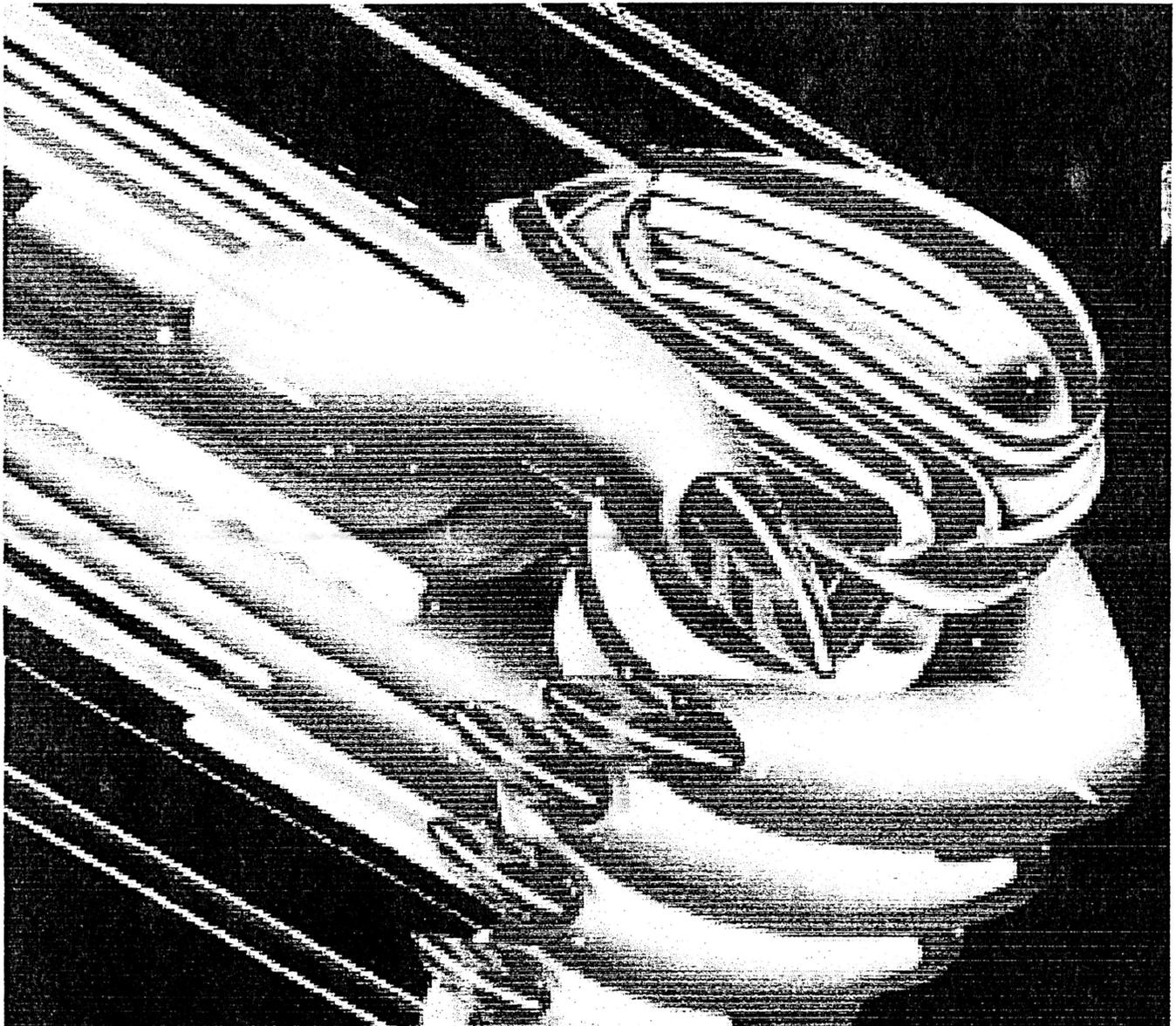


RHETORIC®

Issue 20

MAR/APR 2002

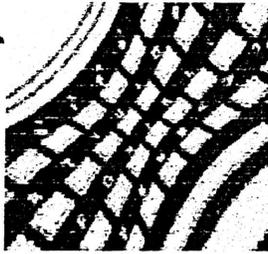
ORIC FUN



**YES! WE'RE ON TIME FOR A CHANGE!
EXCLUSIVE GEOFF PHILIPS INTERVIEW! * TIMES
OF LORE - THE LOG * CHAOSMÖNGER'S RÖCK
and RÖLL YEARS * FRENCH ORIC MEET
PICTURES * TELESTRAT MANUAL * PICTURE
CONVERTER PREVIEW * BRIAN'S POSER PAGES**

20

THE EQUALIZER



EDITORIAL

Hi All,

Firstly, here is the news... Last month I mentioned my retirement from Rhetoric, due to the lack of response as far as contributions were concerned. Well..after an extremely productive online meet, that went on for over 2 hours on Sunday, then everyone got motivated and promised to send stuff in, so for the time being, I'm happy to be back.

I have a new project idea on the go at the moment, and am not sure if it will work, but I'm going to give it a try. I intend to start a new software publishing label, ideally trying to recreate what it was like 20 years ago...today. I'd like to get a catalogue of original games (for outdated computers) that have been written by people that would like them published. I'd then like to duplicate and distribute them via my website/eBay, and pay the authors a royalty for every copy sold. The first stage is to concentrate on software for hard to find machines, such as the Oric, ZX81, Vic 20, Dragon 32 etc.

It is my hope that this will take off, and gain some recognition, and follow on to the next three stages:

- 1) Common 8-bit machines... Spectrum, C64, BBC, Amstrad, MSX
- 2) Common 16-bit machines... Amiga, ST, QL, Acorn and finally stage 4 (which is a bit over-ambitious, but could happen if popular enough)
- 3) 16 Bit machines, Amiga, ST, QL, Acorn and finally stage 4 (which is a bit over-ambitious, but could happen if popular enough)
- 4) Cart based machines - Atari 2600, Vectrex etc.

More info will be on my website as it happens..

WWW. RETROGAMEZ. CO. UK

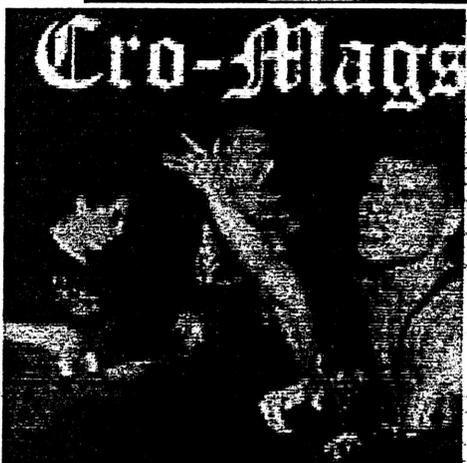
Anyway... here's a bit of silly news. After the earlier bit of moonlighting that TWILIGHTE may have done, programming the Spectrum version of Delta for Thalamus software, I came across this...

Anyone remember the 1980s NY hardcore punk band 'THE CRO-MAGS?' Sounds a bit like CEO-MAG to me ;-) I've heard the French can be a bit of an angry bunch, but this is ridiculous !!

Anyway - the good news is that we hope to bring you some cracking CEO articles in future issues, providing that we can get them translated.

Have we got some groovy stuff for you this month. Feature of the month is an epic chat between legendary Oric programmer GEOFF PHILIPS and our Jon. More news from his development of Times of Lore, with the latest update of his log. We hope to bring you some more 'KEY PEOPLE' interviews and profiles in the future.

Righty-o... it's time to go anyway, cos it's 1AM and The Equalizer is on the telly, so I'm going to watch that before I go to bed. Bye,
Simon



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COMPETITION

Can you make Muso laugh?
Go on...have a go and send us some jokes!

Prizes include:

1st Prize:
A VAUXHALL VIVA!

2nd Prize:
A GIRAFFE NAMED KEN

3rd Prize:
12 pack of TOP DECK shandy (best before October 1978)

Hundreds of runners up prizes of Deep Purple and Carpenters 8-track carts!
Competition winners will be decided and printed in Issue 426. Prize winners must supply a stamped addressed envelope to claim prize. Here's some to start with...



