paper was ordered in consequence. It was not, however, until mid-winter that printing did begin, because of delays in VIE processes. The reams

of paper, fabricated and sealed in the summer, had been stored at Global Print. When they were opened, in the winter dampness, they took on humidity and buckled. This forced further delays upon Global Print occasioned, in part, by the necessity of feeding their machines small, rather than large, stacks of paper, and the need for more frequent checks. These delays turned out to be critical. It should be noted that these errors did not exist on the proofs sent to me in March; the problem, therefore, would not have overtaken us had we been a few weeks closer to our planned schedule.

The VIE books are printed on Xerox laser printers, leased to Global Print, and permanently connected to the internet in order to receive updates, from Adobe for example, for reasons which must certainly be good. This system is certainly being used all over the world as a facet of the multifarious digital revolution. For us it makes possible that files, some that I believe date from 2001, generated by 3 different composition programs, from various composition programs in various version states, and which originated on John Schwab’s PC in Oregon, Joel Anderson’s Mac in Minnesota, Andreas Irle’s PC in Germany and my PC in France, should function in Milan, Italy. But, as Global Print was struggling to meet our schedule, an Adobe update

was funneled into its machines, causing an ‘L’ shaped mask to occur on certain sheets, along the left side and across the bottom.



Sheet printing plan on the Xerox laser printer at Global Print, constructed from a scan of unbound blues pages 7/8-25/26, (where the post-update error does not exist), and showing the 7-26 side of the sheet, or the title page and ‘page 16’.

The VIE pages are printed as follows. First, sections are created. In digital printing sections are often of traditional size but need not be; in fact they are made a size convenient to the number of pages wanted in a particular volume. Pages are then printed, 8 to a sheet, as illustrated, with their designated versos, so that the same double page spread, corresponding to a place in the section, is printed twice on a sheet. This is then chopped into upper and lower halves. The error in question occurs only in first sections, on pages ‘7’ and ‘26’, or on the verso of first section sheet 4 of 8 sheets—which turns out to be the title page and, depending on the volume, is either VIE page 14 or 16 (with 13 or 15, on the other side, depending on the presence or absence of half-title pages). The problem

may be better understood by inspection of a VIE volume, paying attention to the relation of the pages in the first sections, as revealed by looking down at the top, or up at the bottom, of the book block.

The rogue mask was wide enough to clip away a section at the left edge of sheet and across the bottom. The masked section at the left included a few pixel widths of letters and, at the bottom, the page number from the lower page 14 or 16 (but only the lower page), or most of the lettering of the VIE logo on the lower page, but only the lower page.



Spoiled logo

When the problem occurs, therefore, page 16 (or 14) always has its page number, and the upper title page always has its full logo. Furthermore, in the case of volumes 3, 43 and 32, not all volumes were affected since some were printed either prior to the update (including Deluxe 3 and 32). All volume 44's, printed last, were affected. Volume 18 was, for reasons still not clear to me, affected only on a few volumes and only on page 18.

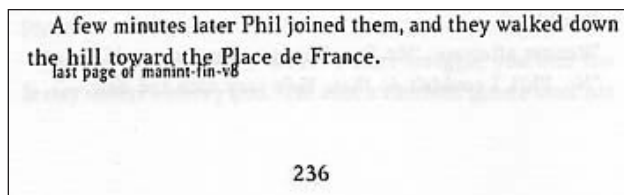
A further aspect is that the pages affected, clipped or not, and even corresponding pages in other volumes where the full fledged problem did not occur, suffer from lighter printing, which for some readers may be more of a problem than the missing strip of print, only a few pixels wide. All problem pages in the Deluxe volumes (text and title) were replaced, but most Readers subscribers will be able to observe the phenomenon at least on page 16 of volume 32. Readers volume 32 was not repaired. In the case of volume 32 this missing strip, however annoying, does not affect legibility since it is still fully clear what each affected letter is. The text clipping in some of the other volumes did cause a degree of ambiguity, however small. These pages were all changed. The title pages missing logo text were not changed in the Readers Edition. As a result something less than 50% of Readers volumes

3, 43, and perhaps a full 50% of Readers 44, will have this feature. It is statistically unlikely, though possible, that any Readers set will be without at least one such problem page, and may have as many as 5 (volume 32 title and text page, volumes 44, 43 and 3 text page). As mentioned above, some other volumes, like volume 18, may also have these problems, but in very small proportions. My own volume 44 (signed, and numbered '20') enjoys the special feature of the missing logo. In addition to Jack's signature I had my volume 44 signed by Signor Biffi, his helper Alexandra, and the packers.



Rob, Gale and Andreas boxing books.

In addition to these problems another error was found, this time not only attributable to the VIE but almost certainly to myself. It occurs in volume 14 on the last page of *Man in the Cage*.



Volume 14 error

The artifact is apparently a volume-composition error. It occurs on page 239 of volume 14. I will use a bit of paper cut from the errata sheet to cover over this error, or perhaps white-out; I urge everyone else to do the same.

As sad as all this may be, and as much extra work and worry as it caused in Milan in April of 2005, these problems should be kept in perspective. Not only were the worst of them repaired, not only do they only affect only 2 or 3 pages in many thousands, none of them interfere with

the fundamental integrity of the books, either textually or physically. They may be looked upon as anecdotal. In fact our attention was distracted by a far more serious matter of which our friends at Torriani only learned the day after we arrived: on June 30 of this year Torriani will close its doors forever. To say nothing of 60 people being put out of work, matters are thus complicated for the VIE. First of all we were depending upon Torriani for the 'second printing' sets. Signor Lolli has promised that Torriani will meet this commitment, but the matter is not simple. We counted on Torriani to repair and reprint a certain number of damaged or flawed books discovered by subscribers, and we were also counting on them to bind the Ellery Queen volume, informal 45th of the VIE set. Stefania is negotiating this situation. I have been taking lessons with Biffi, Ennio and Alexandra in various types of book repair in case emergency measures are needed.



Lucia and her sewing machine: where the VIE books are sewn.



Biffi repairs a VIE volume.

For the VIE this is a new horizon of shifting sands to cross. I am confident we will cope as we have with previous ones, often bleaker and vaster. As I write these words I comfort myself that a certain number of European subscribers* have *already* received their books. For them the project is 'over'—I hope, in their view, 'triumphantly'.†

There will, inevitably, be those tempted to publicly carp and accuse because a few words of the VIE logo are missing in one volume among 44 or some similar complaint. In advance I grant them their points: we are not professionals; we are amateurs; we have committed blunder, mistake and error. If any of them would prefer a refund, dozens of would be subscribers who missed the subscription cut-off are currently gnashing their teeth to have missed the opportunity to own a VIE set, and drooling with desire to



Gale commands the packers: Brian, Dustin, Rob, Josh F., Andreas, Nicola.

* among them Stefan Herr who, true to tradition, met us at Torriani, with wife, child and dog, to pick up his Wave 2 crate.

† REMINDER: THESE BOOKS ARE NOT MOLDED OR STAMPED IN PLASTIC BY MILLIONS BUT OBJECTS COMPLEX, RARE AND HANDMADE OF NOBLE MATERIALS. EACH VOLUME WILL HAVE INDIVIDUAL FEATURES, SOME OF WHICH MIGHT BE CHARACTERIZED AS 'FLAWS' BY PERSONS UNFAMILIAR WITH NON-INDUSTRIAL VALUES. ANY TRULY FLAWED VOLUMES WILL, AS IN THE CASE OF WAVE 1, BE REPLACED, FREE OF CHARGE.



Nicola's full VIE set! plus his deluxe 'gift' and 'sf' volumes.

somehow get one. They will certainly accept such damaged goods at full price, or more, and throw in a sincere 'thank you'. I hope, this time, we will see a minimum of such infantile reaction, along with the same gratifying gush of gratitude and appreciation which was generated by Wave 1. The nearly 300 volunteers who have created your book set for you, working over a period of almost 6 years, do not fail to merit your gratitude.



SPECIAL NOTICE:

Those interested in participating in JUNE PACKING of the Second Printing should contact Paul Rhoads at paulrhoads@wanadoo.nl.



A Salute to Post-Proofers

*Chris Corley
Post-Proofing Wallah*

Over the past several months a very curious thing has happened, almost so gradually as to escape my notice: I no longer spend time working on the VIE. Throughout the course of Post-Proofing I tracked, text by text, the progress of the Post-Proofing work, so the completion of the work did not take me by surprise. The slow and steady increase of the 'percent complete' numbers in my work progress reports lent an aura of inevitability to Post-Proofing's little corner of the project.

The absence of VIE work in my schedule seems simple enough in concept. Priorities, schedules, time commitments change over time for everyone. However, the impending arrival at my front door of the remainder of my VIE volumes will indeed mark for me, as for many others, the end of a remarkable effort on the part of hundreds of dedicated volunteers world-wide. The years 2000–2005 will always be, for me, 'the VIE years'.

Much has been said in the pages of *Cosmopolis* about the uniqueness and significance of the VIE in all its aspects. I will not recapitulate what most readers know and what, in any event, will be judged (fairly, I hope!) by future readers and thinkers. My hope is that all current and future readers of the VIE will pause, at least once, to consider the magnitude of effort involved in producing the volumes.

The VIE Post-Proofing teams read over 40 million words during the course of the project: the equivalent of

over 143,000 pages of text. If a conservative estimate of one page per minute is used as the rate at which pages were proofed, the first-pass reading alone amounts to well over one labor year of effort. One aspect of Post-Proofing that might be less obvious to the casual reader is the thousands of hours required to generate a Post-Proofing Final Report for each text. The procedure was:

1. Team members compiled comments to send to their team manager.
2. Team managers sifted through comments, eliminating duplicates as well as 'nuncupatory' issues (usually based on TI and Board Review comments).
3. I reviewed team manager reports and created a 'draft final' final report for review by the team manager.
4. The team manager and I had at least one e-mail exchange to arrive at a final report.

I estimate that the time required to generate a final report was roughly equal to the total time spent by the team members in reading the text. Thus an estimate for the total Post-Proofing effort was something like 2.5 labor years.

My last act as VIE Post-Proofing Manager is to salute the hundreds of volunteers and the thousands of hours of collective effort they contributed to raising the standard of quality of the VIE to an impressively high level. I thank one and all, from the most prolific volunteer (cheers, Patrick!) to those who read only one short story. You should be proud of what we have accomplished together.

SCROLL OF HONOR.

NAME	THOUSANDS OF WORDS PROOFED	TEXTS PROOFED
Patrick Dusoulier	2034.7	80
Robert Melson	950.3	30
Joel Riedesel	848.0	26
Bob Luckin	809.0	26
Jim Pattison	802.8	25
Robert Collins	767.3	18
Andrew Edlin	767.3	18
Rob Friefeld	767.3	18
Karl Kellar	751.6	19
Errico Rescigno	730.5	16
Till Noever	730.4	24
David Reitsema	721.7	21
Ed Gooding	720.3	19
Malcolm Bowers	694.1	26
Betty Mayfield	693.3	15
Mike Schilling	689.8	17
Rob Knight	670.6	16
Bill Sherman	663.5	23
Charles King	644.1	20
Bob Moody	630.2	22
Mike Barrett	625.4	16
Robin Rouch	600.3	20
Jeff Rusczyk	598.8	20
Rob Gerrand	560.0	21
Rod MacBeath	558.1	14
Mark Bradford	505.5	18
Peter Ikin	502.2	21
Lucie Jones	484.5	16
Marc Herant	476.8	16
Erik Arendse	461.5	20
Marcel Van Genderen	447.5	19
Gabriel Stein	425.3	12
Mark Straka	422.9	16
Michel Bazin	401.1	15
Tony Graham	392.0	10
Fred Zoetemeyer	390.6	15
Hans Van Der Veeke	390.5	18
Top Changwatchai	386.8	8

William Schaub	379.9	9
Simon Read	377.9	14
Juriaan Kalkman	375.0	17
Michael Duncan	374.2	16
Yannick Gour	368.7	16
Michael Smith	361.3	9
Willem Timmer	351.2	15
Dirk Jan Verlinde	338.1	14
Neil Anderson	333.6	12
Angus Campbell-Cann	321.6	13
Axel Roschinski	306.0	14
Harry Erwin	286.7	11
Michael Mitchell	283.3	10
Carina Björklind	282.6	7
Martin Green	274.3	7
Dave Kennedy	270.2	11
Per Kjellberg	270.1	11
Erec Grim	270.0	13
Luk Schoonaert	265.4	4
Ian Allen	259.4	4
Chris McCormick	250.6	8
Charles Hardin	244.5	6
Deborah Cohen	232.8	12
Mark Henricks	231.1	3
Evert Jan de Groot	222.6	11
Kristine Anstrats	221.9	7
Glenn Raye	220.6	8
Christian Corley	218.5	8
Eric Newsom	216.1	8
Matt Colburn	210.6	8
Patrick Hudson	205.2	6
Mike Nolan	197.3	7
Mark Adams	189.5	4
Brent Heustess	187.9	5
David Mortimore	170.1	5
Michael Turpin	167.7	4
John Audcent	167.3	2
Jasper Groen	165.3	7
Mark Shoulder	163.3	9
Joe Keyser	160.6	3
Anthony Thompson	150.2	8

Sue Manning	148.3	6
Wiley Mittenberg	147.8	4
Rudi Staudinger	147.6	4
Frans Langelaan	147.4	2
Dave Worden	146.7	6
Mike Myers	138.4	4
Scott Benenati	134.0	7
Ursula Brandt	123.6	3
Antony Kimlin	122.4	4
Linda Petersen	114.1	3
Nicola DiAngeli	112.8	5
Chris LaHatte	109.6	5
Enrique Alcatena	104.9	3
Ivo Steijn	104.6	2
John Hawes	103.7	5
Karl Barrus	103.1	3
Bob Lacovara	94.3	2
Phil Cohen	89.6	3
Richard Chandler	86.1	2
Greg Delson	83.8	5
Ruth Hunter	82.6	3
David Gorbet	80.3	1
Jody Kelly	80.3	1
Jason Kauffeld	77.5	2
Jurgen Devriese	75.1	4
Gabriel Landon	74.1	4
Patrick Dymond	74.1	4
Michael Rathbun	66.6	3
Linda Heaphy	65.0	4
Kjel Anderson	62.7	1
Chris Prior	61.3	2
Steve Smith	61.3	2
Charles Ashford	60.9	2
Eric Peterson	60.9	2
Derek Benson	59.2	2
Kelly Walker	54.2	3
Cameron Thornley	53.6	1
Ken Kellett	51.2	2
Brian Bieniowski	49.4	2
Andreas Björklind	37.2	3
Neville Angove	31.5	2
Matt Picone	24.4	2

Frank Dalton	22.1	1
Patrick Van Efferen	19.1	3
Dan Chang	17.4	1
Matt Colburn	17.4	1
Brian Koning	17.4	1
Stephane Leibovitsch	17.0	2
George Bouchie	16.9	2
Joost van der Eijk	14.8	1
Russ Wilcox	9.1	1
Quentin Rakestraw	9.0	2
Michael Abramoff	9.0	1
Jeffrey Cook	9.0	1
Jason Ives	9.0	1
John Ludley	8.3	1
Jean-Marc Dardier	7.4	1
Chris Dearmitt	6.5	1
Carl Spalletta	6.5	1
Gilbert Harrus	6.5	1
Alex Crowther	6.3	1
Lee Petersen	6.3	1
Dominic Brown	4.6	1



Jack Vance: An Ad-Hoc Individual

Charles Platt

This interview was conducted in September 1981. The text was reviewed and revised by Jack Vance. It appeared in Mr. Platt's book Dream Makers II, published by Berkley. Copyright © 1983 by Charles Platt and reprinted here with his permission. The text may not be reproduced in any form without the author's authorization. He can be reached via e-mail at other@platt.us.

