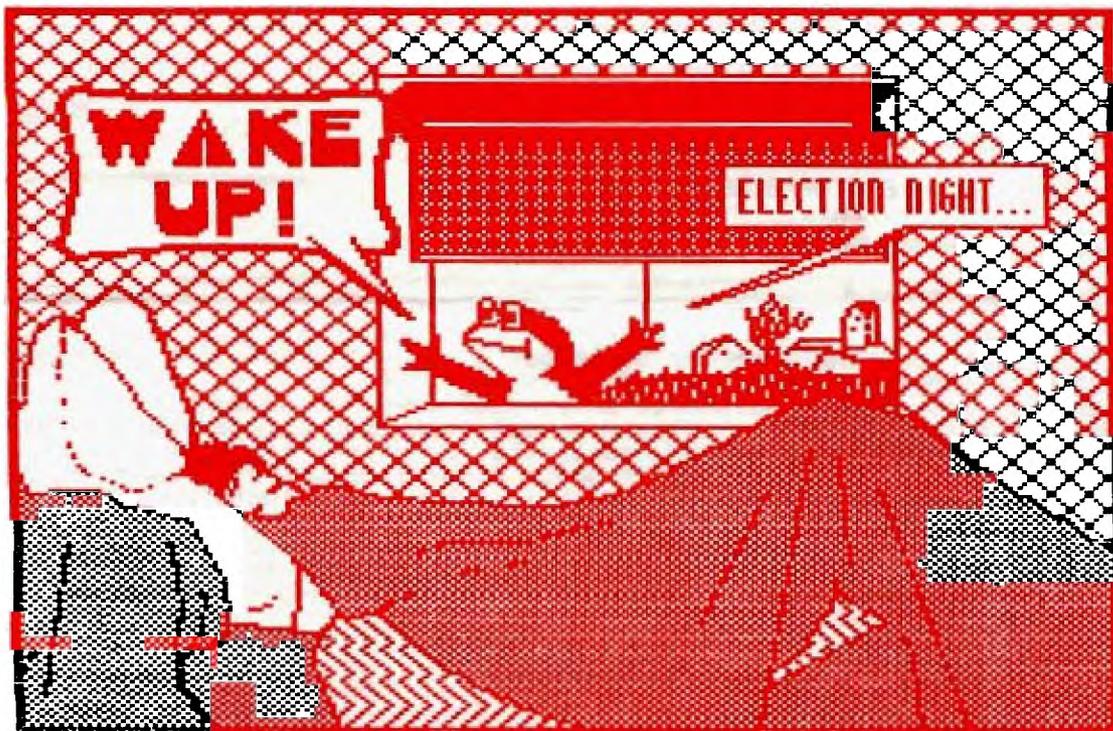




The Ottawa T.I.99/4A Users' Group



VOLUME 9 NUMBER 8 October 1990



DON 'T FORGET THE MEETING -- October 2 1990
and remember to return your exchange newsletters...

P.O. BOX 2144, STATION D, OTTAWA
*** ONTARIO, CANADA K1P 5W3 ***

COMING EVENTS

October Meeting:	2 Oct 1990 7:30 PM	Merivale High School
TI-BASE Workshop:	TBP (check at next club mtg and on the BBS)	Bill Sponchia's home. No need to call if you were at the first meeting, but if you are a newcomer, please let Bill know so he will have an idea of what to prepare for.
November Meeting:	6 Nov 1990 7:30 PM	Merivale High School
December Meeting:	4 Dec 1990 7:30 PM	Merivale High School
Newsletter Deadline:	12 Oct 1990	(14 Oct. if Uploaded to BBS!)

EDITOR'S NOTES by Philip Harris

Well first I would like to welcome everyone back from their summer holidays and thank Lucie for putting together September's issue for us. I trust everyone had a chance to "get away" for part of the summer. As Lucie said in the last Newsletter, I was off to England to enjoy four weeks of no work, pub lunches, REAL beer, cream teas, castle viewing and just trekking across the beautiful countryside. It was a combined meet the relatives (my wife's and mine), honeymoon and holiday all rolled up in one. After four weeks it sure takes a while to re-adjust to work again. While in the UK I couldn't help but notice the computer magazines! There are literally dozens of them, though sadly none for the TI anymore. Most magazines even provide disks (5 1/4 or 3 1/2") with their shareware or public domain software on them (unlike the North American magazines that expect you to download their programs-of-the-month through Comp-U-Serve or other BBSs).