What's the difference between a saxophonist and a gentleman?

A gentleman knows how to play but doesn't.

How do you define a perfect pitch?

Throwing an alto sax in a toilet from 20 feet with out hitting the rim.

What is the difference between a saxophone and a trampoline?

You take your shoes off to jump on a trampoline.

Q: What does a saxophone-player do when he's offered a blow job?

A: Asks the girl where the gig is and insists on bringing his own rythm section.

When should a saxophonist change his reed?

Whenever a difficult section comes up in the music score.

What's the difference between a saxophonist and a lawnmower?

A lawnmower cuts grass; a sax player smokes it

PREVIEW - PICTURE CONVERTER by DBUG

Picture Converter is the latest project of Mickael Pointier, better known to us as DBUG - demo programmer and maintainer of the Defence Force website. It is a DOS based program which converts pictures on your PC into a HIRES screen format and saves them as either as a PC file or a TAP file which can load into an emulator such as Euphoric. From the PC, they can of course be transferred to disc for use on real Orics. The only stipulation for files is that they are of 240 x 200 pixels in size and of one of the following formats: PNG, TGA, TIFF, PCX and BMP.

The program comes as a zipfile, which currently contains three items, the PictConv.exe executable itself, a dll library and some quick and simple instructions. Installation is easy - just unzip all three files into a directory on your hardrive. I'd recommend you print out the instructions too.



In order to test the program I produced a picture of the correct size and file format (a PNG in this case), which consists of a shot of a Bae 146 leaving Birmingham airport. This original picture is produced on the left.

The picture was adjusted to the correct size and shape using one of many suitable image editing programs on the PC. Once you have your picture, place a copy of it in the directory where you have Picture Converter. Now drop to DOS (using the MS-DOS Prompt from Windows is best). Go into the Picture Converter directory and you are ready to convert.

The program is very easy to use, with the following syntax:

PictConv options sourcename destinationname

PictConv is the name of the program, sourcename is where you put the name of the file you wish to convert (our picture of the jet) and destinationname is where you put the name of the finished file (for example jet1.tap or jet.bmp)

The options section is where you decide on how the finished picture will look. There are three groups of options:

- f group (colour options)
- d group (dithering options)
- o group (output options)

You have to choose one option from each of the groups. The following tests will look at the f and d group options, forget about o group for now. I'll go over them very quickly at the end.

There are only two options in f group which are used to choose the colour scheme of the final image:

- f0 Produces a monochrome picture
- f2 Produces an RGB picture (picture will be made up of red, green and blue lines of colour)

There are currently four options in d group. D group decides on what "dithering" method is used. Dithering is what our editor does a technique for producing appropriate shading in digital pictures. Choosing different dithering methods dramatically affects the look of the output picture, as we will see. The dithering options are:

- d0 No dithering
- d1 Alternate dithering
- d2 Ordered dithering (based on a 4 x 4 matrix, with 8 levels)
- d3 Riemersma dithering (based on hilbert curves)

Now we've seen what options we have, lets see what they look like. The following are all genuine Oric screens. Firstly, monochrome output with the four dithering methods:



-f0 -d0 Monochrome, no dithering

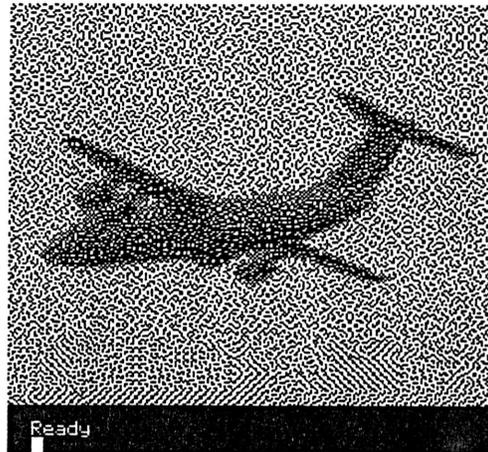


-f0 -d1 Monochrome, alternate dithering

PREVIEW - PICTURE CONVERTER by DEBUG



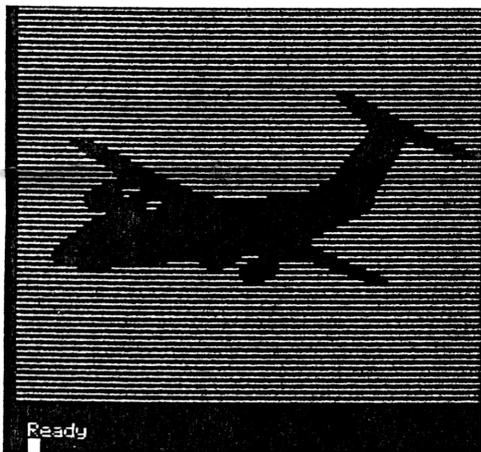
-f0 -d2 Monochrome, ordered dithering



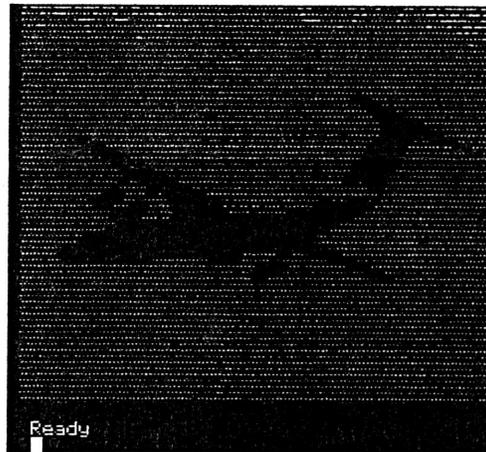
-f0 -d3 Monochrome, Riemersma dithering

Pretty impressive results, eh? It is so easy to use this program to produce good monochrome HIRES pictures - there is really nothing to it. Just try out all the methods to see which one best suits you.

The colour or RGB option is perhaps not quite what you might expect at first. It works by assigning red, green or blue attributes to alternating lines - red, green, blue, red, green, blue, etc. This produces some interesting colour effects and although you can't see the colours on this black and white page, the following pictures illustrate how the colours affect the images (compare them to the monochrome equivalents above).

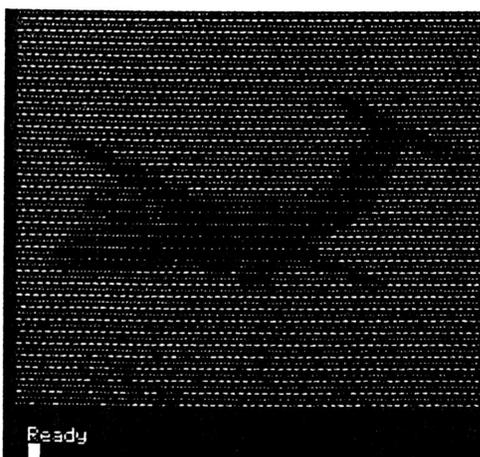


-f1 -d0 RGB, no dithering



-f2 -d1 RGB, alternate dithering

As you can see, not only is the picture dithered, but so are the coloured lines, which produces the coloured effect.