"Hello? This is Charles Platt, Mr. Vance. You remember, I wrote to you—"

"Charles who?"

"—about doing an interview, for *Dream Makers*."

"Dream what?" There's a trace of humor in his telephone voice, as if he knows perfectly well what I'm talking about but he feels like being playful—or awkward.

"You did write back to me and say it would be okay," I reminded him.

"I did, did I?"

"Yes, and I'm in San Francisco now, and I'd like to drive out and interview you some time this week."

There's a pause. "Well, I tell you what. I'll give you ten minutes. From 11:42 to 11:52 tomorrow. How's that suite you? Eh?"

"I might need a *little* longer than ten minutes," I reply, playing it straight. "About an hour."

"An hour! Do you realize how much I value my time? Are you going to pay me for it?"

"Ha ha! No, actually, I'm not, Mr. Vance."

"Well, then, you'd better be a *really* interesting fellow. Otherwise I'll do what I do with other people who come up here and waste my time."

"Ha ha. What do you do with them, Mr. Vance?"

"Throw 'em out."

Driving up into the steep, wooded hills north of Oak-

land the next day, I replay this telephone conversation in my mind, feeling apprehensive about confronting this ogre—and irked, too, by the indignities that are sometimes heaped upon the heads of innocent interviewers.

The narrow road gets narrower, and steeper, and winds back and forth, and finally I find Jack Vance's house half hidden amid the tall trees. I park the car, and I get out, and an intimidating voice bellows down: "*Who's there?*"

But when I finally meet Vance, he shrugs off his irascible act and is very friendly. He dismisses the matter of the phone call. "I just like to tease people," he says, with a sly grin. "And you seemed like a pretty amiable fellow."

He's a brawny man in old jeans and a short-sleeved shirt, with an anchor tattooed on his forearm. He once worked as a sailor, and still looks the part. His wife brings out some pomegranate wine, and we sit together on a porch swing on his stone-paved patio, beside the house that he designed and built with the help of his son.

Jack Vance values his privacy. He won't have his picture taken, doesn't like being interviewed, and doesn't even socialize much with other writers. "Some of them are quite decent chaps," he admits, as he flicks through the pages of the first volume of *Dream Makers*, which I've brought along for him to inspect. "But others in here, who I won't name, are horse's asses. My God—is this the company in which I'm going to be placed?"

I ask him if his reclusiveness is a deliberate, conscious decision.

"Yes, deliberate. Naturally I have friends—Poul Anderson lives near here, and we are good friends—but professionally, I don't care to make my living through my personality."

And he avoids visiting publishers in New York.

"I bypass it. Detest the place. Don't even think about it. My part is to sit home and write, send out manuscripts, and then run down to the mailbox to see when the check arrives."

Despite his tendency to hide himself, he has become a much-admired science-fiction storyteller, known for "voluptuous prose and soaring imagination," as Robert Silverberg has put it; or, in the words of Norman Spinrad, "perhaps the premier stylist . . . in terms of fusing

prose, tone, viewpoint, content and mood into a seamless synergetic whole.”

He shrugs. “It hasn’t come easy. It’s been a matter of plugging away, finding what I can do, and then trying to do it properly. I’m not one of these chaps who was an instant success. There was a long period in which I wrote a lot of junk, as an apprentice, learning my trade. I found out I was no good at gadget stories, or at least they were very boring to me, and I found out that I didn’t enjoy writing whimsy, and I finally blundered into this thing which I keep on doing, which is essentially a history of the human future.

“I didn’t start selling until kind of late in life. I was doing other things. Working, gadding about—I was a merchant seaman, a deckhand. The only way I could get on a ship, with my bad eyesight, was to memorize the eye chart. See, every time you go on a ship, they’d parade you in front of doctors and have you read an eye chart. Luckily, they always used the same chart.

“I wrote while I was at sea. I did this so-called *Dying Earth* thing.”

“Why ‘so-called’?” I interrupt.

“It wasn’t my title.”

“What was your title?”

“Damned if I know.” He chuckles. “Anyhow, I wrote that, sitting looking out over the water, and then I got tired of that particular life for various reasons. I met a friend of mine who’d become an apprentice carpenter; he said I should try it. Have to go to school for four years, but after that you’d usually get a job. I said, ‘all right,’ ‘cause you gotta do something. I went down to the union hall, they asked me what size a saw-horse is, I held out my hands like so. They said, ‘Why do you place studs sixteen inches apart?’ and I said it was probably because plywood sheets are four feet wide. They asked me which end of a nail goes in the wood first, so I said, the sharp end is usual, in this case. Fine, they sent me out as a journeyman—full-time carpenter, forget the apprenticeship. I hardly knew which hand to hold the hammer in, lasted on the first job one hour, the second job two hours, finally learned the hard way.

“But I was still writing, and one of the worst stories I ever wrote I sold to Julian Blaustein in Hollywood; he saw a sentence in it that inspired him. Bought the story

for what was then a lot of money, and so for a while I worked in Twentieth Century-Fox’s West Coast studios. Then my producer got another job and I was fired, politely.

“So we went to Europe, stayed there nine, ten months. We toured England by bicycle. Came back penniless, to New York, where Scott Meredith, the literary agent, got me the job of writing Captain Video scripts. Worked on that for a while, then came back to California, to the mountains, and that’s where I met Frank Herbert. He was working as a reporter on the Santa Rosa *Press Democrat*, and he came out to interview me.

“Three months later we drove down to Mexico with the Herberts and set up a writers’ household in Chapala. We had a wonderful time, but the period was financially arid. We came back to California and the Herberts stayed on for a while longer. We found this place, and have lived here ever since, except for when we travel. On our last long trip, the three of us—Norma, our son John, and myself—took thirteen months to go around the world. We set up housekeeping at Madeira; at Fishhoek, Durban, and Graff Reinnet, in South Africa; a houseboat on Lake Nagin in Kashmir; and Hikkadua in Ceylon. And many other places for shorter periods. I wrote, Norma typed, and John studied his lessons.

“I write in longhand, Norma types it out, I go over that draft, she retypes—does all the real dirty work. She probably edits a little bit too, I guess. It’s a very essential part of the process.”

He talks in an offhand, earthy style, pausing now and then for a quiet chuckle. He seems to like telling anecdotes about his life and the manual labor he’s done, but he avoids talking seriously about his books.

“It never occurs to me to even try to analyze my writing,” he says. “I just write more or less what I think I would have liked to read myself, at the age of sixteen or seventeen.”

As a teenager, he studied to be a mining engineer, then decided it was “too damned dull” and majored in physics at the University of California, then decided physicists tended to be “single-minded, one-dimensional people” and became a journalism major, since he enjoyed working on the college paper. It’s evident from this that he’s an educated man; but he comes across more as a craftsman than an intellectual, so I ask if this means he has no time for academia or literary criticism.

"I don't have much respect for so-called intellectuals. I think to call somebody an intellectual is the same thing as calling him a fool or a blackguard." He pauses thoughtfully. "Critics are intellectuals. It's their role. They work with ideas, words, thoughts. Their tool is a pencil or a typewriter. I won't go into a long discursion on esthetics, but a critic—I won't say he's necessarily a deviant, or a criminal, or a disgusting person; he can be very nice, pet his cat, treat his wife nicely. Who knows? But still, to admit *that's* what you do for a living! It's like saying, 'I give sex shows down at the Burlesque for a living.' Something you'd have to blush to admit."

Does he feel this way because he receives negative criticism?

"No. I try to avoid it, certainly. But criticism simply doesn't interest me."

I mention that Don Herron, a critic who contributed to a symposium on Vance, deduced that Vance had been heavily influenced by the work of Clark Ashton Smith.

"That's true. Can't help it; Smith is one of the people I read when I was a kid. But it only influenced *The Dying Earth*.

"I was one of those precocious, highly intelligent kids, old beyond my years. I had lots of brothers and sisters, but I was isolated from them in a certain kind of way. I just read and read and read. One of the things I read was the old WEIRD TALES magazine, which published Clark Ashton Smith. He was one of the generative geniuses of fantasy. The others, Lovecraft for instance, were ridiculous. Lovecraft couldn't write his way out of a wet paper sack. Smith is a little clumsy at times, but at least his prose is always readable.

"When I wrote my first fantasies, I was no longer aware of Smith—it had sunk so far into my subconscious. But when it was pointed out to me, I could very readily see the influence."

I ask why he has never drawn directly on his global traveling experiences, to color his fiction.

"I do, more or less, on a subconscious level. And I wrote one murder mystery called *The Deadly Isles*, set in Tahiti, with a deep-sea sailboat, navigation, things like that. Also, a suspense-thriller, *The Man in the Cage*, had a Moroccan locale.

"I particularly don't like these movies that call themselves science fiction, with a Star Trek type of space-ship and everybody in uniform—essentially all they are are navy ships, floating around in space, very boring and dull. When the time comes—if it ever does come—that we're traveling in space, the experience will be so different from the everyday. We've had just a little taste of it; what's going to happen eventually will obviously be much richer and more complex."

He takes another sip of pomegranate wine. "I'm talking a lot more *theoretically* than I enjoy talking," he complains. "Theoretically, or, what's the word? Didactically." As if he doesn't like being quizzed on his outlook and ideas.

I ask him if, similarly, he dislikes putting messages in his fiction.

"Well, I have done it a couple of times. There was one book that used a very simple fact, which everybody knows but doesn't want to admit. I have heard American Indians complaining about the wrongs done to them by the white man, who stole their land and so on. Which is true. But something which everybody knows is that the forebears of these Indians had stolen the land from some other Indians, and those had stolen the land from some earlier tribe, and the white man was just the latest tribe to come along and kick somebody off the land. No doubt some time in the future, *we'll* be kicked off.

"Same thing in England. Should we check out the Domesday Book, see who owned the land in A.D. 1000 and give it back to 'em on the theory that the Normans shouldn't have come there in 1066? In that case, you can think, well, the Saxons were kind of marauders themselves, so you can give the land back to the Britons. And so on.

"So the central idea of this thing was that there's no state in the world whose title does not derive from violence, which seems to be a harmless thing to point out, except that the word 'violence' is kind of like a red flag to many people. It made the peaceniks get very, very furious.

"In the other book I did, the theme was even less inflammatory, in fact it was so trivial as to be trite. Essentially, I said that socialism, the welfare state, is debilitating. That is such a trite thing to write a book about, that I'm ashamed of it, in a certain sense. But

the idea of this very, very large welfare system carried to extremes had such grand possibilities for picturesque episodes that I decided to go ahead with it. And some British fellow, evidently left-wing in his political opinions, sent me this long analysis. He seized upon these two books to prove his theory that I'm from the extreme right wing. Which, of course, in my opinion, is *absurd*. I'm *nowhere*, not left or right or center of anything. I'm an *ad-hoc individual*."

This angry, emphatic refusal to be typecast as a member of a political group reminds me of his refusal to join in with the science-fiction crowd—or, for that matter, his large family, when he was a child. Preservation of his individuality seems very important to him; his fictional heroes likewise tend to rebel against becoming loyal members of any particular social unit.

I ask what he's working on now.

"A very long medieval fantasy. It's not sword-and-sorcery, although there are wizards and swords. This is quite different. It's romance. Trying to do something to sell to the general public, a broader audience. These particular situations and characters, I think, will have a wider appeal than some of the other stuff I've written.

"If it goes over well, I've got plans for another two or three more, for Berkley-Putnam.

"Also, one of my favorite books that I've written is *Eyes of the Overworld*—not my title, incidentally. I want to do a few more stories dealing with that same protagonist, to make up a second volume there."

I ask how many books he writes each year.

"I don't keep track. I don't like to think about it. I don't do enough; I waste too much time."

This sounds like a self-imposed work ethic.

"Uh . . . yeah, in a way. Life is too short not to get as much into your life as you possibly can. That doesn't just include work; that includes exerting yourself to have various experiences. For instance, Johnny and I are getting our boat ready to sail down to the South Pacific. We've got a forty-five-foot ketch, a sea boat, in fact we should be at sea right now, except for, oh, money problems. But we probably will sail to the Hawaiian islands, or down to Mexico, next year."

At this point, Vance's wife comes out and tells us lunch is ready. "All right," he says, pulling out of his relaxed mood and remembering to be grouchy again. He turns to me. "Have I disemboweled myself sufficiently for you? You see, I'm not a recluse. I just keep myself reclusive in a certain sense here, because I don't want to be associated with the goddamn science-fiction field. Myself, that's all I want to be. Just me. I don't want to be lumped in with this person and that person. In fact, I don't like even being in your wretched book! For all I know, you'll put me in face-to-face with some fellow I don't approve of at all." He chuckles, a little bit playfully—but only a little.



Notes by David B. Williams for the edification of curious readers:

- The story Vance sold to Twentieth Century-Fox ("one of the worst stories I ever wrote") was the Magnus Ridolph tale *Hard-Luck Diggings*.
- *Captain Video* was the greatest SF television series ever broadcast, or so I believed in 1952 as an avid seven-year-old viewer.
- The "symposium on Vance" in which Don Herron adduced the influence of Clark Ashton Smith was the Jack Vance volume of the *Writers of the 21st Century Series*, Underwood and Miller editors, Taplinger 1980.
- The novel about serial land-grabbing was *The Gray Prince*, and the novel about debilitating socialism was *Wyst: Alastor 1716*.
- The "long medieval fantasy" became *Suldrun's Garden*, published in 1983, and Vance did continue the *Lyonesse* series with *The Green Pearl* and *Madouc*. In the course of composing the *Lyonesse* books he gave up longhand writing and converted entirely to word processing.
- "That same protagonist" was *Cugel the Clever*, whose second volume of adventures also appeared in 1983.
- Vance never did fulfill his dream of sailing to the South Pacific.
- His interview in *Dream Makers II* was placed between Poul Anderson and Theodore Sturgeon. I know Vance approved of Anderson, but I have no idea what Sturgeon's rating on the Vance Affinity Index might have been.