As you no doubt noticed, this issue is again a lean one. We are certainly very short at the moment on material for the Newsletter. Up until the summer we had Bill Sponchia's Hints and Tips column that provided the filler needed to print out a twelve page newsletter. Now we are lucky if we can get enough material for eight pages! You don't always have to be inventive. Sometimes it helps to print articles on areas that have been covered before, but you've seen a new light or twist to it. How many times have we come across a problem and say "I read the solution to that somewhere, months ago. Now where is that article?". Well that is precisely why a fresh approach and an old solution/ idea is welcome. I have left part of Lucie's editorial comments below from the last newsletter, since they are still valid. See you at the next meeting!

This is not a literary journal nor a scholarly publication, just a link between friends. Are you shy at parties? Then why are you shy of writing? Just sit in front of your TI and type away, you never know. The page at the right was done in half an hour, when I realized that I had nothing to fill it; and then I had to cut some paragraphs!

So, I hope that this is not our last few Newsletters. If you like to read one, help us put it together, PPPPLLLLLEEEEEAAAAASSSSSEEEEE!!!!

THE PRESIDENT'S TWO CENTS WORTH

For those that were not at the September meeting, we were informed that there is NO longer any SMOKING allowed ANYWHERE on the school's property (new Carleton Board of Education regulations). So please be advised before attending the next meeting, that you will literally have to stand on the street edge to have a cigarette.

At the October meeting we will be putting forward the schedule of the monthly club meeting for the next year and holding our annual elections for members of the club's executive (see note below). We intend on conducting a demonstration of TI Base Ver II and a demo of the "Disk of the Month", which for October will be "Quick Dirty Posters" by Jim Peterson. I know it sounds X rated but I assure you that the "dirty" just means easy, unpolished pictures. Also to be discussed at the meeting is the possibility of a group membership to Comp-U-Serve that the clubs members could use. Hope to see you there!

Executive elections will be in October. Anyone interested in any of the positions should let a member of the executive know. And for all of you who said maybe next year, remember it's next year.

FAST EXTENDED BASE

Lucie Dorais

This program is about Visual Perception, or how your eyes can deceive your brain; or is it the opposite? Some of the problems in this program are classics, some are not.

The program is very modular; that is, each section (module) is totally independent from the others, with its own sub(s) at the end of each module. The only things in common are the Menu at the beginning and the two global subs at the end. Actually, each module can be used by itself, provided that each has the global subs. If you have a disk system, it also means that each module can be entered alone and fully debugged, then saved in the MERGE form, before you proceed with the next module. In the end, you just merge the four modules together. If you have only a cassette system, you can still enter and debug each module before you proceed to the next, but you will have to "attach" it to the modules already typed, as the cassette cannot use the MERGE function.

(A reminder: to save in a MERGEable form, do: SAVE DSKx.FILENAME, MERGE; to recall it, do MERGE DSKx.FILENAME, not OLD, since OLD destroys what you have in memory, while MERGE does not.)

Since this is a rather long program, and because it will save me the agony of having to invent a new program next month, I give you only one visual perception problem this month. Don't be afraid, the next three are much shorter, being in total about the same length as the first one.