-f2 -d2 RGB, ordered dithering

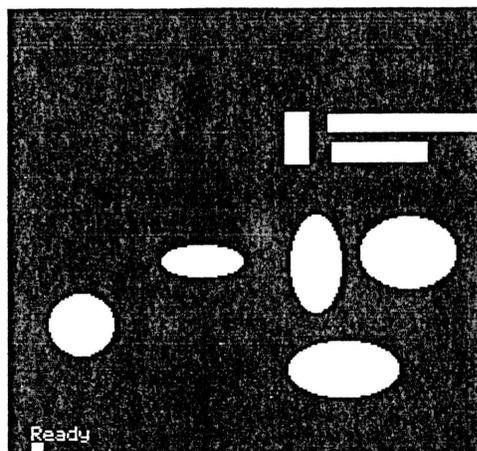
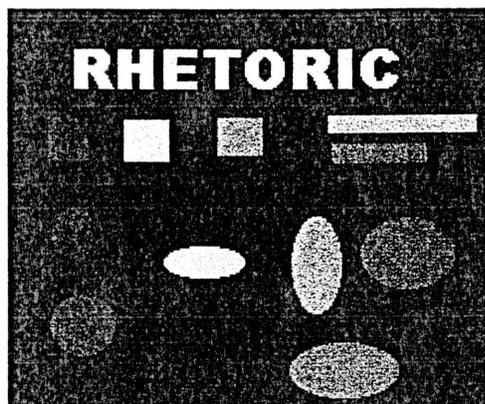


-f2 -d3 RGB, Riemersma dithering

Personally, I didn't like the colour effects as much as the monochrome, finding that it distracted from the original object. Of course, it depends a lot on what the actual picture is. For photographs it doesn't work well, because the level of image

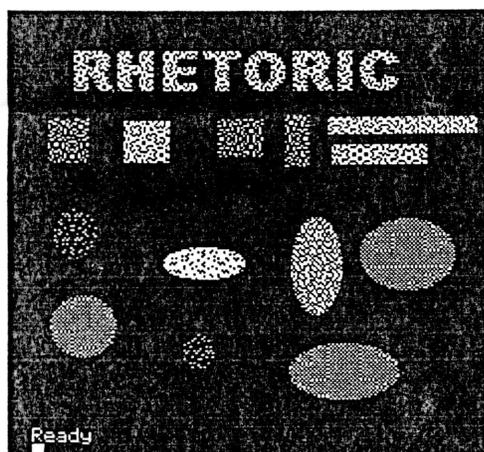
PREVIEW - PICTURE CONVERTER by DEBUG

complexity in a photograph cannot be easily reproduced with the poor (by photographic standards) detail and colour resolution capabilities of the Oric (only 8 colours and about 0.05 Megapixels to use current terminology!). But not all images need be photographs. I created a simple screen that involved a Rhetoric logo and some oval shapes of various block colours. These should produce a fairer test of the RGB options capabilities. Here is the original test screen (on the left). Although of course you can't see the colours, you can see where the shapes are. On the right is the screen with -f0 -f0 settings (monochrome, no dithering).



As you can see, half the shapes have disappeared! This is because the chosen colour/dithering method has to make a choice with each colour as to whether to make it foreground or background.

For the screens below, on the left is again monochrome, but with Riemersma dithering (-f0 -d3), while on the right is RGB, no dithering (-f2 -d0).



These give much better results, all the shapes are present and there is good "colour" variation whether it be shading in the monochrome picture or actual colours in the RGB picture. Interestingly, using the more complex dithering methods such as Riemersma gave poorer quality pictures in the RGB pictures. This is because the dithering broke up the outline of the shapes, making them look less defined. This isn't a fault! It's just a consequence of the dithering method used. But don't worry, not yet implemented is the -f1 option and when incorporated into the program this should make a more intelligent conversion of the colours - I can't wait!

Before I forget, remember the output options? These allow you to create three types of Oric file (tape format with BASIC loader, tape format without loader and raw data). You can also output the picture as another PC file type, as a C source code or as an S Source code for use with SDK (the Oric Software Development Kit from the same author).

I've run out of space to provide more test pictures or better description of some of the options so I'd better give you a summary. Overall, this program is really useful! You can have a lot of fun converting your own photos over to the Oric or creating your own pictures using a simple drawing program on your PC. The resulting pictures are not always successful, due to limitations of the Oric rather than anything wrong with the program. Therefore experimentation with the various colour and dithering methods is required. When creating your own simple colour drawings, you'll have to experiment to find out which colours in your drawing program work well when transferred to the Oric and which don't. Don't let that put you off as it is well worth the effort.

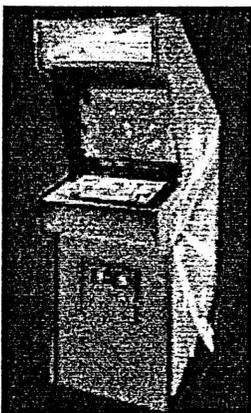
The final point (just enough space left!) is that this program is still very much a "work-in-progress" and this is a Preview and not a Review(!). There are therefore a number of features still to appear in the program. These include support for pictures smaller than 240 x 200 (useful for creating sprites maybe?) and for other dithering methods such as "Floyd-Steinberg". The author is also open to requests for features YOU want implemented so if there is anything you would really like to see, drop him an e-mail at : mike@defence-force.org or visit the Defence Force website at : www.defence-force.org If you don't ask - you won't get!

CHAOSMÖNGER'S

VIDEO GAME ROCK AND ROLL YEARS

Last issue, we left the 70's behind, and waved goodbye to all things over the top and garish... Space Hoppers, The Sweet and T.Rex, Steve Marshall's trousers, and those wood grained games consoles. So what would this new decade bring?...

While the late 70s gave us a taste of what was to come, with the birth of home gaming, the 1980s took it one stage further. In the arcades, we were wowed by 1978's **S p a c e**



Invaders, and the wire frame graphics of Asteroids in 1979, but just one year later came two of the most influential and important games of all time.

DEFENDER, Eugene Jarvis's creation for Williams Electronics took gaming two stages further. Firstly colour. One of the first colour arcade games ever made, certainly the first ever to become widespread. Secondly, it was one of the first games to feature a 'go anywhere' scrolling playfield. Everything about the game was perfect, and it still stands up today. Graphics, effects, gameplay, sound effects, that wonderful cycling colour palette, and the sheer difficulty of mastering the game.... It was a special blend that has rarely been bettered even to this day.

TEMPEST, was Atari's arcade offering, and utilised their vector graphics technology that they'd used in Asteroids, but this time in colour, and 3D too. It's another game that still amazes today, and refuse to be laid to rest. Jeff Minter, cult games programmer has brought us Tempest

2000, and Defender 2000 for the Jaguar console, both of which can be played in original, or enhanced modes, with Tempest 3000 currently in development. Atari too, through it's various owners have brought out PC versions. Defender is available on just about every system known to man, either officially, or unofficially.

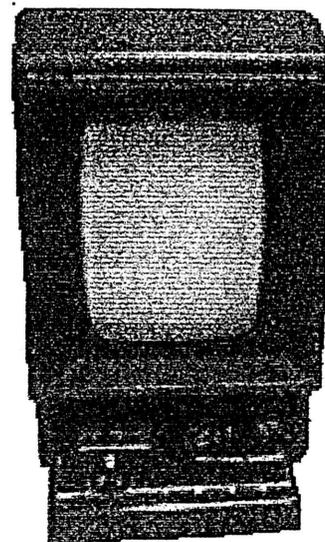
The home games market at the time was flourishing. The Atari 2600 was leading the way, and current arcade games were being converted across for home gaming. Some were done well, like SPACE INVADERS and BERZERK. Others were dire, like DEFENDER and PAC-MAN.

For the next two years, things were going pretty well, with people spending all their money in the arcades, and home systems selling well.... UNTIL....

Late 1982, early 1983 saw the video game crash. Whilst people in the UK may have been shielded a little from it, it was major news in the US. The home computer boom was here, and people deserted consoles in their droves. After all, who wanted to pay £30 for a blocky conversion of an arcade game, when you could buy a computer for £120, and buy the games for a fiver (or even type them in yourself out of a magazine!). Of course, we all know about the ZX81, Spectrum, Oric, Dragon, etc.. That's another story...

No-one was prepared to release a new games console at this time were they? Hardly anyone anyway. Back in the very early 80's a large number of 5" monochrome CRT screens were purchased cheaply from a liquidators surplus by a mystery team that had an idea of what to do with them.

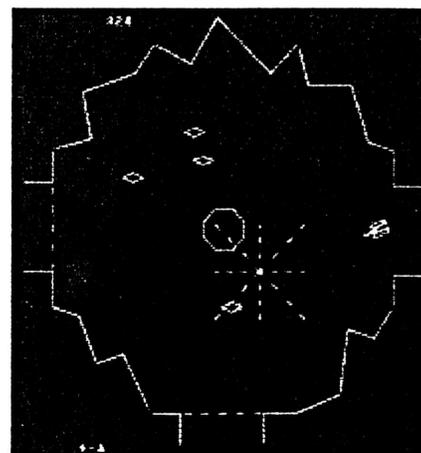
A project named MINI-ARCADE was begun, who's name progressed to VECTOR-X, and then to VECTREX. By then, the company had decided to



scrap those 5" CRTs in favour of 9" models, and in June 1982, the Vectrex was officially born.