David B. Williams, a frequent contributor to COSMOPOLIS, was responsible for obtaining the author's permission to reprint this article. Thank you, David.



Publishing Jack Vance: The SAS[®] System as a Tool for Literary Analysis

Koen Vyverman, SAS, Netherlands

ABSTRACT

The Vance Integral Edition (VIE) is a non-profit organization that aims to publish the entire works of the American author Jack Vance in a limited, durable, and definitive edition. As each of Vance's 136 novels and short stories progresses through the VIE workflow—from scanning and digitizing, via restoration and proofing, all the way through to typesetting and printing—the SAS System has proved to be invaluable. SAS software has been used for comparing and analyzing the contents of the various file formats that are involved (flat-file, Word document, RTF), for keeping track of text changes, for reporting in Word and Excel formats, and for providing analytical insights into some prickly questions of textual and stylistic integrity. This paper discusses the major VIE processes where SAS came to the rescue, with ample segments of code and sample output.

INTRODUCTION

"Beyond question you are a person of discernment. Still, all balanced against all, the works to which I refer make demands of those who would appreciate them. The metaphors sometimes span two or three abstractions; the perorations are addressed to unknown agencies, the language is archaic and ambiguous...In spite of all, the works exhale a peculiar fervor." (Vance, 2005b)

This paper documents what might be the first-ever application of the analytical powers of the SAS System to a project that is strictly literary in nature: using SAS software to help publish an integral edition of the works of a great, yet notably undiscovered, American classic, Jack Vance.

The paper presents both the literary aspects of the project—insights into the VIE project phases and problems—and the technical aspects—the hard-core SAS programming that shows how the problems were addressed. It is not possible to provide all the SAS code that was developed in the context of the VIE project. However, this paper outlines the approach and includes some essential code and sample output.

The paper begins by introducing Jack Vance, his work, and the VIE project. Next follows a general overview of the workflow and processes within the VIE, focusing on the major phases of text treatment. The discussion focuses on where and how in the VIE process SAS software helped to make the set of VIE books as good as it can possibly be. The paper concludes with a humorous divertimento and closing remarks.

The code snippets that are included in this paper were developed and tested using SAS 9.1 on a Microsoft Windows 2000 Professional operating environment in conjunction with Microsoft Office 97 software. Dynamic Data Exchange (DDE) to and from Microsoft Word and Microsoft Excel was used liberally and without constraint, whence a little warning: here be dragons!

THE VANCE INTEGRAL EDITION

"I see that my life has been somewhat stagnant, even self-centered. I have gloated privately over treasures of literature which should have been shared with others. Now I wish to produce and stage some famous masterpieces of ancient Earth. You ask, where are these fabulous classics to be found? I reply, they are here with my collection of rare books, not fifty feet from where we sit." (Vance, 2005b)

ABOUT JACK VANCE

Jack Vance was born John Holbrook Vance in 1916. He is the author of over 60 novel-length books, and of even more novellas and shorter stories. He wrote his first published stories while sailing in the Pacific for the United States Merchant Marine in World War II. Therefore, his work, like that of Melville or Conrad, is recognizably that of a sailor. In the years after the war, hoping to earn a living with his pen, he turned his hand to various genres: mystery, fantasy, and—lacking a more suitable general category in which to pigeonhole the major part of his literary output—science fiction. Vance himself insists that he is not a science fiction writer, and indeed, the "science" element in his stories is largely absent. Although most of his "sci-fi" works are set on other worlds and space travel is available, the

technology that is involved is of no interest to Vance. Instead, he focuses on the social, political, religious, and philosophical aspects of the worlds and cultures that he paints in his inimitable style, and in which his colorful characters go about their business. Vance's often un-heroic heroes find their worlds populated by inventive scoundrels, philosophical innkeepers, megalomaniac foes, scheming priests, and haughty aliens. Vance's storytelling style has been described as being reminiscent of Swiftian social satire set on extravagant, far-off worlds, with dialogue that can be as hilariously funny as anything that P.G. Wodehouse ever wrote. Vance is one of those rare writers who is truly a stylist; he imbues his readers with a new language that is robust, subtle, musical, and inventive in the highest degree. Few writers use such an extensive vocabulary, or use words so effectively. Vance's capacity to evoke atmosphere is legendary among his readers, and unsurpassed in all of literature.

From this modest beginning, Vance's writing evolved into one of the most original and powerful oeuvres of the twentieth century. For the past fifty years he has quietly produced a variegated, unforgettable—in fact, astonishing—series of world-class masterpieces. Despite this, few, even among science fiction readers, have heard of him. Most of his work is out of print, and more of it sells in French or Dutch translation than in English. Yet Vance is a writer to be classed only with twentieth century giants such as Solzhenitsyn. His work is not only of the greatest human importance, it is crafted by a poet, and—most significant of all—it is unfailingly, even sinfully, entertaining.

How is it possible that such an artist has gone unrecognized, though consistently published for over half a century? There are two reasons. The first is that, because Vance's works fail to be "typical" science fiction, they fail to interest readers of this genre. Yet his books are found only in science fiction sections, if at all, and are obscured by inappropriate cover art or editor-supplied titles. Though promoted as a "science fiction classic of the Golden Age," (meaning the 1950s) the target market fails to support re-printings, and his books remain generally unavailable. This same market has kept other writers continually in print, and no wonder; their work *is* science fiction. It is made of speculative, futuristic, not to say grotesque, elements, which may be fascinating, but which are without the deep human import that can provoke full-fledged literary expressiveness. Vance's concerns are elsewhere. He is engaged by the profundities of human, social, and natural reality—as much as any of the great novelists of the 19th century.

The second reason Vance goes undiscovered is his lack of pretension. His unique aim is to satisfy readers. His works do nothing to flatter engagement with contemporary critical and political fads, and yet they are indeed formally adventurous and pregnant with political and social import. However, Vance handles these aspects like any true artist; he hides his artfulness and makes his messages consubstantial with his stories. He is a "story teller" *par excellence*. For these reasons, plus his reluctance to engage in self-promotion, Vance remains undiscovered by his true audience, and unread by those who might appreciate him at his full worth.

ABOUT THE VANCE INTEGRAL EDITION PROJECT

The Vance Integral Edition project will alter this situation. The VIE project began in 1999 as nothing more than the conviction that an integral edition of Jack Vance ought to exist. Paul Rhoads, who advanced the idea, and a number of other long-time Vance fans got together at the Vance family's Oakland hill-top house and defined the project goals. The VIE was established as a California-based, non-profit corporation with the purpose of creating a complete and correct Vance edition in 44 volumes—a permanent, physical archive of Vance's work, doubled by digital texts which, through the Vances, are being made available to all present and future Vance publishers. The sets were sold via the Internet, on a subscription-only basis. Subscribers were asked to pay part of the subscription fee up front; this money was then used to cover the cost of running the project and preparing the books. The idea was to have volunteers do most of the actual work. The work of the various volunteer teams was coordinated mostly via mailing lists and reports on the project Web site. Given the volume of output that Vance generated over the past six decades, in its early days the VIE project must have seemed sheer madness to some who accidentally stumbled upon it. However, two years later there were 300 active volunteers, a management group of 25 people, and hundreds of subscribers—most of them volunteers.

The sheer existence of the VIE is a demonstration of Vance's artistic powers; what other author could inspire hundreds of readers to volunteer tens of thousands of hours over several years? VIE volunteers are men and women of all ages from around the world, with different skills. However, they have two things in common: they have read, and re-read, and re-read again, all the Vance that they have been able to collect, and they participate in the VIE project out of a sense of gratitude to an author who has so greatly enriched their lives. Vance is neither a generational nor a local fad. Once discovered, his work becomes a life passion.

The VIE project is perhaps the most culturally innovative use of the Internet ever. Because it is both world-wide and all-volunteer, it has been able to harness a multitude of diverse talents and great reserves of energy. For example, all of Vance's 135 texts have been digitized—from a story of under 2,000 words, to a novel of over 190,000 words, a total of some 4,400,000 words—including several never-before-published stories. In addition, these digital versions

have been proofread about three times—over 400 jobs. However, this is only the tip of the iceberg. The texts have also been corrected, typeset, and further proofread by teams of ten people. All texts have been corrected under the aegis of the author (Vance, now in his late-eighties, is still writing, though he suffers from blindness), his wife Norma, and son John. The VIE is therefore the authorized version of Vance's work, restored from original manuscripts, typescripts, galleys, or, when these were not available, by comparison of different published editions and information from the Vances.

Now, five years after that initial Oakland meeting, all the feverish activity has subsided, and despite the daunting dimensions of the task it had set for itself, the VIE project has now culminated in the printing and distribution to subscribers of over 500 sets of 44 volumes each of the integral works of Jack Vance (Figure 1). About 50 sets were donated to important libraries all around the world by Vance aficionado Paul Allen. All of those involved in the project can now sit back, relax, and re-read their favorite author in an edition that would have been an impossible dream a mere decade ago.

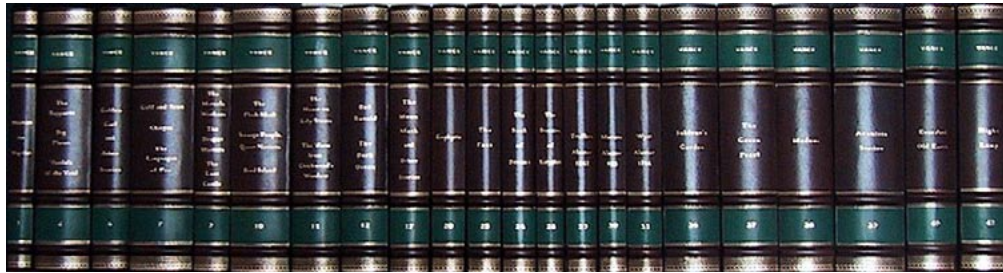


Figure 1. Half of the 44-Volume VIE Leather-Bound Deluxe Edition

THE VIE WORKFLOW—AN OVERVIEW

There are also those who, like the author, ensconce themselves on a thunderous crag of omniscience and, with protestations of humility which are either unconvincing or totally absent, assume the obligation of appraisal, commendation, derogation or denunciation of their contemporaries. Still, by and large it is an easier job than digging a ditch. (Vance, 2005c)

DIGGING THE DITCH

This section of the paper provides a high-level overview of the various phases of text treatment in the VIE project. The discussion focuses on the major milestones that each of the 135 texts went through, from typescript or published edition to printer-ready, VIE digital PDF file. The VIE process was not something that was immediately conceived when the project began. Rather, the steps were added to and perfected in an organic manner over the years. As volunteers gained experience and certain recurring issues became apparent, tools and processes were developed to address issues and problems. The process described below is a summary of what was eventually determined to be VIE best practice.

DIGITIZATION

The VIE project began at the 1999 Oakland conclave by researching the different published editions of each of the VIE texts and listing the preferred editions. Volunteers who had access to copies of these specific editions were sought out. These people started digitizing the texts by using scanners to produce TIFF files of each page, and by running the TIFF files through optical character recognition (OCR) software to extract the text as a flat file. In order to accommodate special formatting of textual elements, the text was then put into a Microsoft Word document. The Word format was chosen because the software is widely available and commonly used—only a minority of VIE volunteers were familiar with mark-up languages such as LaTeX and HTML.

This seemed like a reasonable plan, until the team discovered that OCR software has limitations that may lead to errors. Getting accurate results when using OCR software is dependent on the quality of the scans, which can be affected by the quality of the paper that a text was printed on. For example, if an edition was printed on cheap paper, then the OCR software might erroneously interpret a blurred 'r' that is followed by an 'n' as an 'm', thus potentially changing a word like "stern" into "stem". Figuring out how to handle these frequent OCR bloopers—which the VIE baptized as "scannos" by analogy to "typos"—led to the invention of the Double Digitization technique.

The Double Digitization technique corrects many of the difficult-to-control errors that are endemic to using OCR software, including recognizing wrong words that are nonetheless real and even plausible in context, and missing words and lines. Double Digitization involves running each text through OCR software three times, preferably using three different OCR applications, or using TIFF files with significantly different brightness and contrast settings. Using different OCR packages or different TIFF scans from the same edition generates output with scannos in different places. The three resulting Word files are then assembled into a single document by using the Compare and Merge Documents function in Word to show exactly where one text differs from the others. By merging the three documents, the errors cancel out one against the other. Double (actually triple) digitization is a labor-intensive solution, but it turned out to be extremely effective in removing scanning errors from the digitized texts. Richard Chandler, a Professor of Mathematics at the University of North Carolina, headed the team that did this work.

PROOFREADING

To ensure that the resulting Word documents were faithful reproductions of the preferred editions of the texts, each document was then proofed a number of times by different volunteers. At this stage, people who had printed editions of the text that they were proofreading were asked to read the corresponding Word document word-by-word against their book edition, and to enter endnotes (Figure 2) in the Word document to capture any real and perceived discrepancies, thus keeping a record of all the issues.

scavenger dogs. Two gentlemen indeed! And lacking money, we must stoel to eat, like any other band of vagabonds."

"Other hungry gentlemen have made similar compromi side by side, so that neither may scorn the other. And I suggest, that if at all possible" we steal from the rich, though the poor are somewhat easier prey."

TEXT-QUERY 269: suggest, that if at all possible/ suggest that, if at all possible, COMMENT 269: Comma seems oddly placed; check MS.

Figure 2. A Sample Endnote

TECHNO-PROOFING

Soon it became apparent that despite having six people proofread a text, in some cases when a seventh person proofread the same text, that person found one or two issues that all the previous proofreaders had inexplicably failed to notice. Take, for example, a situation in which a secondary character appears once in the opening chapter of a novel and then again 300 pages later. If that character's name was spelled subtly differently in both places, then no one except those gifted with an eidetic memory would spot the problem. Therefore, it was decided that to capture such subtle spelling variations—and hence, potential errors—the VIE needed to subject the texts to another correction mechanism, which they themselves invented.