Let's start with the pre-scan and the MENU. The dummy DATA in line 110 is there only because at least one DATA line has to precede the pre-scan. The CALL SCR(8) is a call to our only user-defined sub: it clears the screen and changes its color (for variety, each module has its own color). As you can see, the program will also use sprites, a good way to refresh your memory of them; but you will have to wait until next month!

```
100 REM ** VISUAL PERCEPTION ** by L. Dorais / Ottawa UG / Sept. 1990
110 DATA dummy
120 DIM A(5),B(5) :: GOTO 140 :: C,CC,D,K,R,RR,S,SC,X,Y,A$,B$,C$,D$ :: CALL
CHAR :: CALL HCHAR :: CALL COLOR
130 CALL SPRITE :: CALL DELSPRITE :: CALL MAGNIFY :: CALL LOCATE :: !@P-
140 CALL SCR(8) :: DISPLAY AT(3,6):"VISUAL PERCEPTION": : : : " 1- COLOR
CONTRAST": : " 2- WHICH IS THE LONGEST?"
150 DISPLAY AT(12,3):"3- SAY THE COLOR": : " 4- WHAT DO YOU SEE?": : : " 5- EN
160 GOSUB 1020 :: IF K<49 OR K>53 THEN 160
170 IF K=53 THEN END ELSE ON K-48 GOTO 190,510,670,850
```

And now the two global subs: one is a normal GOSUB, the other the usef-defined SUB SCR mentioned above:

```
1000 !@P+ ** global subs **
1010 DISPLAY AT(24,7):"PRESS ANY KEY..."
1020 CALL KEY(O,K,S) :: IF S=0 THEN 1020 ELSE RETURN
1030 SUB SCR(X) :: CALL CLEAR :: CALL SCREEN(X) :: SUBEND
```

The first problem of Visual Perception is based on the ability of the brain to retain a color, and then to mix it with another right in the brain. The problem is often reproduced in books, but each time it is given in only one color contrast. Thanks to Tex, we can have a choice of ten contrasts (five times two colors); I tried to use only the colors which offered the stronger contrasts. The instructions and explanations are in the program itself.

```
180 !
190 ! ** color contrast **
200 CALL SCR(15) :: DISPLAY AT(1,8):"COLOR CONTRAST": : "IF YOU LOOK LONG
    ENOUGH AT A SQUARE ON A CONTRASTING"
210 DISPLAY AT(5,1):"COLOR, AND THEN IF IT DIS- APPEARS, YOUR EYE WILL KEEP
    A 'MEMORY' OF IT."
220 DISPLAY AT(9,1):"IN THIS EXERCISE, YOU ARE ASKED TO CHOSE A CONTRAST,
    THEN THE SCREEN WILL SHOW A SQUARE SET ON CONTRASTING"
230 DISPLAY AT(13,1):"COLOR.": : "LOOK AT IT LONG ENOUGH, NOT LESS THAN A
    MINUTE. THEN PRESS ANY KEY: THE SQUARE"
240 DISPLAY AT(18,1):"WILL DISAPPEAR, AND YOU SHOULD SEE ITS 'MEMORY'."
    : : "WHEN YOU HAVE ENOUGH, PRESS A KEY AGAIN."

250 GOSUB 1010 :: CALL CLEAR :: A$="FFFFFFFFFFFFFFFF" :: CALL CHAR(97,A$)
260 DATA 16,14,9,3,11,14,2,16,12,5
270 RESTORE 260 :: FOR X=1 TO 5 :: READ A(X),B(X) :: CALL COLOR(9+X,A(X),B(X))
    :: Y=8*X+96
280 CALL CHAR(Y,"",Y+1,"00003C3C3C3C",Y+2,A$,Y+3,"FFFC3C3C3C3FFF") :: NEXT X
290 GOSUB 380 :: GOSUB 470 :: CC=SC :: GOSUB 460
300 GOSUB 480 :: IF K=89 THEN 290
310 DISPLAY AT(10,1):"NOW, WHAT HAPPENS IF THE SQUARE DOES NOT DISAPPEAR,
    BUT THE COLORS ARE INVERTED?"
320 DISPLAY AT(15,1):"DO YOU WANT TO TRY? (Y/N)" :: GOSUB 490 :: IF K=78
    THEN 140
330 GOSUB 380 :: GOSUB 470 :: D=SC :: SC=CC :: CC=D :: GOSUB 460 :: GOSUB 480
    :: IF K=89 THEN 330
340 DISPLAY AT(5,1):"IF YOU LOOKED AT THE FIRST SQUARE LONG ENOUGH, THEN
    ITS 'MEMORY' WILL MIX WITH THE NEW COLOR, AND THE COLOR"
350 DISPLAY AT(9,1):"OF BOTH THE SQUARE AND THE BACKGROUND SHOULD BE SOME
    MIXTURE OF BOTH..."
360 DISPLAY AT(15,1):"NOW, ARE YOU SURE YOU LOOKEDAT THE FIRST SQUARE FOR
    MORETHAN ONE MINUTE???" :: GOSUB 1010 :: GOTO 140
370 ! subs
380 CALL CLEAR :: FOR X=1 TO 5 :: Y=8*X+96 :: R=3 :: C=6*X-3 :: D=64
390 GOSUB 450 :: Y=Y+2 :: R=11 :: D=69 :: GOSUB 450 :: NEXT X
400 DISPLAY AT(22,6):"PRESS A KEY FOR": " CHOICE OF CONTRAST"
410 GOSUB 1020 :: IF K<65 OR K>74 THEN 410 ELSE K=K-64
420 IF K<6 THEN CC=A(K) :: SC=B(K) ELSE CC=B(K-5) :: SC=A(K-5)
430 CALL CLEAR :: GOSUB 460
440 FOR X=10 TO 15 :: DISPLAY AT(X,12):"aaaaaa" :: NEXT X :: RETURN
450 FOR K=R TO R+2 :: CALL HCHAR(K,C,Y,3) :: NEXT K :: CALL
    HCHAR(R+1,C+1,Y+1) :: CALL HCHAR(R+4,C+1,D+X) :: RETURN
460 CALL SCREEN(SC) :: CALL COLOR(9,CC,1) :: RETURN
470 FOR D=1 TO 500 :: NEXT D :: GOSUB 1020 :: RETURN
480 GOSUB 470 :: CALL SCR(15) :: DISPLAY AT(5,3)BCTP:"ANOTHER CONTRAST? (Y/N)"
490 GOSUB 1020 :: IF (K<>78 AND K<>89)THEN 490 ELSE RETURN
```