The first and only home vector graphics console was here, and a hatful of top games were produced, including a fabulous home version of Asteroids built in, called MINE STORM. Mass production began, and in early 1983, GCE, the company behind the console attracted the interest of toy giant MB.

Because the machine is a monochrome one, coloured acetate overlays were supplied with games that you put over the



TIMES OF LORE... THE LOG

2002-01-06 23:43:21 By Twilighte

Over this weekend, I have cleared up some bugs and added alot more functionality to the game engine.

When inside buildings, some characters were being corrupted when the hero moved left or right too far so that the neighbouring Buildings roof was shown. This has been fixed both by a little Shuffling of the character sets and the Game map.

I have also gotten fed up waiting for a reply to a bug that existed in the Map Editor I was using. Essentially, bytes 112 to 126 were being converted to 255 Decimal when I tried to export the map. So I have written an ORIC loader that populates these areas using data statements.

Alot of extra work, but it works. This has also meant I've been able to do the Vortex control code. This is a means by which the Hero can get from the physical location of the Stairs in the Inn to the cellar (Located in the sea) and back again.

A bit more editing of the Zones/Blocks etc. and the game engine is starting to look promising.

The next big hurdle, and one I will be working on next will be the creature management sub-system.

I also need to sort out the animation characters for the Sea, Waves, Torches and Fire Wells. However, this will be addressed later, when I know how much memory is left for it.

The current MC memory usage is now 2386 out of 6672.

2002-01-15 23:32:33 By Twilighte

Thanks Jede for the File upload option for this forum.

Just got back from Finland although had today to do some more code.

I've almost completed the Creature control code, but not tested any of it so don't know what the effective speed of the game will be like.

I'm getting worried about Machine code memory again, although I have relocated the Disc loader to FE00 and the IRQ handler will go into FC00.

Also, all BG Animations will fit into FA00-F8FF so leaving F400 to F9FF for more Machine code memory if needed (1536 Bytes), and there is still some space in the table area of memory (Currently at ACxx of B4FF).

What is left to do...

Creature Control Code - Needs a little more code, compiling and testing.

Icon Management - To control the Icon bar

Message Management - To manage the text window for messages.

Window Management - To manage the window system

Object Control Code - To control weapons, objects dropped and projectiles

Lifeline Control Code - Plotting the candle height proportional to life.

Plot editor - Editor to populate memory 0400-1FFF containing the game plot

Animation - Sort out the animation chars for the sea, and fire frames

Disc Loader - Needs a little modification before it is ready.

IRQ Handler and SFX - Need to add the Sound Effects

Tidy up - Tidy up on areas, probably a bit of optimization

2002-01-16 00:02:36 By Twilighte

Code now compiled...

MC Memory is now 3563 bytes.

2002-01-20 22:44:55 By Twilighte

I don't understand it Jede, I hear music here.

Maybe you need some extra guidance...

Load Eupharic, then load the demo, then switch on the radio.

You should now hear Music, Stereo Music if you're lucky enough to have two speakers.

2002-01-19 23:07:59 By Jede

Hi, I had downloaded the TOL demo, but I can't hear the music, and I set the volume at the maximum but no sound... My sound card work well, in fact... I don't understand... Any explanations?

2002-01-26 20:07:30 By Twilighte

Well, I finally managed to pull myself away from sorting out the rest of the game, back to sorting out the most important bit.

You know, just like people say to me so often "we never finish projects because we keep thinking of new ideas, then start from scratch again", I keep doing it with Times of Lore. I keep going off (On a tangent) to sort out other areas of the game and keep avoiding the biggest problem.

Currently, it is the Creature code.

This controls and plots the other one or two creatures resident on the screen.

The intelligence of the creatures is limited, if only for the memory available and speed of operation.

Essentially, there are two types of creatures. Friends and Foes. The Allegiance flag distinguishes them apart.

Friends (More commonly known as Explorers) always follow a logical pattern. They will always walk in a straight line until they hit an obstacle. Then they will turn right and continue in that direction. This is the same as the Scout movement in Magnetix.

Foes will always be trying to approach the Hero (To engage combat).

If they hit the hero or another obstacle, they will turn into Explorers for 10 game-cycles. So they may hit your hero, retreat a little then attack again. This will also help the foe if it becomes trapped.

Each creature has a Sprite Set. This then splits the creatures into Peasants, Orcs, Priors and a whole load of other personalities.

Sprite memory has been arranged specifically so that the Creature Sprite Set, its direction and its frame can be easily calculated.

The order of which each process (Check, Move and Plot Creature) occurs is crucial. All sprites must be on the PSB before the sprites movement can be checked. The PSB must also have been populated with the Objects (To do code after the creatures) which also include projectiles, the background and the Hero.

So to recap, the Sequence is...

```

READ THE KEYBOARD
MANAGE HERO CONTROLS
MOVE HERO IF APPLICABLE
BG >> PSB
PLOT OBJECTS TO PSB
PLOT HERO TO PSB
PLOT CREATURES TO PSB
CHECK AND MOVE CREATURES
SET PSB COLOUR COLUMN
PSB >> RSN
DO ANIMATION
LOOP
    
```

BTW: BG is the Background Buffer, PSB is the Pre-Screen

Buffer and RSN is the real Screen.

I tried it this morning, and the TOL Engine worked, except still only the hero on the screen. There are a thousand and one things that can (And probably will) go wrong with the engine but I was expecting at least something to appear on the screen!

2002-01-26 20:23:01 By Twilighte

The animations in the game consist of around 8 characters split into two sets. The Rivers, Lakes and the Sea will use 4 characters, whilst the Torch, Fire Wells, and Fading Floors (hehe) will use the second set.

You will not find Fire next to water, so the program dynamically changes the animation to the right set according to the Environment Matrix.

Characters 40 to 42 will have 4 frames of animation, whereas character 43 will always have 8 frames.

So whilst 4 frames are fine for the Sea, River ripples, Torches and Fire-Wells, the Waves and Fading Floor need 8 frames.

All Animation Frames for each character are held in overlay RAM.

Next, there are about 24 Sound Effects in the game. From the sound of foot-steps to the sound of birdsong in the forest to the sound of clashing weapons.

The Sound Effects will also be stored in overlay RAM, together with the Play routine and will use just 3 bytes each.

The Creatures in the game may reside inside as well as outside buildings. So a special flag is used to say which side of the wall, a creature resides.

The code can then stop plotting a sprite when the hero moves inside or outside a building.

2002-01-27 20:18:50 By Twilighte

Well the creature code was proving to be a real pain this weekend. The major problem is how to map creatures inside buildings.

Low priority creatures are easy enough to generate outside and in the underworld, but they must be positioned precisely in buildings. The Innkeeper at the bar or the Supping serf at the bench, the Prior in the Waiting room or the sleeping serf in bed.

But I didn't want to map all creatures that resided inside buildings, since the checking of these creatures (Whether they would appear) would drastically slow the game down.

So I have opted for a simpler method...

If the Hero enters a building, the position in the map is taken, together with relative offsets of two other creatures within the establishment.

There are 4 sets of relative offsets, for each type of building. Since the Hero enters the building, the program will know what the building is and where in the map it resides.

The relative offsets are added to the Buildings position in the map to give the absolute location of the Creature.

Then it is a simple matter of monitoring the edges of the PSB for the appearance of this location, before plotting the Creature.

If the Hero enters an Inn, only two Creatures can co-exist (The innkeeper and a Supping, sleeping or Drinking Serf (if low priority area) or the high priority creature.

THE ORIC TELESTRAT MANUAL PART 2

By Jim Groom

Well, I hope you were interested in the last issues article. This time we get down to the nitty-gritty of the commands themselves. In order to get more in each issue, I'm trialling a smaller font for the main text. If you don't like it, let me know, otherwise it will be used for all future issues. So without further ado, on we go....