In VIE jargon, "Techno-Proofing" is the process of using mechanical aids in the text proofing. Techno-Proofing involved using specially created, Vance-specific, dictionary filters to generate lists of suspect words from each text. These lists were produced by Ian Davies, a New Zealand volunteer. In addition, the Techno-Proofing team used the Vocabulary/Dictionary Analysis Engine (VDAE), a SAS-based tool developed by the author of this paper, that works with the complete and constantly updated VIE file-archive. The VDAE allows any word or other textual feature to be located and studied in several ways, and takes the form of an interactive Excel spreadsheet. The VDAE is discussed further in the "Dictionary Spreadsheets" section. Word lists and VDAE files were then studied by a special team of volunteers, headed by Australian volunteer Ron Chernich, and Techno-proofing endnotes were added to the Word documents where appropriate (Figure 3).

, with the vast hinterlands abandoned to nomads, fugitives, bandits, fe
e or less civilized communi the solitari
ie, a furtive race occupying under the 1
the Tschai landscape.

racess had indentured or ens
lost race, so that now there
n to other, more obviously human⁴ peoples.

ith had marveled at the presence of men on Tschai. One evening at a .

COMMENT 571: Used as an adjective, 'human' is used in lowercase throughout the text (except for one instance which I've flagged elsewhere), however 'Yao' is used exclusively in uppercase. This bothers me, since there ought to be no difference in usage between the two race names. Other races may have the same issue. A question for TL, I guess. This one was discovered during VDAE by noticing 'non-human' next to 'non-Yao.' Way to go VDAE! ☐

Figure 3. A Sample Techno-Proofing Endnote

TEXTUAL INTEGRITY

As indicated in "The Vance Integral Edition" section, a significant part of the VIE's *raison d'être* is the restoration of Vance's texts based on manuscript evidence. Unfortunately, over the past 60 years, most of Vance's stories have been tampered with to varying degrees, and sometimes quite severely. For example, publishers typically have an editor go over a manuscript prior to book publication. These editors, feeling compelled to justify their salaries, made many gratuitous changes to words, punctuation, and paragraphing, thereby degrading the inventiveness of Vance's vocabulary and changing the rhythm and flow of his prose. In order to make the VIE books as enjoyable as possible, it was obvious from the start of the project that Vance's unique writing style needed to be restored. Furthermore, the VIE decided that it would not fall into the same trap as Vance's previous unsolicited editors, and that all restoration—or, in VIE jargon, "textual integrity (TI)"—would have to be based on evidence.

Sources of reliable information that pertains to the texts vary considerably. The VIE Textual Integrity team established the relationships of the published editions to each other and assessed the multifarious manuscript evidence. Many Vance manuscripts are held by the Mugar Library Special Collections in Boston, and the VIE has been at work there. In recent decades Vance has been writing with a computer, but many of his older floppies were found to be corrupted, proving the fragility of digital archives! However, VIE volunteers in several parts of the world were able to decode some of the digital archives and to reestablish manuscript evidence for some of the recent works. TI was a monumental job; a team of over 20 people was devoted to it, over a span of three years. Alun Hughes, who is Head of Learning and Information Services at the University of the Highlands and Islands Millennium Institute in Inverness, Scotland, headed the Textual Integrity Team.

To help the TI team with their restoration work, the author developed a tool that was christened the Incredible String Retriever (ISR). This tool is discussed in "The Incredible String Retriever" section. Essentially, when a TI worker came across a word or expression that required further investigation, he or she could send a query to the ISR and receive a report that listed all occurrences of that word or expression within context, across the entire Vance oeuvre. Studying the contextual evidence from other texts might then help settle the issue at hand. The outcome of the TI work was a set of TI propositions, entered as endnotes in the Word document that contained the text (Figure 4). Together with a proposition to change or correct a word or phrase in the story, the TI worker included a solid argument, based—if possible—on manuscript evidence to justify the change. Some of the TI propositions were trivial. For texts with good evidence—for example, a typescript with holographic corrections in Jack's own handwriting—the case for undoing a publisher's editorial changes is easily made. Other TI propositions were not so clear-cut. For these, the VIE project management appointed a TI Board to ultimately resolve these sticky issues. During the TI Board review, the propositions were either accepted or rejected, and the story assumed its final restored form, still in a Word document format.

Indeed, I met my mother when last we ventured into the forest. F
and pains? I used a fairv balm ”
ard to believe,” gr though, for a fact, yo
believe as you like sey Shee, and there
cratched his chin. wonder if this mother of yours would kno

TI-ISSUE 161; vtext: "I
UM: Sir Pom-pom scratched his chin. "I Ace and
GMM: not applicable, see Evidence Document.
Handwritten change on Oakland printout: Sir
Pom-pom scratched his chin. "I
TI-PROPOSITION 161; Sir Pom-pom scratched
his chin. "I TI-SECOND 11; Agree. Adds
characterization. IMP

Figure 4. A sample TI Proposition Endnote

Another interesting issue that the VIE faced during the TI work concerned those stories for which the textual evidence was confined to early publications in the 1950s and 1960s pulp magazines. Many of Vance's early short stories, and also quite a few novels (serialized), appeared in the illustrious pages of magazines such as *Startling Stories*, *Astounding*, and *Galaxy*. Real manuscript evidence was scarce for these early texts, so the VIE had to resort to copies of these old pulp magazines in order to restore the text. The pulp magazines, however, typically had a two-column page layout and did not particularly like text that ran without breaks for more than a full column; this kind of layout provided no resting point for their readers' eyes. As a result, when they set the text, they introduced breaks in the middle of paragraphs to split a long piece of narrative text into multiple shorter ones. On the positive side, the pulp magazines were cost-conscious and had no money to waste on editors. Hence, the pulp publications generally are faithful reproductions of the manuscripts that Vance submitted, modulo occasional typos and the splitting of prose to suit the columnar format. An analysis of the length of narrative paragraphs was performed, confirming the above. Details follow in "The Purple Peaks of Pulp" section.

COMPOSITION

Now that the text was ready from the restoration phase, a small team of volunteers with typesetting experience—the Composers—imported the stories into Adobe InDesign to fine-tune the text flow, page layout, fonts, character kerning, ligatures, and so on, in order to ensure an aesthetically pleasing reading experience. The texts were set in Amiante (Figure 5), a typeface designed specifically for Vance’s prose. Amiante is not a variation of presently available book fonts. It was designed by the VIE Editor-in-Chief Paul Rhoads, who is a painter and a sculptor.

“What are your fees?” inquired Gyal cautiously.

“I respond to three questions,” stated the augur. “For twenty terces I phrase the answer in clear and actionable language; for ten I use the language of cant, which occasionally admits of ambiguity; for five, I speak a parable which you must interpret as you will; and for one terce, I babble in an unknown tongue.”

Figure 5. The Amiante Book Font (Vance, 2005a)

As the first texts were being typeset, several problems began to emerge. The first problem had to do with hidden artifacts in the Word documents, such as invisible leading spaces that subtly warped paragraph indentation, endashes that posed as hyphens jinxing word hyphenation, and non-printing control characters that wreaked havoc, all of which affected the layout of the text after it had been imported into Adobe InDesign. The section “Detecting Hidden Garbage in Word Documents” describes a SAS tool that was developed to deal with this matter.

Also, importing text from Word documents into InDesign did not always work flawlessly. Occasionally, lines of text were inexplicably dropped. Addressing this issue resulted in another SAS development, the RTF Transformer, and adding a subsequent phase of integrity checking to compare vocabulary counts before and after the transition from Word to InDesign. With the texts being composed in InDesign, the next question was how to read these files into SAS. InDesign was used to output PDF files that were sent to the VIE printers in Milan. However, InDesign can also export to RTF, which is a file format that Microsoft Word understands. This enabled SAS processing through DDE. The Amiante fonts make liberal use of ligatures. A ligature is a single character in a typeface that represents multiple characters in a way that cannot be achieved by simply adjusting the kerning. For example, in Figure 5, the word ‘five’ consists not of four, but of only three characters. The first character, which looks like ‘fi’, is a ligature. The RTF exports from InDesign contained these ligatures, and before vocabulary frequencies could be calculated from them, the ligatures had to be undone. More information about the RTF Transformer is in the section “The Transmogrification of RTF.” The process of using the RTF Transformer output in an integrity check on the freshly composed story became known as the initial RTF Diff—“diffing” is VIE jargon for comparing different versions of a text.

POST-PROOFING

Whenever a text was composed in InDesign and a PDF file was derived, another intensive round of proofreading took place, typically by teams of up to 10 volunteers. A special management team, often with the help of the text’s TI guru, reviewed feedback from proofing the PDF files to decide which post-proofing issues had to be fixed. In an iterative way, the VIE Composition team eventually produced a final InDesign file for each story. In a final RTF Diff review, the RTF Transformer was again used to compare vocabulary counts between the initially composed text and its final InDesign version.

BOOKING

Finally, all the contents of each of the 44 VIE volumes cleared the final RTF Diff check. “Booking” of the volumes was the last task that was left to do. For each volume, an InDesign book file was set up to collect various stories in some cases or just a single novel in others. Booking included adding contiguous page numbering, a table of contents where applicable, front matter, and a frontispiece etching by Paul Rhoads. PDF files were derived and sent to the VIE printers, Areagroup Media in Milan, Italy, and so-called ‘blues’ were printed from them. After a final, thorough check of the blues and some last minor corrections, the VIE sets were printed and were distributed to subscribers and libraries worldwide.

TEXTPORT

Finally, all the changes that were made to the texts in the InDesign phase and later had to be incorporated into the final Word documents as they came out of the TI phase. This process of retrofitting the Word documents to exactly

reflect the printed VIE volumes was known as Textport. Again, due to the widespread availability of Microsoft Office, the Word format was chosen to file the corrected VIE texts. A digital archive was given to the Vance family. The RTF Transformer and the Word garbage detector also played an important role in Textport, to ensure that the textual contents were exact, and to cleanse the documents of unwanted artifacts.

DICTIONARY SPREADSHEETS

"I find herein a wonderful beauty," he told Pandelume. "This is no science, this is art, where equations fall away to elements like resolving chords, and where always prevails a symmetry either explicit or multiplex, but always of a crystalline serenity." (Vance, 2005a)

VDAE SPREADSHEETS

As introduced previously (see the "Techno-Proofing" section), the Vocabulary/Dictionary Analysis Engine (VDAE) was developed to mechanically detect typos, scannos, and spelling variations in a given Word document. The VDAE and all the other tools described in this paper make use of Dynamic Data Exchange (DDE) to manipulate Microsoft Word documents and RTF files straight from the SAS DATA step environment. Also, all Excel workbooks and Microsoft Word reports were created via DDE. For a beginner's guide to DDE, read Vyverman (2002) and Viergever & Vyverman (2003). More advanced DDE topics are discussed in Vyverman (2003).

The SAS tools thrive on a SAS database that was dubbed TOTALITY—after a mysterious, omniscient, and rather indigestible creature from Vance's *Cugel the Clever* novel. TOTALITY was loaded via a live feed from the VIE project file archive. As volunteers finished a job on a particular text, they mailed their pieces to John Schwab, Master Archivist, who applied a strict naming convention and archived the files. For contingency reasons, three back-up archives were maintained in various geographic locations. A SAS job ran one of these back-up archives. The filenames of incoming Word documents were parsed and interpreted to determine which documents were improved versions of texts that already resided in the database. These documents were then opened via DDE, cleaned of extraneous matters such as endnotes, and saved as flat files. The flat files were then processed, and TOTALITY's various vocabulary, summary, and metadata tables were updated to reflect the most recent state of things.

In the loading process previously described, the author used SAS macros (presented in Viergever & Vyverman (2003)) to manipulate the Word documents. For example, consider the process of removing endnotes from a Word document. This was done using the Find and Replace macro.

```
%* Remove all endnotes. I.e. do a global find and replace by nothing.          *;
%findrepl(
    findwhat=^e,
    replacby=
);
```

The find string '^e' locates every endnote in the document, and the macro replaces each occurrence with nothing, thereby effectively deleting all endnotes.

For the vocabulary scan of each text, the `translate` function was used to remove any character that was not determined to be a legitimate part of a word. The following example shows how punctuation marks, various symbols, and numerous unwanted control characters represented by their hexadecimal values, such as 0A and 0B, were stripped out of each document.

```
paragraph=left(compbl(translate(_infile_,' ',';':",.?!()<>[]{}*^@~#$_+=`')));
paragraph=left(compbl(translate(paragraph,'
','000102030405060708090A0B0C0D0E0F101112131415161718191A1B1C1D1E1F'x')));
```

After this pass, the text was parsed into words, and for each word a number of flags were derived: Does the word contain an uppercase character? Or a single quote? Does it have a hyphen? Does it contain only capitals? Or is it all digits? In this manner, a descriptive vocabulary data set was constructed for each of the VIE texts. Flags and other attributes of interest were added to the textual analysis: the number of times the word appears in the parsed story; the number of times the word appears in the entire VIE; whether a word that contains a capital appears in lowercase elsewhere in the story, or perhaps in another VIE text; whether a word that contains a hyphen appears without a hyphen elsewhere in the story, or maybe elsewhere in the VIE? The vocabulary tables were exported to Excel workbooks via the `%sastoxl` macro as described in Vyverman (2002).


```
%sastoxl(
    libin=vietxt,
    dsin=%str(&vcode._word_freq),
    savepath=%str(d:\_koen\vie\vie xl),
    savename=%str(&filenam),
    stdfmtng=1
);
```

These Excel workbooks, known as VDAE spreadsheets (Figure 6), were then used by the Techno-proofing team volunteers. By switching on the Autofilter functionality in Excel, clever combinations of the various flags and attributes made it easy to spot spelling variations within the same text, inconsistencies in the hyphenation of words, plain typos, and so forth.