Lines 200-240 just display a screen of explanations of the problem. When typing text, always make sure that no word will be cut at the right side of the screen; to make sure, always align the first word of a new line under the first character of the preceding line; each screen line has of course 28 characters. Then the GOSUB 1010 asks you to press any key to start.

In this program, all text is in capitals, and the small letters are used for the graphics; here, letter "A" is redefined as a block; we put the definition into variable A\$ because we will use it again; why bother to type it twice? The DATA in line 260 is for our five color contrasts, read into A(X) and B(X) in the next line; RESTORE 260 will allow Tex to be able to find the right data line each time it runs that portion of the program. To save running time, we use the same loop to CALL COLOR sets 10 to 14, and to redefine the first four characters in each set. Variable Y takes the value of the first character of each set: 104, 112, 120, 128 and 136. Line 280 CALL CHARs these characters and the three next in each set.

We now need to display the Color Contrast Menu, then to change the screen into the chosen contrast; all this is done by the SUB in lines 380-440. Again, Y will take the value of the first character in each color set; the color contrasts are displayed on two rows of five contrasts each. For the first row, displayed at row R=3, C is the column, and D the value of character 64, to which we will add the value of X to get the menu choices A-E. The CALL HCHARs in the secondary sub in line 450 first display three rows of three times character Y (we recycle variable K, usually kept for the call keys); then, in the middle of that square, (R+1,C+1), we call char the character next to Y, a smaller square in the contrasting color. The menu letter D+X is then displayed under the big square.

RETURNING to our main sub, back to line 390, we increment the Y character by two (to get the third and fourth char. in the set), the row becomes 11, the default character D becomes 69, and back we go to draw a contrasting square on the bottom row. This is done five times, then you press a key (A-J, ASCII 65-74) for your choice. If you pressed a key in the top row, letters A-E, the character color CC will be A(X), the screen color SC will be B(X); if your key was in the bottom row (F-J), the colors are inverted. The screen is then CLEARED, then another secondary sub (line 460) colors it with SC and set 9 is colored with CC (remember above, we defined "a" as a block?). Why don't we use the SUB SCR to do part of this (clear and color screen)? Because later we will need to recolor the screen without clearing it...