THE ARITHMETIC OPERATORS

The following arithmetic operators may be encountered:

+ addition :- A+B, X+20, 2+3, N\$+P\$
- minus :- A-B, 5-2
* multiplication :- A*B, 2*3
/ division :- A/B, 5/3
^ to the power of (more correctly known as the exponent) :- A^2 = 2 squared
= equals :- IF A=B+3 THEN.....

The operators are carried out in a sequence depending on the type of operator. The evaluation sequence is carried out as follow:

First - Exponents
Second - multiplication & division
Third - addition and subtraction
Four - comparitors (less than, greater than, etc)

This sequence may be modified by the use of parenthesis, items inside parenthesis being carried out before those outside. for example:

(2+3)*4 gives 20 (2 plus 3 = 5, then multiply this by 4)
2+(3*4) gives 14 (3 times 4 is 12, then add this to 2)

What if we do not use any parenthesis?

2+3*4

Do we get 14 or 20? The result is 20, because the multiplication is carried out before any additions. So we have 3*4=12 and then we add the 2.

There are also a number of signs used for comparison, the most important being =. The comparisons are used as conditions, for example:

IF A>10 THEN GOTO 200

The full list of comparisons are as follows:

< Less than
> Greater than
<> Not equal to
>= Greater than or equal to
<= Less than or equal to

The arithmetic operators can also be used with alphanumeric expressions, for example:

A\$="BONJOUR"
B\$="MONSIEUR"
C\$=A\$+B\$

If you type PRINT C\$, you will obtain BONJOUR, MONSIEUR.

The comparison signs can be used to compare characters, sorting in alphabetical order. For example:

A<B, B<C, C<D or C<M etc...

To compare two strings, the TELESTRAT compares the first characters of both strings. If these are equal, it then compares the second characters and so on. For example:

"ALLO" < "BOBO" (since A<B)
"ALLO" > "ALLEZ" (A=A, L=L and O>E)

' (apostrophe)

SYNTAX: No. of line (space) ' (comment) or:

THE ORIC TELESTRAT MANUAL PART 2

By Jim Groom

No. of line (instruction):(comment)

TYPE: BASIC system command

The apostrophe replaces the **REM** in a program. i.e. a line starting with an apostrophe will be ignored by the computer, or if the apostrophe occurs later in the line, the text following it will be ignored and not carried out as an instruction. The command is most commonly used to insert your own comments into a program, to aid clarity or understanding.

If it is used at the beginning of a line, precede it with a space. The difference with **REM** is that an apostrophe used in the middle of a line does not need to be preceded by a colon:

For example:

```
10 GOSUB 1000 : REM SOUS PROGRAMME
20 GOSUB 1000 : ' SOUS PROGRAMME
30 GOSUB 1000 ' SOUS PROGRAMME
```

are all valid, whereas:

```
30 GOSUB 1000 REM SOUS PROGRAMME
```

is not.

See also: **REM**

] (right bracket)

SYNTAX: **]** LABEL :

TYPE: Control structure

The command **]** (right bracket) allows a name (referred to as a LABEL) to be placed at the beginning of a subroutine. This can then be accessed from elsewhere in the program by simply placing the LABEL in the program.

For example a subroutine to display a title page might begin:

```
1000 ] TITLE : ....
```

This subroutine would normally be accessed by **GOSUB 1000**, but the use of "**]** TITLE" allows it to be reached by **GOSUB TITLE** or even just **TITLE** instead of **GOSUB 1000**.

This function, is exactly the same as **GOSUB**, but it makes programming simpler as it is much easier to remember a subroutines name than it's line number. Those familiar with BBC BASIC will recognise the similarity with the **PROC** command, used for naming subroutines.

] is also used to specify the channel number for certain instructions such as **GET**, **PRINT** etc. For the use of **]** in these commands see the commands themselves.

See also: **GOSUB**

ABOX X1,Y1,X2,Y2,p

SYNTAX: **A**BOX EN,EN,EN,EN,EN

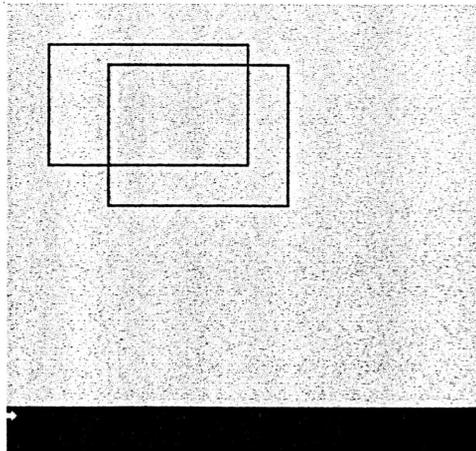
TYPE: High resolution graphics command.

ABOX is used to draw a rectangle on the screen, in a similar way to the **BOX** command. The difference is that the rectangle produced with **BOX** starts at a point whose coordinates are relative (the location is calculated according to the preceding coordinates), and whose parameters determine the length and width. For **A**BOX, the parameters give the absolute coordinates of the ends of the diagonal. The corners of the rectangle will thus have the coordinates X1Y1, X1Y2, X2Y2 and X2Y1. X must lie between 0 and 239 and Y must be between 0 and 199. The final parameter, p, determines the foreground/background attribute (look at page 80 of the Atmos manual for more details).

Note: After the execution of the **A**BOX command, the current cursor position is not changed, it remains at X1Y1.

```
50 HIRES:PAPER 3:INK 4
100 ABOX 20,20,120,80,1
150 ABOX 50,30,140,100,2
```

See also: **BOX**





JANUARY 2002 ORIC MEET, PARIS - FRANCE

Once again a nice afternoon with real computer enthusiasts. And I had the great pleasure to bother Jon during a big part of the afternoon. A lot of information and some tips I will maybe never fully understand even if it was very well explained...

Jede decided to propose a new exercise: the two lines prog in basic which are not useful... Simon immediately proposed:

10 rem

20 rem

A lot of talks, projects... Don't forget to come at the next one...



No extraordinary hardware hacks for the oric but still some very interesting and promising work in progress. And of course a special guest (there were two): **Jonathan Bristow**. I think on the picture Jede is asking him whether there will be music for Jon's new game **Times of Lore**. ;)



The second guest: **Jim Cuomo**. He was using the Oric to create graphics following his music. A demo was planned but was cancelled due to a little technical problem. Next time maybe. Good luck for the cd Jim...



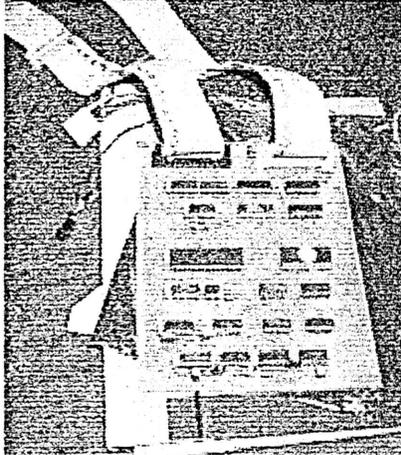
Thierry, Laurent and André with the new portable oric... Oops, sorry it's only a G3 with the new **CEO MAG** anthology on CDROM. Note the little telestrat in the background.



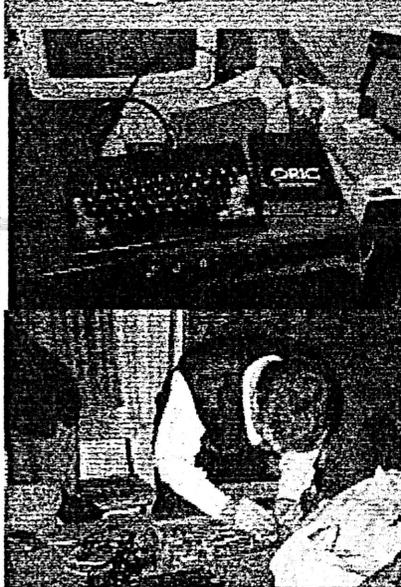
'I feel so lonely', 'so lonely' (etc... police) Jonathan?. Some work in progress and new projects from Jon... Very impressive. Or should I say very very impressive...