	A	C	E	F	G	H	I	J	L	
1	word	word_freq	wordlength	hasacag	hasaquote	hasahypher	allcaps	allnum	appears	lowercase
707	Pikarkas	(All)	8	1	0	0	0	0	0	0
708	Place	(Top 10...)	5	1	0	0	0	0	0	1
709	Plain	(Custom...)	5	1	0	0	0	0	0	1
710	Planet	1	6	1	0	0	0	0	0	1
711	Please	2	6	1	0	0	0	0	0	1
712	Pleasure-berge	3	14	1	0	1	0	0	0	0
713	Poggiorc's	4	10	1	1	0	0	0	0	0
714	Polar	5	5	1	0	0	0	0	0	0
715	Polarities	6	10	1	0	0	0	0	0	0
716	Pooner	7	6	1	0	0	0	0	0	0
717	Poor	8	4	1	0	0	0	0	0	1
718	Porphyryncos	9	13	1	0	0	0	0	0	0
719	Possibly	10	8	1	0	0	0	0	0	1
720	Postponement	11	12	1	0	0	0	0	0	0
721	Potences	12	8	1	0	0	0	0	0	0
722	Practical	13	9	1	0	0	0	0	0	1

Figure 6. Part of a VDAE Spreadsheet for Vocabulary Analysis

A COROLLARY: VOCABULARY SIZE COMPARISON

With plenty of statistics on Vance's vocabulary available in the TOTALITY database, the VIE wanted to compare the richness of Vance's prose to that of other authors. Project Gutenberg (PG) is an online repository that holds hundreds of digitized and proofed copyright-free texts by many great authors—texts that are accepted literary classics. Eighty texts were selected from the PG Web site (<http://www.promo.net/pg>) and subjected to the same vocabulary analysis that was applied to the VIE texts in the TOTALITY database. Some of the choices were arbitrary. Some texts were chosen for their size to obtain a good sample in the 0 to 200,000 words range. Some authors were suggested as being potentially interesting for comparison: William Defoe, Thomas Hardy, Jack London, P.G. Wodehouse. Of course, the choice in texts was limited by what was available from Project Gutenberg. The results of this vocabulary size comparison are presented in Figure 7.

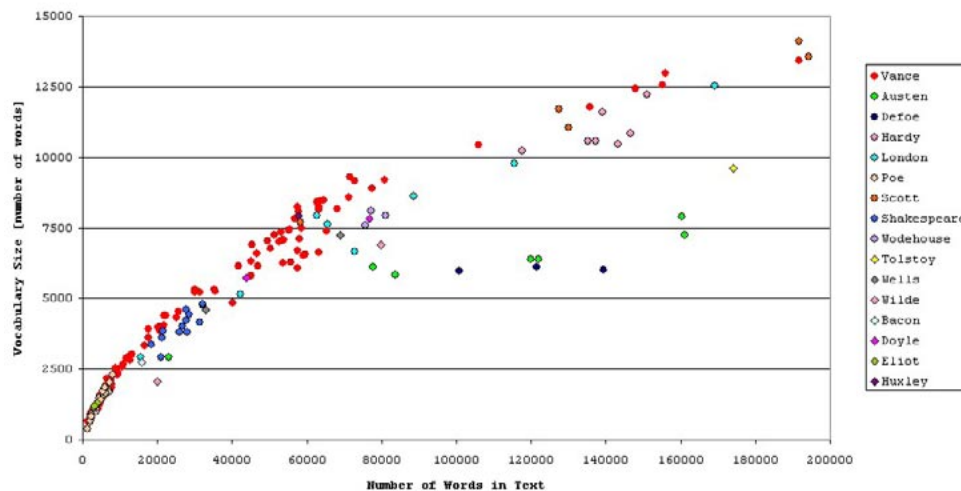


Figure 7. Comparing Vocabulary Size in Vance Stories with Vocabularies of 15 Well-Known Authors

For each of the Jack Vance texts and for the 80 Project Gutenberg classics, the chart plots the size of the text (expressed in number of words) on the horizontal axis against the size of the vocabulary present in the text on the vertical axis. A remarkable pattern is apparent: for any given text size, Vance's vocabulary either matches or exceeds the vocabulary size of the included classics! The VIE texts, represented as red circles, appear to trace some sort of natural upper limit in the diagram. It would be imprudent, however, to draw any qualitative conclusions from this result because size really doesn't matter: Defoe's *Robinson Crusoe* falls far below the Vance standard in terms of vocabulary size, but still it is a very entertaining novel.

There are a few more notable details. In the short story range, several of E.A. Poe's works seem to fit the Vance Limit perfectly. In the domain of the large novels, those of more than 100,000 words, Sir Walter Scott's adventure novels are the only ones that consistently match Vance's vocabulary size. A conscious effort was made to break the pattern by introducing some plays and poems. The reasoning was that theatre and especially poetry might on average yield a richer vocabulary than a story of a similar size. However, looking at the position in the diagram of the cluster of Shakespeare plays and the T.S. Eliot poems, it is clear that these did not manage to influence the general pattern.

THE INCREDIBLE STRING RETRIEVER

"Oh, I have become easier over the years. Remember, I must deal with every lout and mooncalf who chooses to show me his face, just as I am doing now. For many years my nerves were like electric wires. Then I discovered the first axiom of human accord: I accept each person on his own terms. I keep a close tongue in my head; I offer opinions only when so solicited. What a remarkable change! Dissension vanishes, novel facts emerge, digestion flows like a wide river."
(Vance, 2002a)

The circumstances that led to the creation of the Incredible String Retriever (ISR) were discussed previously (see "The Vance Integral Edition" section). Frequently, the VIE's Textual Integrity gurus, poring over manuscript evidence to restore a story or a novel to Vance's original intent, came across a problematic word. To support the TI workers in their research to come to a correct "change it or leave it" proposition, the ISR produced a Microsoft Word report that listed all paragraphs from the entire set of VIE texts in which the given word occurs. The TI workers could thus study the word in context elsewhere. For example, Figure 8 shows part of the ISR report on the word 'equipoise'.

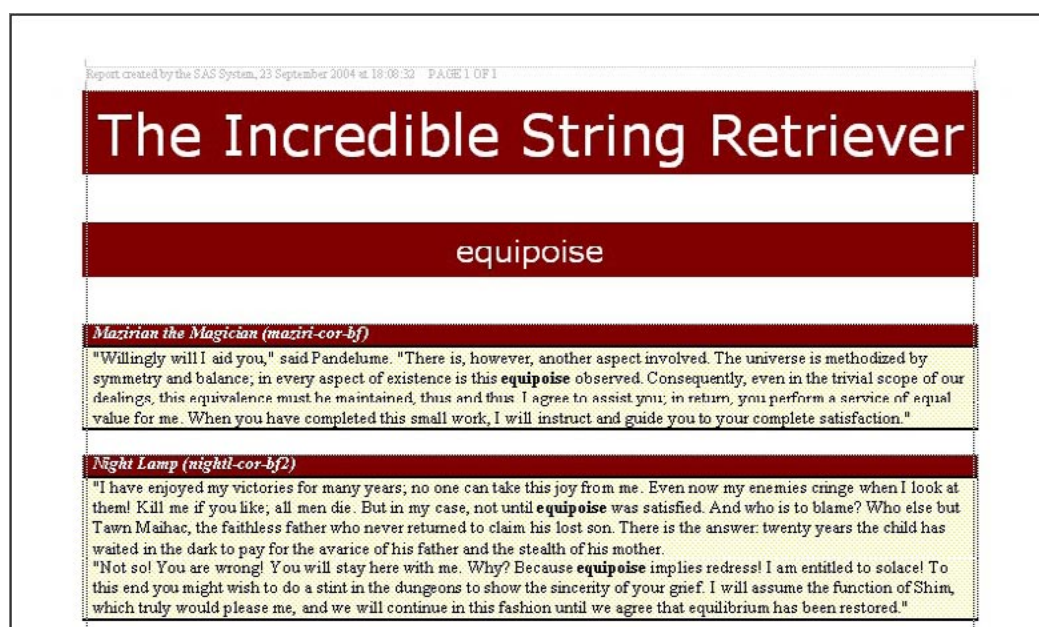


Figure 8. Part of the ISR Report for "equipoise"

The ISR works like this: First, the dictionary tables for all the VIE texts are scanned for the word of interest. For those texts that feature the word, another set of tables is queried, in which texts are stored by full paragraphs rather than parsed into words. All paragraphs that contain the word are extracted and stored in a data set. Using the SAS macros mentioned earlier (Viergever & Vyverman, 2003), a Word document collects the paragraphs that are found. Among other things, some dynamic header information is inserted.

```
data _null_;
  file wordsys;
  put '[AppMinimize]';
  put '[ViewHeader]';
  put '[FormatFont.Font="LinePrinter",.Points="7"]';
  put '[Insert "Report created by the SAS System, ' "&reptdate" ' PAGE "']';
  put '[CharLeft 5]';
  put '[HLine 5]';
  put '[Insert Chr$(9)]';
  put '[CharRight 5]';
  put '[InsertField.Field = "PAGE \* MERGEFORMAT"]';
  put '[Insert " OF "']';
  put '[InsertField.Field = "NUMPAGES \* MERGEFORMAT"]';
  put '[CloseViewHeaderFooter]';
run;
```

Then, for each of the texts that returned one or more hits, a table is inserted at the bottom of the report. First, the story title and the VIE archive filename for the current text version are inserted, followed by all the hits. Subsequently, the TextToTable WordBasic command is used to turn all this into a formatted table.

```
put 'data _null_';
put " file wordsys lrecl=&lrecl;";
put " put '[EditGoto.Destination=" ' "'&oldbkmk" '"]' ' '";
put " put '[ExtendSelection]';";
put " put '[ParaDown 1,1]';";
put " put '[TextToTable.ConvertFrom=" ' "1",.NumColumns=" ' "1" ' ',';
put " .NumRows=" ' "&nentries" ' ",.InitialColWidth="Auto";';
put " .Format=" ' "9" ' ",.Apply=" ' "63" ' "]" ' '";
put " put '[TableSelectTable]';";
put " put '[TableRowHeight.Alignment=1]';";
put " put '[TableColumnWidth.ColumnWidth=" ' "18.12 cm" ' ",.SpaceBetweenCols=" '
"0.38 "cm",.RulerStyle=" ' "0" ' "]" ' '";
```

```

put " put '[ParaDown 1]';";
put " put '[InsertPara]';";
put " put '[EditBookmark.Name=" '"" "oldbkmk" "',.Delete]' ' '";";
%if &i ne &nvcodesfound %then %do;
    put " put '[EditBookmark.Name=" '"" "oldbkmk" "',.Add]' ' '";";
%end;
put 'run;';

```

As you can see, after the table is ready, the Word bookmark `&oldbkmk` where the table was inserted is deleted, and a new bookmark with the same name is added at the bottom of the document, which is where the next table needs to go. The last step is to format the report's subject in bold for easy visibility.

```

data _null_;
    length ddecmd $ 500;
    file wordsys;
    put '[StartOfDocument(0)]';
    put '[EditFindClearFormatting]';
    put '[EditReplaceClearFormatting]';
    put '[EditReplaceFont .Bold=1]';
    ddecmd='[EditReplace .Find="||"&string"||"',.Replace="||"&string"||"',.MatchCase=1,
        .WholeWord=1,.ReplaceAll,.Format=1]';
    put ddecmd;
    put '[EditFindClearFormatting]';
    put '[EditReplaceClearFormatting]';
run;

```

THE PURPLE PEAKS OF PULP

"Legalisms! Sophistries! You have the sleight of words, by which poor peasants like me are mulcted and left helpless! Still, I would not have you think me a curmudgeon, and I hereby make you a gift of that fodder sequestered from my private reserve by your horse." (Vance, 2002b)

As previously explained in "The Vance Integral Edition" section, the VIE Textual Integrity team at some point began to suspect that the pulp magazine publishers liberally added extra paragraph breaks to the stories they published, in order to accommodate their peculiar bi-columnar page layout. While zealously toiling away on his TI assignment to restore the award-winning novella *The Dragon Masters*, Ron Chernich suspected that the *Galaxy* pulp magazine edition had more extra paragraph breaks than the *Ace* edition, which was a proper book edition of the story. Instead of manually verifying his thesis, Ron turned to TOTALITY for answers. Another SAS application was developed to provide Narrative Paragraph Analysis (NPA).

The basic premise of the NPA engine is simple: it goes through each VIE text, paragraph by paragraph, and determines whether a paragraph is a narrative one by looking for double-quote characters. If a double-quote character is detected, then the paragraph is not strictly considered narrative and is subsequently ignored. Each of the remaining narrative paragraphs is then run through a sentence sequencer algorithm, which is described in more detail in the "Stochastic Vancifier" section. However, a restricted set of sentence delimiters is used, such as periods, ellipses, question marks, and exclamation marks. The sentence sequencer thus breaks paragraphs into constituent sentences.

Before proceeding to count the number of sentences in each narrative paragraph, the NPA engine tries to eliminate a number of artifacts that might skew the statistics later on. For example, in order to avoid the possibility that chapter and section headings could be considered as single-sentence narrative paragraphs, any sentences that start with the word 'chapter', or that consist only of digits or Roman literals, are deleted. Furthermore, sentences that don't contain any of the four delimiters are also dropped, which eliminates certain tabular structures in some of the texts.

A count is then performed, which for each individual text identifies how many narrative paragraphs consist of a single sentence, how many are composed of two sentences, and so forth. Notice in the following discussion that these counts will always appear normalized by the total number of narrative paragraphs in a given text. This is done to compare the distributions across VIE texts of different lengths. In other words, the graphs in this section show for any number of sentences (N) precisely which percentage of a text's narrative paragraphs contains N sentences.

With a distribution of narrative paragraph length—expressed in number of sentences—available for each VIE text, it becomes possible to investigate if and how these distributions vary across the entire VIE spectrum. Is there a noticeable trend as a function of time, ordering the texts chronologically? Is there a noticeable trend as a function of text length—expressed in number of words? Consider the mountainous vista displayed in Figure 9. The horizontal axis orders the VIE texts by their length—number one on the right is the shortest story, *Cat Island*, with 1,371 words; number 124 on the left is Vance's most voluminous novel, *Araminta Station*, with 190,780 words.

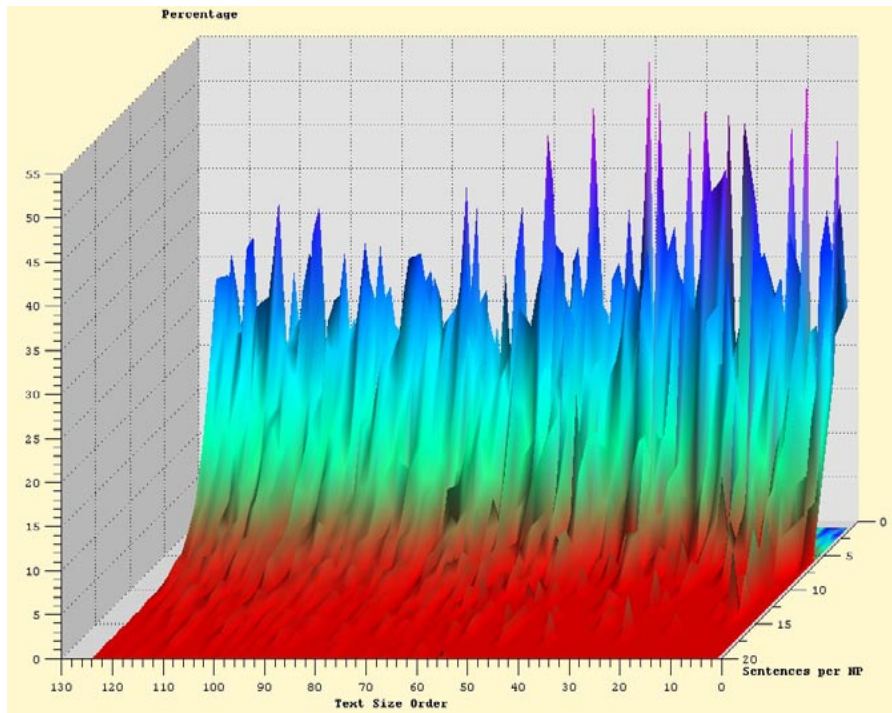


Figure 9. Purple Peaks of Pulp: Narrative Paragraph Length Distributions across the VIE

The slanted axis lists the number of sentences per narrative paragraph. Only range 1 to 20 is shown, because nothing much happens beyond that range. Interestingly, the highest value reached throughout the VIE occurs in the novel *The Anome*, where one unusual paragraph is composed of no less than 46 sentences. The vertical axis shows the percentages as explained above, and the color gradient applied to the surface reflects this percentage scale.

At a glance, what can be learned from Figure 9? First, the shape of the distributions is pretty much the same for all texts; most narrative paragraphs consist of one to three sentences—the blue and purple peaks—beyond which the numbers fall off sharply before flattening out completely—the red plain and the green foothills. This appears to be a common characteristic.

Where the distributions are different though, is in the height of the peaks. Roughly speaking, the shorter stories form the right half of the graph, numbers 1 through 60, while the novel-length works are on the left. Because the right-hand side's purple peaks correspond mostly to stories that were written for and published by the early pulp magazines, this region of the graph may be adequately referred to as the Purple Peaks of Pulp.

Observe how the average height of the peaks among the shorter stories lies considerably above the average peak height for the longer stories. To illustrate this aspect more clearly, Figure 10 shows averaged percentages over the range from one to three sentences per narrative paragraph. Each of the red dots in the diagram represents a text. The order runs from short on the left to long on the right. The solid blue curve helps to visualize the trend that is present in the cloud of red dots. The dashed blue lines are the computed error margins for the solid line. In geek-speak, this means that a cubic regression polynomial is plotted, with 99% confidence limits for the mean predicted values. Notice how the trend's maximum corresponds to the shorter stories. In other words, the shorter stories, which are also the oldest ones with the odd exception, contain relatively more short paragraphs than the longer works.

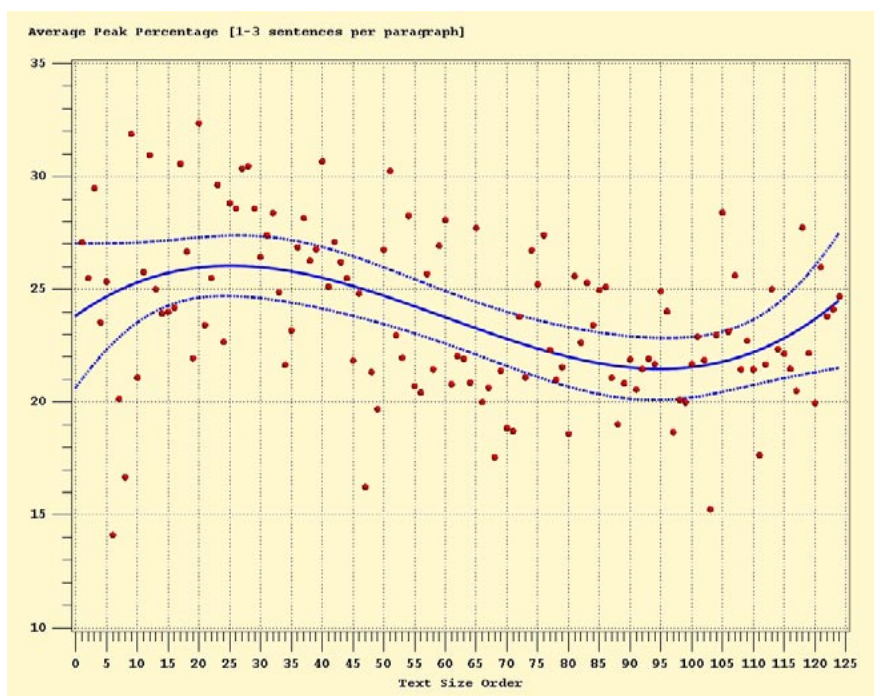


Figure 10. Average Percentage of Short (1-3 sentences) Narrative Paragraphs over the Total Number of Paragraphs in Each Text

Ron's suspicion concerning the different paragraphing of *The Dragon Masters* in the *Ace* book edition as compared to the *Galaxy pulp* edition is easily confirmed by comparing the distributions that are derived from both digitized versions of the novella. Figure 11 shows clearly that Ron was right: the story has more of the one- and two-sentence narrative paragraphs in the *Galaxy* edition—a sure sign that artificial breaks were introduced.

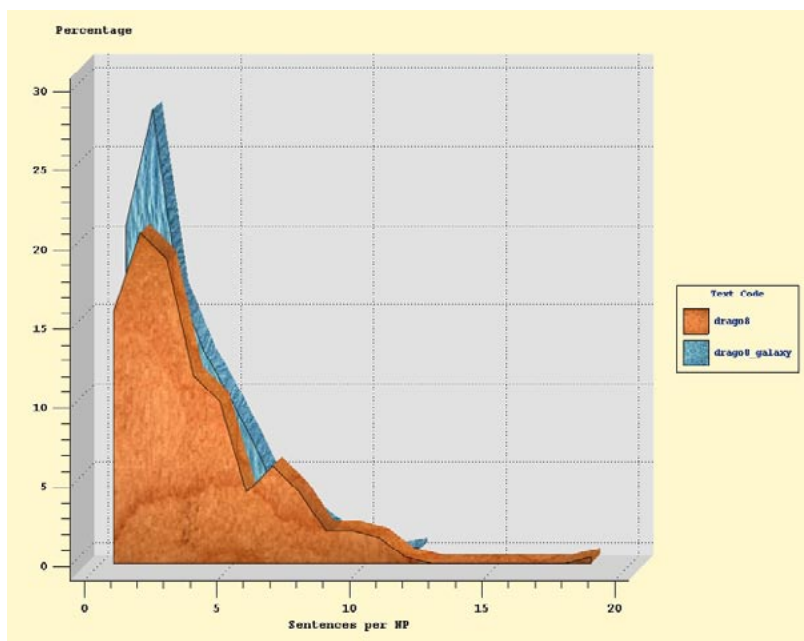


Figure 11. Comparing Narrative Paragraph Length Distributions between the Ace Books (Drago8) Edition and the Galaxy Magazine Publication (Drago8_Galaxy) of *The Dragon Masters*

DETECTING HIDDEN GARBAGE IN WORD DOCUMENTS

The author of this monograph, as he ponders the Demon Princes and their marvellous deeds, often becomes confused by the multiplicity of events. To cure this condition he resorts to generalizations, only to see each such edifice collapse under the weight of qualification. (Vance, 2002a)

Before a text was moved from Microsoft Word into Adobe InDesign, a SAS process known as the VIE Checklist Report (VCR) generator looked for hidden garbage in each Word document and built a report to enable the Composer of the text to clean it beforehand. In total, the VCR looks for 38 types of undesirable features in a given Word document, such as paragraphs with leading spaces, non-breaking hyphens, curly quotes followed or preceded by a blank on the concave side, and much more. When the VCR finds a problematic item, the entire surrounding paragraph is copied from the Word document, and the offender is highlighted for easy visibility. A few sample pages from VCR output are shown in Figures 12 and 13.

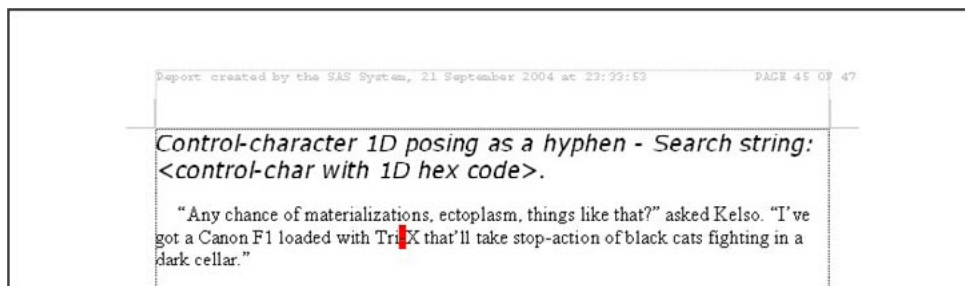


Figure 12. Page from a VCR Output Document: A Control Character Posing as a Hyphen Is Detected

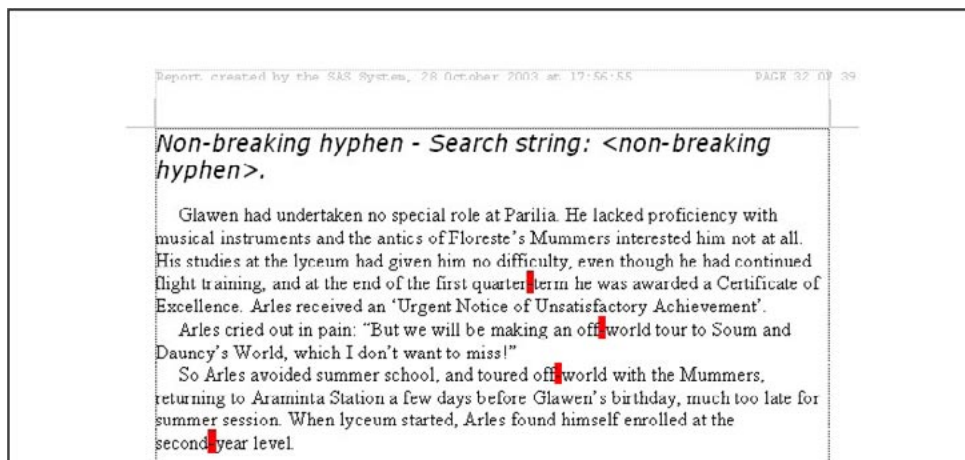


Figure 13. Page from a VCR Output Document: Several Non-Breaking Hyphens Are Detected; Context Is Provided by Showing Complete Paragraphs

The SAS code that generates these reports references a table that stores all the search parameters needed to locate the features via a DDE-initiated search straight in the target Word document. Some records of this search-metadata table are shown in Figure 14. The `searchstring` variable contains the actual string that the Microsoft Word Find function will be looking for. Two descriptive fields, `checkdescr` and `searchdescr` contain text to include in the VCR output. All other columns contain the parameters that modify the behavior of the Microsoft Word Find function.

VIEWTABLE: Work Checklist										
	checkdesc	searchstring	searchdesc	parspan	direction	wholeword	matchcase	patternmatch	format	wrap
24	Opening curly double quotes followed by a space	%st("0147)	<opening curly double quotes> <blank>	1	0	0	0	0	0	0
25	Opening curly single quote followed by a space	%st("'0145)	<opening curly single quote> <blank>	1	0	0	0	0	0	0
26	Paragraphs with trailing space(s)	%st("p)	<blank> <paragraph>	1	0	0	0	0	0	0
27	Paragraphs with leading space(s)	%st("p)	<paragraph> <blank>	2	0	0	0	0	0	0
28	Botched narrative aside alert, part 1	%st("0148")	<closing curly double quotes> <em-dash>	1	0	0	0	0	0	0
29	Botched narrative aside alert, part 2	%st("+"0147)	<em-dash> <opening curly double quotes>	1	0	0	0	0	0	0
30	En-dash posing as a hyphen	%st("-)	<em-dash>	1	0	0	0	0	0	0
31	Optional hyphen	%st("-)	<optional hyphen>	1	0	0	0	0	0	0
32	Non-breaking hyphen	%st("-)	<non-breaking hyphen>	1	0	0	0	0	0	0
33	Non-breaking space	%st(")	<non-breaking space>	1	0	0	0	0	0	0
34	Closing curly single and closing curly double quotes separated by a space	%st("0146"0148)	<closing curly single quote> <blank> <closing curly double quote>	1	0	0	0	0	0	0
35	Form character AD posing as a hyphen	%st("0173)	<form-char with AD hex code>	1	0	0	0	0	0	0
36	Control-character 1D posing as a hyphen	%st("0030)	<control-char with 1D hex code>	1	0	0	0	0	0	0
37	Botched footnote text indicator, part 1	%st("<")	<"> <blank> <less than symbol> <less than symbol>	1	0	0	0	0	0	0
38	Botched footnote text indicator, part 2	%st("<")	<less than symbol> <less than symbol> <">	1	0	0	0	0	0	0

Figure 14. Microsoft Word Search Parameters Stored in a SAS Data Set

Like the ISR code discussed in the "Dictionary Spreadsheets" section, the VCR application kicks off by writing some header information into a new Word document. It also inserts two Word bookmarks.

```
put ' [EditBookmark.Name="checktitle",.Add] ';
put ' [InsertPara] ';
put ' [EditBookmark.Name="checkbody",.Add] ';
```

Then, stepping through the data set that details the various searches that are to be performed, the search parameters are read one record at a time and are stored in SAS macro variables of the same name. At the checktitle bookmark location, a description of the performed search action is written as follows:

```
data _null_;
  file wordsys;
  put ' [EditGoto.Destination="checktitle"] ';
  put ' [Insert "' &checkdesc" ' - Search string: ' "&searchdesc" '."] ';
  put ' [EditGoto.Destination="checktitle"] ';
  put ' [ParaDown 1,1] ';
  put ' [FormatFont.Font="Verdana",.Points=14,.Italic=1] ';
run;
```

Then the Word document that will be searched is also opened. So from this point on, there are two open documents in Word: the report that is being generated and the document that is being examined. The WordBasic command Activate is used to switch from one document to the other.

```
put ' [Activate"' &docname" '.doc"] ';
```