And because it is very very impressive people begin to gather... Seeing screenshots on the internet is one thing but when it's explained it's much more interesting...



Another project: the new floppy disc controller made by Thierry. It is conceived to be made even by non electronic specialists. Still some bugs but it's closest than ever...



The Oric is a multiplatform system: 3.5" floppy from a PC, and 3" box from an apple II, thomson monit

Now the tech part: here Thierry is fixing a telestrat. Of course he gives at the same time some information on the differences between the stratos and the telestrat... or.



Jean is now fixing it up, some solders and here it is. But the question is "where will I put the hard drive?". No sorry not yet. Maybe in the future...



The notebook man, the camera man, stuntman for the group photos, at the head of the magazine, name it, he does it and always with a smile: André

TECHNIQUE

I have taken a little time-out from coding Times of Lore (I'm very busy coding at work at the moment, and need a change (Of sorts)).

What I want to produce is the best full screen Animation on the Oric. If you're connected to the Web, you've no doubt seen my Split-line images, which produce full colour images on the HIRES screen. However, this technique is slow to generate, and being in HIRES uses 8K of memory.

What I want to start doing is greyscale images in TEXT mode. Obviously, greyscale on the Oric can only be achieved through alot of dithering and using just the standard Oric text resolution of 40*28 is a bit low-grade. Note: I could use Dbugs great pseudo graphics mode, but that also uses up alot of memory.

Taking the standard Oric screen and without using Alternate Text, I have 96 characters to play with. If i split every character into an upper and lower cell (Part), and have a resolution of 3 bits (8 levels of dithering), I can spread all the combinations of dithering to 64 characters. With each cell being 6*4 pixels.

On the screen side, the resolution is instantly doubled in the Y-Axis, giving me 40*56 with 3 bit greyscale. OK, so I have organised the format, although now i must convert a test image to see what it looks like for a single frame.

This is where the problems start. I can load any image into Paint shop, resize it to 40*56 and using the Posterize function from the colors menu, reduce the image to 3 bit colour. I can then convert the image to monochrome, but then I hit a snag. How do I convert this image to a format i can easily understand for the Oric?

For the split-line conversions, I was simply splitting the single image into its Red, Green and Blue elements (3 pictures), then converting each of these to black and white.

I have posed this question to Dbug, and am currently waiting for a reply.

However, in the meantime, if you want to see such an effect in action, try getting hold of a Spectrum demo called Emergency (Incredible demo).

More in the next issue... Jonathan

THE MAIL BAG

JOHN HURLEY WRITES...

Sorry, but the time has come for me to admit that old age is catching up on me, and do other things before it is too late.

This will be the first ORIC related magazine that I have ever retired from since first owning an ORIC back in 1983. All the others have folded under me.

I have now turned 70 years of age and my grandchildren for whom most of my computing was done have also grown up and have Nintendos or Playstations which put the poor old ORIC as a thing of the past.

I will still keep the ORIC set up in the spare room for as long as my wife will allow, as I use it for letter writing and occasionally to play a strategy type of game like MAXIT or PATIENCE.

I hope the magazine will keep running for the more able ORIC buffs as it still has much potential for programmers and people who like to modify and re-create basic programs already in existence like I used to do.

Good luck to you all and 'happy ORICING'.

John Hurley

It's always sad to hear of anyone leaving the fold, especially a person who has such a positive involvment in the Oric over the years.

All of us at Rhetoric wish you all the best for the future, and thank you for your support throughout the years, and hope we can maybe hear from you occasionally in the future to let us know how you are. Best wishes,

*Simon
Editor of Rhetoric*

RADIX changes the number base for the notation of numbers entered from the keyboard and displayed on screen. The new base is passed as an argument and must range from 2 to 36 (beyond 10, up to 26 letters can be used as digits).

RADIX returns the new base as the result (but you will note that the current base is always printed as "10"). If a nonnumeric argument is supplied, the current base remains unchanged and is returned.

Example:

? (RADIX 8)

=10

? (+ 6 7)

=15

? (RADIX 12)

=10

? (+ 6 7)

=13

* The four integer operations are +, -, *, /. They take two numbers as arguments and return the result. A **NONNUMERIC** error is generated if an operand is not a number, and a **DIVBYZERO** is generated if you attempt to divide by 0.

/ returns the quotient of the integer division whereas **MOD** returns the remainder. As both the quotient and the remainder are often needed, **DIV** carries out the division once and returns a dotted pair (quotient.reminder).

Example:

? (DIV 10 3)

=(3.1)

* Order predicates are < and >. They return T if the order of the two arguments is true, and NIL otherwise. Comparisons in a broader sense (including equality) are not primitives, so the test has to be reversed.

Example:

? (NOT (< A B))

returns T if A >= B, and NIL otherwise.

g) Modifier Functions and Side-Effect Functions

* **SETQ** assigns the value supplied by the second argument to the symbol specified by the first argument (which is not evaluated). If the symbol was local to a function, the assignment is lost when exiting the function.

For example:

? (SETQ A '(1 2))

=(1 2)

? A

=(1 2)

? (SETQ A 'B)

=B

? A

=B

* **SET** assigns the value supplied by the second argument to the symbol specified by the first argument (both arguments are evaluated).

Example:

```

? (SETQ A 'B)
=B
? (SET A 3)
=3
? B
=3
? A
=B

```

* RPLACA and RPLACD replace respectively the CAR and the CDR of the dotted pair supplied as the first argument by the second argument, and returns the updated dotted pair.

Example:

```

? (SETQ A '(1 2))
=(1 2)
? (RPLACA A 0)
=(0 2)
? A
(0 2)
? (RPLACD A '(3 4))
=(0 3 4)
? A
(0 3 4)

```

* NCONC concatenates two lists like APPEND, except that no dotted pair is used up. NCONC modifies the end of the list supplied by its first argument to append the second list to it.

Example:

```

? (SETQ A '(1 2))
=(1 2)
? (NCONC A '(3 4 5))
=(1 2 3 4 5)
? A
=(1 2 3 4 5)

```

- 15 -

* MEMORY is used to read or write a byte from or to memory. If a single argument is supplied, it is considered as a memory location and MEMORY returns its contents. If two arguments are supplied, MEMORY sets the memory location to the byte value of the second argument and returns the value of the previous contents.

Example:

```

? (RADIX 16)
=10
? (MEMORY 26B 1)
=7 sets the paper colour to white...

```

* TIME returns the value of a timer in 1/100th seconds which can be used to measure the execution time of a program.

Example:

```

? (SETQ T1 (TIME)) (GC) (- (TIME) T1)
=5

```

* PRINT displays the expression passed as a parameter and returns this expression as the result. PRIN does the same but it does not print a carriage return at the end of the expression.

Example:

```
? (PRINT 'HELLO)
HELLO
=HELLO
? (PRINT '(A (B C) D))
(A (B C) D)
=(A (B C) D)
? (PRIN 0)
0=0
```

* READ reads an expression from the keyboard and returns it as the result. If more than one expression is supplied, the remaining expressions are kept in the keyboard buffer for possible use by a further READ.

Example:

```
? (PRIN '(+ 2 2)) (+ 2 2)
(+ 2 2)=(+ 2 2)
=4
? (SETQ A (READ)) (+ 2 2)
=(+ 2 2)
```

Note that (+ 2 2) was not read by the interpreter but actually by READ.

h) Defining Functions

* An OricLisp function which evaluates its arguments is an expression in the form

```
(LAMBDA (param1 ... paramN) exp1 exp2 ... expM)
```

where param1 ... paramN are the names of the formal parameters and exp1, exp2 ... expM is the body of the function (a LAMBDA evaluation therefore contains an implicit PROG).

Examples:

```
(LAMBDA () (/ (TIME) 100))
a function without parameters which returns the time in seconds
(LAMBDA (N) (+ N 1))
```

a function which returns the value of its argument plus one

Caution! The second item of the function list (formal parameters) must be a list (which may be empty, like in the first example above).

LAMBDAs are "unnamed" functions which can be used in the same way as OricLisp primitives.

Example:

```
? ( (LAMBDA(N)(+ N 1)) 3)
=4
```

To assign a name to a LAMBDA, use the PUTD primitive.

```
? (PUTD 'INCR '(LAMBDA(N)(+ N 1)))
=(LAMBDA (N) (+ N 1))
? (INCR 3)
=4
```

Note: A symbol can have at the same time a value, a property list and a function definition associated together.

For example:

```
? (SETQ INCR '(1 2))
=(1 2)
? (INCR 3)
=4
? INCR
=(1 2)
```

* GETD is used to get the function definition of a symbol. GETD returns the LAMBDA of a function definition in LISP, T for a function in machine code, or NIL if the function is undefined.

Example:

```
? (GETD 'T)
=NIL
? (GETD 'EVAL)
=T
? (GETD 'INCR)
=(LAMBDA (N) (+ N 1))
```

* MOVD copies the function definition from a symbol to another symbol, thus defining a synonym for a function without consuming any extra memory space (apart from the target symbol itself).

Example:

```
? (MOVD 'APPEND 'COPY)
=T
? (COPY '(A B (C D) E))
=(A B (C D) E)
```

II.4 Advanced Concepts

a) Non-Eval Functions

OricLisp allows you to define functions which do not evaluate their arguments (called 'non-eval functions'). Such a function has the following format:

```
(FLAMBDA param exp1 exp2 ... expM)
```

A single symbol is supplied as a formal parameter; it will be linked to the list of all non-evaluated parameters. Non-eval functions are used to define new control structures (but also sometimes to define functions with an undetermined number of parameters).

Example:

```
(FLAMBDA L
 (COND ((EVAL (CAR L)) (EVAL (CADR L)))
 (T (EVAL (CADDR L))))
) ) defines an IF X THEN Y ELSE Z !!
```

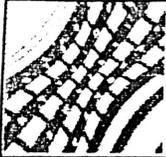
which will be linked as follows:

```
? (PUTD 'IF '(FLAMBDA L
? (COND ((EVAL (CAR L)) (EVAL (CADR L)))
? (T (EVAL (CADDR L))))))
=(FLAMBDA L (COND ((EVAL (CAR L))(EVAL (CADR L))) (T (EVAL (CADDR L)))))
? (IF NIL (PRINT 'ARGH) (PRINT 'OK))
OK
```

=OK and you note that, indeed, the THEN clause is not evaluated, unlike what would have happened if the IF structure had been defined by (LAMBDA (X Y Z) (COND (X Y) (Z)))

Example:

```
(PUTD 'PLUS '(FLAMBDA L
 (COND ((NULL L) 0)
 ((+ (EVAL (CAR L)) (PLUS (CDR L))))))
))
```



ORIC PROGRAMMER INTERVIEW SPECIAL

Resident guru
Jonathan Bristow
talks to legend
GEOFF PHILIPS

JB: Hi Geffers, I seem to remember you telling me that you'd written some 8-bit games, for what systems?

GP: Good evening Twi. Way back of course. Mostly conversions apart from the Oric, but a couple of MSX new titles, sometimes conversions were really created from just looking at the game being played (no source provided, presumably eaten by the programmer). Mighty bombjack on C64, Some MSX games, spectrum conversion of boulderdash construction kit, some chess game on the Amstrad (engine provided)

JB: Wow, Was Mighty Bombjack similar/same as the well known Bombjack on the 64 or its sequel?

GP: From that family, I guess. It came from a proper arcade machine, and had a rather large map, pyramid shape. I could only win the game with a good set of cheats in place! it had some nice ideas, including a torture room if a player got too greedy! I think I did quite a good job multiplexing sprites. I had to work out the map data by pure hacking.

JB: What year was the game released, and by what house?

GP: Those were very lean years, the mid to late eighties; I was rather poor for a time, stuck in a rut doing game conversions which didn't earn a lot.

GP: I've seen it emulated out there!

JB: Emulated? You've seen it again on an Emulator?

GP: mmmmm ouch.. You've got me - I was doing it indirectly through another software house, who farmed out work to me

GP: Oh yes, a few years ago.

JB: Sounds like you didn't enjoy it much?

GP: I was sort of pleased someone had gone to the effort. Out of all the things I did after the Oric, it was about the best I had done. I even have good reviews somewhere in a scrapbook. Well goodish, not major league

JB: Excellent, did you write all aspects of the game. Code, Graphics, Sound?

GP: Well, I had the ROMs. and some of Roger- the guy I worked with's graphics men did me the graphics that I couldn't convert directly from the data, which I decoded

GP: Well, the orpheus years were tough, I was living on beans and potatoes when all that ended. At least after that all I earned was for myself, and not swallowed into company debts.

JB: Beans and Potatoes, life was that hard?

GP: A nightmare! I can laugh about it now. I remember going though all my pockets looking for

money - and joy! found a ten pound note - I could eat for a few days!

GP: The end of Orpheus was a huge relief, but those days had left me pretty badly off - nothing to fall back on.

JB: Gees, Couldn't you moonlight? Mind you by the sounds of things, you must have slaved all your energy into the games?

GP: Yes, I worked pretty hard at Orpheus - I acquired some new skills in the 90's and never looked back

JB: So what Oric Titles did you write?

GP: oric munch, house of death, zodiac, the gruneberg language, part of oric mon, fixes to author, the demo programs that went with the orics.

GP: oric flight, (cough)

GP: trouble in store

GP: I seem to have a hand in most things.

JB: Geez, you wrote Trouble in store. Quite a feat for the Oric. Especially with the synthesised voice. How did you get the voice?

GP: That voice was some hard work! It's quite short, so plays at a fast sample rate

GP: Hey did I tell you I met up with Paul and John marshall a couple months back?

JB: No, weren't they part of the team that originally designed the Oric?

GP: John Marshal == rat splat!!

GP: Paul Kaufman wrote PING EXPLODE and ZAP!

JB: Wow, Rat splat was another fantastic game. What are they doing now?

GP: He used to be Tansoft's software manager, but wasn't a crook like Barry Muncaster

GP: Paul looks the same, he's had some bad luck moving from company to company, working from home

GP: John looks quite different - well adding 10 years to an 18 year old etc. He is now living in Gamblingay! LOL That's just down the road from Orpheus' office

GP: He's kind of out of programming

GP: I could not properly work out what exactly he does now, not handson stuff though; thank god I still enjoy doing the software side.

GP: I've a picture somewhere of the reunion

JB: Wow, can you scan it, and send it in?

GP: sure just locating

GP: The tansoft and oric days were great fun

JB: Looking back they were fun, I presume?

GP: I think those days genuinely were fun; home computers were such a new thing. And before that, I was doing boring things like Cobol.

GP: Lots of things were very nice in that time - seeing the odd title on a shop's shelf, getting a book published, earning royalties LOL

JB: All in the space of 5 years?

GP: well most of the good things all happened in 2 years!

GP: After that it all went pear shaped

JB: hehe, but then you got a proper job?

GP: 1983, early days, 1984, Oric appears, 1985 Orpheus ----- eeeeeeeeeeeeeeeeeeeeeeeeeee (nosedive)

JB: Of course, you wrote the demo prog in the Welcome cassette. Damn, I remember now. Cos you wrote Oric's first Game, Road Race. Derr, my memory is flagging again!! hehe

GP: Yes, writing the first demo tape was more of a self-teaching thing - very little information around back then on the internal workings.

JB: And Gruneberg language was a German Language tutor, wasn't it?

GP: He was a little dark haired man, Italian looking

JB: What, greyscale on the oric?!?!?

GP: Mike Gruneberg. It was quite tedious doing all the sentences. And he would be quite picky once it was done. Lot of work, and 4 languages

GP: No graphics in this!

JB: hehe

GP: Just some curious word associations

GP: Imagine a cat eating a large gateaux

GP: - remember the advert with a cat and a cake?

JB: No, sorry, but he looked like the cross between a cat and a Gateaux?

GP: That was one of the words - gato

GP: I saw him on Breakfast TV a few years ago, still selling his courses, in book form

JB: So an old Goat then? (Letters rearranged to protect the innocent)

GP: hehe

JB: So his Language was a technique

that you adapted to the Oric as a Language learning program?