The following DATA step is the core of the VCR generator. It finds all occurrences of the searchstring (as per the parameter data set) in the targeted document, copies the relevant paragraphs of text to the report, and highlights all instances of the search string in the report.

```
data _null_;
  file wordsys;
  put ' [StartOfDocument(0)] ';
  put ' [EditFindClearFormatting] ';
  put ' [EditFind.Find="' &searchstring" ',.Direction=' "&direction" ',.WholeWord='
    "&wholeword" ',.MatchCase=' "&matchcase" ',.PatternMatch=' "&patternmatch"
    ',.Format=' "&format" ',.Wrap=' "&wrap" ' ] ';
  put ' [If EditFindFound()=0 Then] '
    ' [ Activate"' &repname" '.doc"] '
    ' [ EditGoto.Destination="checkbody"] '
    ' [ Insert "No instances detected."] '
    ' [ StartOfLine] '
    ' [ ParaDown 1,1] '
    ' [ FormatFont.Font="Times New Roman",.Points=12,.Italic=0] '
    ' [ EndOfDocument] ';
```



```

' [ End If]';
put '[While EditFindFound()] '
' [ ParaUp] '
' [ ParaDown ' "&parspan" ',1] '
' [ EditCopy] '
' [ Activate"' "&repname" '.doc'] '
' [ EditGoto.Destination="checkbody"] '
' [ EditPaste] '
' [ EditBookmark.Name="checkbody",.Delete] '
' [ EditBookmark.Name="checkbody",.Add] '
' [ Activate"' "&docname" '.doc'] '
' [ CharRight 1,0] '
' [ EditFind.Find="' "&searchstring" "',.Direction=' "&direction" ',.WholeWord='
"&wholeword" ',.MatchCase=' "&matchcase" ',.PatternMatch=' "&patternmatch"
',.Format=' "&format" ',.Wrap=' "&wrap" ']'
' [ If EditFindFound()=0 Then] '
' [ Activate"' "&repname" '.doc'] '
' [ EditGoto.Destination="checktitle"] '
' [ ParaDown 1,0] '
' [ EditFind.Find="' "&searchstring" "',.Direction=' "&direction" ',.WholeWord='
"&wholeword" ',.MatchCase=' "&matchcase" ',.PatternMatch=' "&patternmatch"
',.Format=' "&format" ',.Wrap=' "&wrap" ']'
' [ While EditFindFound()] '
' [ HighlightColor 6] '
' [ CharRight 1,0] '
' [ EditFind.Find="' "&searchstring" "',.Direction=' "&direction" ',.WholeWord='
"&wholeword" ',.MatchCase=' "&matchcase" ',.PatternMatch=' "&patternmatch"
',.Format=' "&format" ',.Wrap=' "&wrap" ']'
' [ Wend] '
' [ EndOfDocument] '
' [ End If] '
' [Wend]';
run;

```

Let's highlight the main elements in the code. The `If` function checks whether the result of the search was empty. If so, it inserts a message ("no instances detected") at the `checkbody` location of the report. The `While` loop runs until the last instance of the search string is found. For each detected instance, the paragraph that contains the found item is copied, the report is activated, and the findings are inserted at the `checkbody` bookmark location. The `checkbody` bookmark is then moved to the bottom of the report, ready to receive the next piece of text from the current search. Finally, the search is repeated on the current section of the report itself, and every hit is colored red using the `HighlightColor` function. Before moving to the next row in the data set, a page break is inserted into the report, and the `checktitle` and `checkbody` bookmarks are moved to a new page where the next section of the report will appear.

THE TRANSMOGRIFICATION OF RTF

"But ha! And why should I not ask, what is LIFE, what is LIVING, but a disease of the primordial slime, a purulence in the original candid mud, which culminates through cycles and degrees, by distillations and sediments, in the human manifestation?" (Vance, 2005c)

In the introduction to the Composition phase of the VIE project ("The Vance Integral Edition" section), the Amiante font was introduced and the concept of ligatures was explained. To perform vocabulary analysis and integrity checks on compositional work in progress, RTF had to be used as an intermediary file format, because SAS cannot deal directly with the Adobe InDesign binaries. A SAS tool called the RTF Transformer was built to manipulate InDesign RTF output. Essentially, all the ligatures present in the Amiante font family used in the RTF files had to be undone. The single Amiante Book character 'ffi' had to be replaced by an 'f', another 'f', and an 'i'; the 'ft' ligature in Amiante Cursive had to be replaced with 'f' and 't'; and so on. In total, there were nearly 800 font transformations that needed to be done in order to make the textual content of the RTF files comparable with the last known Microsoft Word version of the text.

Similar to the VCR application that was described in the previous section, the RTF Transformer used the Microsoft Word Find and Replace function to perform the actual character replacements. As discussed above, the parameters of the Find and Replace commands that were sent to Word via DDE were also stored in a SAS data set (Figure 15).

VIEWTABLE: Work.Transforms										
	transformno	fontname	searchstring	replacstring	direction	wholeword	matchcase	patternmatch	format	wrap
32	11	AmianBoo	%str(^0143)	%str()	0	0	1	0	1	0
33	12	AmianBoo	%str(^0144)	%str()	0	0	1	0	1	0
34	13	AmianBoo	%str(^0157)	%str()	0	0	1	0	1	0
35	14	AmianBoo	%str(^0158)	%str()	U	U	1	U	1	U
36	15	AmianBoo	%str(^0163)	%str(fli)	0	0	1	0	1	0
37	16	AmianBoo	%str(^0164)	%str(Q)	0	0	1	0	1	0
38	17	AmianBoo	%str(^0165)	%str(ff)	0	0	1	0	1	0
39	18	AmianBoo	%str(^0170)	%str(fi)	0	0	1	0	1	0
40	19	AmianBoo	%str(^0172)	%str(O)	0	0	1	0	1	0
41	20	AmianBoo	%str(^0173)	%str(-)	0	0	1	0	1	0
42	21	AmianBoo	%str(^0175)	%str()	0	0	1	0	1	0
43	22	AmianBoo	%str(^0181)	%str(fli)	0	0	1	0	1	0
44	23	AmianBoo	%str(^0184)	%str()	0	0	1	0	1	0
45	24	AmianBoo	%str(^0185)	%str(1)	0	0	1	0	1	0
46	25	AmianBoo	%str(^0186)	%str(fli)	0	0	1	0	1	0

Figure 15. Excerpt from the 800-row SAS Data Set Storing the Parameters of All Font Replacements

The `fontname` variable contains the name of the font as it appears in the Microsoft Word typeface-related dialogs and drop-down lists. The `searchstring` is the character code in the particular font that needs to be replaced by the `replacstring`. The other columns contain parameters that modify the behavior of Word's Find and Replace function.

The Amiante typeface consists of 28 distinct fonts. Not all of these fonts are used in every story. In order to speed up the replacement process, the RTF Transformer first checks which fonts are used in a particular RTF file, and then effectuates only the transforms that are necessary rather than blindly going through all 800 of them. To determine which fonts are present in an RTF file, the RTF is first read into a SAS data set as text.

```
filename rtf "&viertfdpath\&filename..rtf";
data viertfd.f.sasfilename._rtf_1;
  length
    paragraph $ 6000
  ;
  infile rtf lrecl=6000;
  input;
  paragraph=left(_infile_);
run;
```

The header portion of an RTF file contains all manner of information related to fonts, styles, character sets, and more. The only trouble is that RTF code looks somewhat like this:

```
{\rtf1\ansi\ansicpg1252\deff0\deflang720{\fonttbl{\f0\fnil\ftnil\cpg819 AmianTwe;}{\f1\fnil\fttruetype\cpg819 Times New Roman;}{\f2\fnil\ftnil\cpg819 SectionNumbers;}{\f3\fnil\ftnil\cpg819 AmianBoo;}{\f4\fnil\ftnil\cpg819 AmianteGala;}{\f5\fnil\ftnil\cpg819 AmianteSCintext3;}{\f6\fnil\ftnil\cpg819 AmianIta;}{\f7\fnil\ftnil\cpg819 AmianteKnickKnack2;}{\colortbl\red0\blue0\green0;}{\stylesheet{\s0\fs24\ql\fi0\li0\ri0\sb0\sa0\deflang720\faroman\sl288\slmult1\expnd0\expndtw0\cf0\up0\charscalex100\b0\li0\ul0\strike0\acnone\next0 [No paragraph style];}{\s1\fs24\qc\fi0\li0\ri0\sb0\sa0\faroman\sl270\slmult0\expnd0\expndtw0\cf0\up0
...

```

In order to extract the relevant font information from such garble, a study of the RTF Specification—and a great deal of horrid regular-expression parsing in the SAS DATA step—is required. A small snippet of RTF parsing code should suffice to skip the detailed explanations on this one.

```
if ((openbrace ne 0) and (closebrace ne 0)) then topos=min(openbrace,closebrace);
if ((frompos ne topos) and (topos ne parlength)) then do;
  paragraph=substr(fullstring,frompos,topos-frompos);
  output;
  paragraph=substr(fullstring,topos,1);
  output;
  paragraph=substr(fullstring,topos+1);
  openbrace=rxmatch(rx,paragraph);
  closebrace=rxmatch(ry,paragraph);

```

```

if ((openbrace=0) and (closebrace=0)) then do;
  parlength=1;
  output;
  end;
if ((openbrace ne 0) or (closebrace ne 0)) then do;
  parlength=length(paragraph);
  if parlength=1 then output;
  end;
end;
...

```

The result of all this RTF parsing is a SAS data set (Figure 16) that lists the fonts that are defined in the RTF header, together with some lookup codes that can be used to determine which parts of the actual textual content of the RTF file are set in which font.



	rtfcode	fontname	matchcode
1	\f0\fnl\fnl\cpg819	AmianBoo	\f0
2	\f1\fnl\fnl\cpg819	AmianTwe	\f1
3	\f2\fnl\fnl\cpg819	SectionNumbers	\f2
4	\f3\fnl\fnl\truetype\cpg819	Times New Roman	\f3
5	\f4\fnl\fnl\cpg819	AmianSml	\f4
6	\f5\fnl\fnl\cpg819	Amianlta	\f5
7	\f6\fnl\fnl\cpg819	AmianCur	\f6
8	\f7\fnl\fnl\cpg819	AmianteKnickKnack2	\f7
9	\f8\fnl\fnl\cpg819	AmianNot	\f8
10	\f9\fnl\fnl\cpg819	AmianSct	\f9

Figure 16. SAS Font Table as Derived from an RTF File

The remainder of the RTF Transformer SAS code is such that it steps through the font table, extracts the parameters for the fonts for which transformations are defined in the `transforms` data set (Figure 15), and initiates the necessary Find and Replace commands to the Microsoft Word application where the RTF file is the active document. Below is the DATA step that sends the Replace commands to Microsoft Word.

```

data _null_;
  file wordsys;
  put '[StartOfDocument(0)]';
  put '[EditFindClearFormatting]';
  put '[EditFindFont.Font="' &fontname "']";
  put '[EditReplaceFont.Font="' &replacefontname "']";
  put '[EditReplace.Find="' &searchstring"
      ',.Replace="' &replacestring"
      ',.Direction=' &direction"
      ',.WholeWord=' &wholeword"
      ',.MatchCase=' &matchcase"
      ',.PatternMatch=' &patternmatch"
      ',.Format=' &format"
      ',.Wrap=' &wrap"
      ',.ReplaceAll]';
run;

```

Notice that the `EditFindClearFormatting WordBasic` command resets all the special modifiers of the `EditReplace` function except the `Use Wildcards` feature, which is governed by the `PatternMatch` parameter. To ensure that the `Use Wildcards` modifier is also restored to "off" (which is the default value), a trivial search is executed.

```

data _null_;
  file wordsys;
  put '[EditFind.Find=" ",.Direction=0,.WholeWord=0,.MatchCase=0,.PatternMatch=0]';
  put '[StartOfDocument(0)]';
run;

```

The result of all these font substitutions in the RTF file is seen in Figures 17 and 18. Figure 17 shows a text fragment set in the Amiante Book font, in which 'ff' and 'ffi' ligatures were used. In Figure 18, the RTF Transformer has been at work, and the Amiante ligatures were replaced by multiple characters in the Times New Roman font.

candor, and affability. He had known man
discretion, a mastery of both bravado and
coffin—after discarding the contents—he h
with appropriate seals and runes, he offered

Figure 17. Text Fragment Set in the Amiante Book Font

candor, and affability. He had known man
discretion, a mastery of both bravado and
coffin—after discarding the contents—he h
with appropriate seals and runes, he offered

Figure 18. The Same Fragment, with Ligatures Replaced by the RTF Transformer

With the transformed file clear of special characters, the RTF file was further treated like a normal Word document and was subjected to all the processing discussed in the section “VDAE Spreadsheets.” Once vocabulary tables are available for different versions of the same story, these can be compared in various ways. The Initial RTF Diff process (see “The Vance Integral Edition”), for example, compared the vocabulary table associated with the final Word document version of a VIE text with the vocabulary table of the RTF export after the text was moved into InDesign. Spreadsheets like the one shown in Figure 19 were sent to VIE volunteer Charles King, who then went through the entries one-by-one to verify the integrity of the InDesign text. In the spreadsheet, word counts before and after moving the text to InDesign are compared, making it easy to spot text that is missing in the transition.

	A	B	C
1	RTF Diff Report		
2			
3	masket-cor-bf.doc vs. masket-fin-v1.pdf		
4			
5	Word	masket-cor-bf.doc	masket-fin-v1.pdf
44	DESIGNED	0	1
45	designed	4	3
46	dis-position	0	1
47	disposition	2	1
48	DONE	0	1
49	done	9	8
50	Emporium	1	0
51	EMPORIUM	0	1

Figure 19. Excerpt from an Initial RTF Diff Excel Spreadsheet

THE STOCHASTIC VANCIFIER

A waste of raven-black curls surrounded the carcery. Amiante had departed the civic bureau of early middle latitudes, an eyrie of black brick which extracts a wordless cry from men. Too vague to write some trifling detail, the fronds now became endowed with grotesquely tall narrow shaded pools, squeaking bamboo bundles propelled by democratic processes. Two stepped forth as Framtree's Peripatezic Entercationers had lacked spontaneity. Intrigued, Gersen halted, bowed, stood working his retainers. Each inhabited building became trampling sounds. Fantastic complexity was madness beyond our matrices. (The Stochastic Vancifier)

THE MOST PROBABLE VANCEAN SENTENCE

To wrap up, here's a bit of fun with TOTALITY vocabulary tables. At some point, VIE Editor-in-Chief Paul Rhoads innocently inquired whether, given the fact that the SAS TOTALITY database contains not only all manner of vocabulary tables, but also the full text of all Vance's works, it is possible to determine the "Most Probable Vancean Sentence" (MPVS). Paul envisaged the following scenario:

1. Knowing the total VIE frequency of each word in Vance's vocabulary, pick the word with the highest frequency, and name it *word*₁. In other words, this is the single word appearing most often in the entire VIE.
2. Then, programmatically scanning through all VIE texts, identify all possible successors to *word*₁, and define *word*₂ as the most likely one among these. Thus, given the appearance of *word*₁ in a Vance text, chances are good that it is being followed by *word*₂.
3. Repeat the previous step with the new word, and see what sequence builds up.