GP: Well it was done for all the platforms at the time, I think

GP: Not by us though

GP: Yes, I designed the program, it was all BASIC

GP: Though I think I made shortcuts, it was still just lots and lots of data

JB: Yeah, I imagine there would be loads of data. Multiloads?

GP: I think the best, most accomplished thing I did for the Oric was too late - megabase. It had a core assembly language database engine.

GP: It's amazing how much fits into 48K

JB: Or 64K now with the Disc drive and special disc loaders. So was Megabase based around any popular format?

GP: No, I based it on what I would need to implement Oric base. It extended BASIC with databasc type facilities, so anyone could write database type applications with BASIC commands, quite a bit like SQL, but 10 years earlier LOL

JB: Wow, that could have been Big. But I think you mentioned before, that you haven't the source anymore?

JB: I've just found Mighty Bombjack for the C-64 !!!

GP: I think the source to megabase disappeared in the "big skip chuckout" of 1991!

JB: 1990 Tecmo/Elite

GP: Ah yes Elite

GP: God, there's one game I did that never got released, pity because it wasn't bad - a game called September

JB: I'll notify the site of who the proper author was... But who did the Music and Graphics again?

GP: Well the graphics were largely converted from the arcade machine data

GP: But those that weren't were drawn by us lot

JB: the title/loading screen shot looks incredible for 1990, maybe I'm looking at the Amiga version, was their one?

GP: nooo it was a good picture that!

GP: September.. The lad who invented it was rather annoying, a get-rich-quick kid

JB: Bloody amazing, ooh, and their's a SID link...

GP: You know, I cant remember how the audio was done

JB: hehe, it was 12 years ago!

GP: I think I found the data in there for the notes

JB: my god, 30 Tunes!!!

GP: yes, lots of jingles

GP: end of level, bonus, torture, awards, pickups

JB: hehe, but Who did do the Music....

GP: quite a good piece of work. All assembler

JB: hehe, i'm gonna find that game now...

GP: Well as I say, I think the music came straight from the arcade machine's data

GP: I did the hard graft, the programming

GP: Should be my name somewhere in the code by the way

GP: I mean, I probably put it in as ascii somewhere

JB: aha! Nice little ditties

GP: it was quite well polished

JB: Looks like it

JB: So what MSX titles did you write?

GP: elidon, multigames, — mmm spy vs spy 2? not sure.. Oh and boulderdash something.

GP: <http://www.classicgaming.com/rotw/mbombjack.shtml>

JB: Elidon: i seem to remember that on the C-64, what was that one all about?

GP: fairies!

GP: flying around a labyrinth

JB: hehe, sounds a bit queer

GP: mmm, not a bad game though

JB: No doubt So were their any other games you worked on for the C-64?

GP: some things that never got any where, september as I said. Sure there were others, because I knew the C64 quite well, but I can't recall any!

GP: that page gives a download, but its slow

GP: Oh my word, it has my old epy phone number in the hex

JB: hehe, excellent. And now some old granny must take your fan mail!

GP: gosh, I am glad my name is in the data

JB: What was September all about?

GP: September was a board game, sticking shapes down to connect one end to another

JB: So did you do the Graphics for Mighty Bombjack?

GP: I extracted them, and Roger's graphics man drew the images that weren't available, or not suitable to

sprites

JB: Interesting, on the C-64 again?

GP: yes, and spectrum and amstrad - other programmers at orpheus working on it

GP: I did the logic behind the game

JB: I can appreciate by far, the coding is the hardest part

GP: But you know - I realised after I could do better a.i. There were things I learned a few years later about searching for solutions in games (like chess) - shortcuts that would have made it play better

JB: When i write games.... I love doing the Graphics... I love doing the Music... I love doing the Sound Effects... I love doing the Code... I hate Debugging!!

GP: hehe, it can drive you mad

JB: Talking of AI, i'm currently working on the creature code for Times of Lore conversion to the Oric. Bloody nightmare!!

GP: Yes, can be.. Can also be the most fun part

GP: Talk to me if you ever do a game which like chess requires thinking ahead (what if he goes here, I go there...)

GP: Not that I want to code it, but there's some principles that make a huge difference

GP: God mighty bombjack is everywhere

JB: Have you seen Fabrice's Maze drawing routine? Simply Amazing! (No pun intended)

GP: LOL no, but Fabrice is a remarkable man

JB: Indeed. Sorry, going back to Trouble in Store, how did you get the Synthesised voice? Was it synthesised or Sampled?

GP: sampled

GP: from some pretty tacky hardware

GP: It's probably my voice, but I wouldn't swear to that

GP: I think it was only 1 bit. I only found out later that you could modify the amplitudes of the sound chip to effect several bits. But the Oric's access to that sound chip wasn't too clever, so may not have been possible

GP: I recall I just took the data in with a brute force read of the port, at a fast rate

JB: Thankyou. Many years back me and Nick Haworth worked on using your Sample routine to sample the voice through the Cassette port (You'd put the routine in your book), though it was never as good (In a very crude sense) as the sample in Trouble in store.

GP: curious that, perhaps I'd improved the method by that time, not sure what came first to be honest

JB: hehe, same here But all WE got was eeeeeerrrgggghhhshshsh for "Hello"

GP: Perhaps I bypassed the cassette interface?

GP: I did the same for voice chess, a bit earlier - that's probably the same technology as the book, and that's why it's not so good - using cassette- pretty bad idea.

JB: Yes, maybe that would make sense. But you know we now have three channel Sample Sounds on the Oric?, surely?

GP: But how does that help?

GP: Oh you mean now now

GP: there's a D to A in the modern Orics?

JB: Sorry, erm.. yes, now now hehe

JB: Well what is the Volume registers inside the Oric if they aren't D/A converters?

GP: but that's CHEATING

GP: Yes, that's what I meant about seeing this later - to be honest I saw it in someone else's code for another machine with that device Speccy perhaps?

GP: in effect it just amplifies noise with a varying output level 0-15? And then you can combine channels together to get various output levels total, perhaps 5 bit output in effect

JB: I abhor cheating, so i don't. though it depends where you think i'm cheating. if you are thinking that i am using external hardware, you are incorrect

GP: But on the Oric, access to that chip is through indirect port, if I remember

GP: Oh - standard Oric?

JB: Yes, but do you remember something called the Shift register?

GP: mm yes?

JB: of course, do you think i'd lower myself to add on expansions just to improve a perfectly capable machine in its own right (Well maybe not that capable! hehe)?

GP: So you can use the shift register to get some nicer sampled output?

JB: Well you can set up the shift register and a couple of others to make a location in the 6522 a virtual Sound Chip register, thereby virtual 4 bit D/A

GP: God, how clever!

JB: But this is not all. Their are many other developments that have been achieved on the Oric since 1990's. Seemingly Full colour modes etc.. Why do you think i'm still such an Oric Addict?!! hehe

GP: Mmm hehh, I can see the attraction. I just feel these days, there's always something I don't know that I ought to learn. I am still learning so much every year. Learned loads about databases in the last year, tons of things.

JB: Yes, their is an awful lot to learn, and definitely not enough time to learn everything.

GP: No, but its dangerous to bury one's head in the sand, I've done that a few times - not learning C until quite late, etc

JB: Hmmm, indeed

GP: hehe I am going to play mighty bombjack, downloading the emulator

JB: 22:14 Apparently, their was a "Back in Time Live" event in Birmingham last May with such VIP's as Rob Hubbard, Fred Grey, Martin Galway and Chris Huelsbeck their. Damn, i would have loved to have gone!

GP: Gosh what fun heh

JB: hehe Is that a little sarcasm i hear? hehe

GP: nooo really, heh, its fun to meet up with people from the past

JB: Fancy Mighty Bombjack being game of the Week!, wow!

GP: ah well it was about 10 weeks ago

GP: too much of a coincidence to be this week

JB: Even so...

GP: yes, nice to have found that, thank you.

JB: Nice to be seeing it now, thank... You

JB: Right, i'm off to play the game too now...

GP: hehe ok speak to you soon!

GP: bye for now!

JB: Cya, and thankyou again