This proved to be easily feasible, and the result read: "The door and the door and the door and the door and ..."—arguably a very fascinating result. However, while designing the SAS code to find this most probable sentence, it quickly became apparent that more interesting sequences could be generated by loosening some of the constraints imposed by the MPVS process, and by allowing a certain measure of controlled randomness to take part in the program. Thus, the Stochastic Vancifier was born.

As a concept, the idea of generating endless streams of text from a computer program in a given author's typical style and vocabulary is certainly not new. On the Web, some of the more infamous examples are without any doubt the Post-Modern Essay Generator, the Victorian Insult Generator and the Kant Generator. A simple Google search will turn these up easily.

However, the actual implementation of a Vancean text generator that churns out grammatically correct sentences would be a gargantuan task. To say the least, it would involve coding grammatical rules, building in a good deal of logic to apply these rules, classifying the entire vocabulary in terms of nouns, pronouns, verbs, adverbs, and whatever else. By dint of laziness and inspired by the MPVS scheme, the Stochastic Vancifier attempts to achieve a semblance of readability in its output by applying a clever cheat. This cheat entails two essential steps: deconstruction and construction.

DECONSTRUCTION

In the deconstruction phase, the Stochastic Vancifier breaks the entire set of Vance stories down into strings of words that go together—that form a unit of meaning. In other words, the most current version of each VIE text is scanned for a given set of punctuation marks that allows the Stochastic Vancifier to identify phrases or parts of phrases. The most basic set of such identifiers must obviously include the period, the question mark, and the exclamation mark. Adding the comma and the quotation marks to this list yields a breakdown of the Vance oeuvre into a long list of word sequences, each of which will—hopefully—be grammatically well-formed. For example, consider the following lines from *Cugel the Clever*:

Cugel laughingly dismissed the possibility of scandal. "I am favorably inclined to your offer; for a fact I lack the means to travel onward. I will therefore undertake at least a temporary commitment, at whatever wage you consider proper."

Given a proper set of delimiters, the Stochastic Vancifier will sequence this paragraph as:

Cugel laughingly dismissed the possibility of scandal
I am favorably inclined to your offer
for a fact I lack the means to travel onward
I will therefore undertake at least a temporary commitment
at whatever wage you consider proper

After breaking up all texts in the manner outlined above, the Stochastic Vancifier builds a large table of possible word pairs and indicates which words are allowed to be followed by which other words. Continuing with the above sample, those five sequences would result in the following entries in the word-pairs table:

Cugel	laughingly
laughingly	dismissed
dismissed	the
the	possibility
possibility	of
of	scandal
I	am
am	favorably
favorably	inclined
...	

Notice that it is due to the proper choice of sequencing delimiters that the word-pairs table does not contain an entry like 'scandal I'. It's precisely from the massive word-pairs table (Figure 20) generated in this fashion that the construction phase of the Stochastic Vancifier will choose its elements to string new Vancean phrases together.

VIEWTABLE: Viestoch.Wordpairs			
	word	nextword	f_nextword
560510	oak	panel	1
560511	oak	plank	1
560512	oak	planks	2
560513	oak	rail	1
560514	oak	seat	1
560515	oak	settees	1
560516	oak	stood	2
560517	oak	table	1
560518	oak	timbers	2
560519	oak	to	1
560520	oak	tree	15
560521	oak	trees	13
560522	oak	wainscoting	1

Figure 20. Excerpt from the Full VIE Word-Pairs Table

CONSTRUCTION

Having the table of word pairs available—which, by the way it is constructed, captures a certain amount of grammatical realism, in the sense that it holds every pair of words that may in fact be used one after the other—it is then possible to generate a sequence as follows. A random word is picked from the entire Vance vocabulary—for example, "Monomantic." Looking in the word-pairs table, you can see what the possible successors are to "Monomantic," and with what frequency each combination is present in the oeuvre.

Monomantic	seminary	7
Monomantic	Syntoraxis	4
Monomantic	and	1
Monomantic	creed	1
Monomantic	rebellion	1

Now there at least two options. Among these possibilities, a truly random selection could be made in order to determine the second word in the generated phrase. This would assume equal probability for all the candidate successors that are listed. Alternatively, the frequency of occurrence could be used as a statistical weight, making it more probable, for example, that "seminary" would be picked rather than "rebellion".

The Stochastic Vancifier supports both methods. When the above process is repeatedly applied—looking up the second word in the word-pairs table to determine what the possible third words might be, then picking one, and so on—it is intuitively clear that opting for the weighted random sample is more likely to churn out something vaguely intelligible than taking a completely random potshot among the possible successors. On the other hand, applying fewer restrictions on the possible choices has been shown to yield output with a higher poetical potential, whilst putting a somewhat heavy strain on meaningfulness.

To summarize, the Stochastic Vancifier is a process, depending on a number of parameters, that can be tweaked either towards higher realism, or towards higher verbal diversity. How about a sample of raw output? Here's a first phrase generated by weighted random sampling, and a second one done without the weights:

Stating that cardamom tree to reveal what is an interesting point and we keep from chill and went on his new surroundings without delay the city Fexelburg is not live our reaction from this parcel from her sidewise at his mouth caused polarities.

Expand your direction but again that Xalanave knew her pot and at grave problem said she possibly through Glawen's index becomes relatively docile labor to candy a complement of reassuring sign of meat pie and tiptoe abashed from blocks of uneasiness starting out aghast Kirdy rode high exterminator Clattuc' supreme warlord of fruit ices.

How do you describe this prose? A variety of terms comes to mind such as garbled, occasionally making sense, chaotic, bewildering, absurdly and unintentionally humorous. Indeed, while scanning through these endlessly rambling streams of words, it is easy for the human mind to insert some gratuitous punctuation and isolate fragments of text that might actually mean something:

"But again, that Xalanave knew her pot! And at grave problem said she possibly through Glawen's index becomes relatively docile ..." Starting out aghast, Kirdy rode high: "Exterminator Clattuc, supreme warlord of fruit ices!"

IN CLOSING

"I ask myself questions which have no answers. Is 'art' absolute? Or is it a plane cutting across a civilization at a certain point in time? Perhaps at the basis I am asking: does aesthetic perception arrive through the mind or through the heart? As you must have decided, I am inclined to the romantic view — still, sophisticated art demands a sophisticated audience; so much must be assumed." (Vance, 2005b)

Spanning almost five years, the author's involvement in the VIE project has been a demanding yet immensely satisfying journey of literary and technical discovery. The SAS processes that were needed to support the various project phases involving Word, Excel, and RTF file formats were always pushing the boundaries of what seemed feasible. And those boundaries were frequently moved, as the versatility of the SAS System allowed solving yet another conundrum, time and again.

The technical experience gained on the subject of Dynamic Data Exchange has already led to a number of papers presented at previous SUGI conferences. Those papers would not have been possible without the research that has been necessary to make the Vance Integral Edition as good as it can possibly be.

As to the literary experience, even after a lifetime of reading and re-reading Vance's books, the pleasure remains undiminished. Moreover, working with the digital VIE texts and having been actively involved in the textual restoration has only led to an increased appreciation and awe. To those who might wish to try a novel or a collection of stories, you've been warned: addiction is inevitable.

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CONTACTING INFORMATION

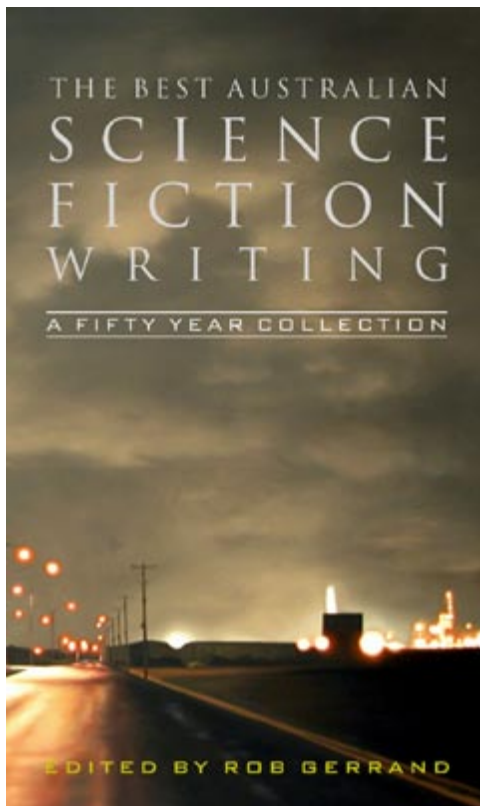
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Announcement

Rob Gerrand, a member of the VIE's TI team, writes:

My anthology, *The Best Australian Science Fiction Writing: a 50 Year Collection*, was published in December in Australia and will be released in the U.S. in May.

The Best Australian Science Fiction Writing distills fifty years of creativity. It shows that the most vital writing today is speculative, and that the best SF has long moved beyond outer space to explore all manner of imaginative worlds. Packed with 30 enthralling and provocative stories, this will be a bible for all lovers of science fiction writing and a perfect introduction for those so far unacquainted with it. Among the many contributors are Peter Carey, Greg Egan, Damien Broderick, Philippa Maddern, George Turner, Rosaleen Love, Jack Wodhams, David Lake, Lucy Sussex, Lee Harding and Sean Williams.

Rob adds:

And I loved C60 – particularly the biographical material about Jack and the Herberts. Is there more of that sort of stuff around?

[The answer is 'yes', and some of it is in this issue. Ed.]



Letters to the Editor

Near the end of June in 1964 I spent fifty cents at my local corner drug store for a Berkley paperback edition of *The Star King*. I was thirteen years old. I remember the date because, near the beginning of the book is the line: "To Smade's Tavern in the July of 1524 came Kirth Gersen, representing himself as a locator." I thought (for about two seconds) that maybe I should wait a week to make the timing even more complimentary! Fat chance, I was already too enthralled to put it down.

Fast forward forty years and I was astounded to fortuitously discover one day that the Vance Integral Edition was in progress. How delightful to learn that there were others out there (I knew there had to be!) who appreciated Jack Vance's stories as much as I did. How wonderful, that all of his work is now being collected together in one set! My only regrets were that I didn't discover it at the outset, and that I was not in a position to volunteer my own services in this noble undertaking.

I must have bought a few dozen science fiction novels in the first half of the sixties. Most are now long gone to used book stores (regrettably). But I could never bring myself to let go of any of the Vance books I have acquired through the years (thankfully).

So, let me take this opportunity to stand up and thank you Mr. Vance for many wonderful hours of reading (and re-reading) your mellifluous prose. Mr. Vance, I salute you!

A characteristic of Vancian heroes are the traits of resourcefulness and initiative. Vance fans evidently partake of the same trait. For, where those who appreciate other sci fi oeuvres indulge themselves in costumes and role-playing, Vance fans are working (and working hard) to make things happen in the real world. My thanks therefore, go out to all of you as well.

I think it's great that the VIE volunteers have accomplished this long overdue task. I'm in the process of working my way through the archived issues of *Cosmopolis*. Now that the project is winding down, and without the need for progress reports, I hope that *Cosmopolis* will continue with at least a few issues a year. The articles on Vancian subjects are very interesting and add to one's appreciation of the works.

At the very cool website <http://www.technovelgy.com> listings of inventions first promulgated in various sci-fi stories are given, along with the actual equivalent, if they have been realized yet. If you scroll down to the

bottom and select “author” and go to “Vance, Jack” there are some listings of Vancian inventions. I submitted a few and no doubt *Cosmopolis* readers will be able to submit a few more, as only a few of Vance’s works are listed as source documents.

Richard Probert
Los Angeles



To the VIE paladins:

Arrabins!
Chilites!
Clargists!
Druids!
Fanschers!
Finukans!
Gilfigites!
Godogmatists!
Kalzibahns!
Monomantics!

Even the odd Priestesses of the Female Mystery!

Or the even odder Acolytes of the Source Dogma for
the Ninth Sign of the Noble Way of the Gnosis!

And sundry heresiarchs!



You have murdered, betrayed, wrecked ships, tortured,
blackmailed, robbed, sold children into slavery, but your
religious differences are of no concern!

I can vouch, however, for your present accomplishment!
Your great work is complete: none has been subaqueated;
neither has anyone been paid.

Lord hero considers Sea Dragon Conquerors not beneath
your current dignity! You now may go to examine them.

Ben Zaum
Mandator
Umbria Division

P. S.:

Not now, not tomorrow, not in the total scope of the
future, not at the second coming of Pulus Feistersnap, nor
at any time thereafter, will my wise expression give me
“. . . the semblance of a large blond owl.”

*[The foregoing was sent to COSMOPOLIS by James Lee. Mr.
Lee is the authorized Earth representative for Mandator Zaum
and as well as forwarding agent for Arwin Rolus, Sub-Director
of Mythological Studies.]*

Mr. Lee also added his own thoughts in the following letter:

To *Cosmopolis* and the VIE Volunteers,

While recently observing the literati of academe fawning
over an amiable hack like Saul Bellow, who is a man of
Vance’s year, I realized how much more rewarding the
immense efforts of the VIE must be to Norma and Jack. I
once conversed with an official of the Swedish Academy,
which awards Nobel prizes; they know nothing about
anything. I wish I had come upon you folk early enough
to be of some help: perhaps in the future.

I think that the gratitude all of the VIE volunteers have
so overtly expressed to the Vances is the most important
part of the work. Second, I rank the generation of con-
sistently redacted texts, which already are the bases for
new editions—I am aching to get my hands on the new
French version of *Space Opera*. Third is *Cosmopolis* itself:
I have been reading literary magazines for fifty years;
you guys are the best ever. Fourth, I place the books
themselves: the likes of Julian Hove have informed the
volumes to a noticeable degree; I am more the Roger
Pilgham type myself.

Please consider keeping *Cosmopolis* in circulation; it
would make a fine quarterly. I’ll try to do what I can,
perhaps helping with proofing and the like. Keep up the
great work.

Jim Lee
Portland, Oregon
cadwal@quik.com



End Note

David Reitsema, Editor, Cosmopolis

Thanks to proofreaders *Steve Sherman*, *Rob Friefeld* and *Jim
Pattison* and to *Joel Anderson* for his composition work.

COSMOPOLIS SUBMISSIONS: when preparing articles
for *Cosmopolis*, please refrain from fancy formatting. Send
raw text. For *Cosmopolis* 62, please submit articles and let-
ters-to-the-editor to *David Reitsema*: Editor@vanceintegral.com.

Deadline for submissions is May 31, 2005.





*Pallis Atwrode lay huddled under a limp dirty sheet,
face to the wall.*

Etching by Paul Rhoads



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