Finally, before exiting the main SUB, Tex displays a big square all made up of "aaaaa"s in the middle of the screen. Upon coming back to the main program (we are still in line 290), we GOSUB 470 for a short delay, and from there we GOSUB 1020 to tell Tex to wait for us to press a key; the delay is just to prevent you to press the second key too quickly. When you press a key, the square in the middle of the screen will disappear; this is done very fast by coloring it with SC; that is, character color CC becomes the same as screen color SC; we then GOSUB 460 to recolor set 9; the CALL SCREEN(SC) will have to visible effect, since SC was not changed.

Now, the GOSUB 480 in line 300 leads us to another delay and call key (GOSUB 470), but this time when you press a key the screen is cleared and colored grey (15), and Tex asks you if you want another contrast. Upon return to line 300 in the main program, if you said Yes, you are taken back to line 290 to display the contrast menu again. You can now run and play with that part of the program. When you are bored, ask yourself the question DISPLAYED in line 310, and type the remaining portion of the module to get the answer! (Tex, being polite, does not force the second exercise on you: if you answer No in line 320, you are taken back to the main menu.)

In line 330 we again GOSUB 380 to display the color contrast menu, followed by the delay and the call key. This time, when you press a key, the colors of the square and of the screen background will be inverted. To do this, we need to store the screen color SC in a temporary variable D (we save memory by recycling this now useless variable), then SC becomes CC, and CC takes the value of D. The GOSUB 460 will re-color both screen and square (set 9), and the GOSUB 480 will perform the delay, call key, and ask you for another contrast. If you say Yes, back to the beginning of the line.

If you say No, you are given a screen of explanations (lines 340-360), followed by a note to press a key, then you GOTO 140 to the main menu. Have fun, but don't strain your eyes!

WANT TO HELP OUT YOUR CLUB ?

THE OTTAWA TI99/ 4A USERS GROUP
NEEDS YOUR HELP .

YOU CAN BE A LOCAL AREA CONTACT
FOR NEW MEMBERS FOR YOUR CLUB
THIS INSERT IS OUR BEST BET TO FIND
NEW MEMBERS .

IT IS DESIGNED TO BE PLACED BY YOU
IN A LOCATION OF YOUR CHOOSING.
JUST TAKE THIS TO YOUR NEAREST
CORNER CONVENIENCE STORE,
LIBRARY, OR OTHER NOTICEABLE LOCATION.

DO YOU REALLY WANT TO GET INVOLVED ?
WHY NOT PEN IN YOUR NAME
AND TELEPHONE NUMBER ON THE OTHER SIDE ?
YOU CAN BE THE LOCAL AREA CONTACT
FOR YOUR CLUB
A FEW MINUTES OF YOUR TIME WILL
HELP TO ENSURE THE SUCCESS OF THE CLUB
AND YOU WILL ENJOY THE FEELING OF
PARTICIPATION .

FROM YOUR CLUB EXECUTIVE...THANKS

HOTLINE NUMBERS

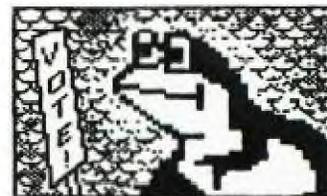
The executive has expressed a desire to assist all members should you have some problems or questions, want to do some library swapping or borrow a book. This will be the place to look. Listed here are the members of the executive, committee heads, and others in the group willing to help in their specialized areas. Of course, if you wish to be placed on the list, just give me a call. I know there is a lot of expertise within our Group, so I hope to add to this list. Please respect normal hours unless you specifically know that someone doesn't mind a call at 3a.m., or use the BBS to leave a message at 738-0617, 24 hours a day, 7 days a week.

CHARLES EARL.....PRESIDENT.....(613) 231-3651
JOHN CLARKE.....VICE PRESIDENT.....(613) 838-2081
MICHEL GOSSELIN.....SECRETARY.....(819) 684-3983
RALPH KUHN.....TREASURER.....(613) 236-2182
JANE LAFLAMME.....PAST PRESIDENT...(H) (613) 837-1719 or (W) 745-2225
PETER ARPIN.....SYSOP.....(613) 523-0017
BILL SPONCHIA.....WORKSHOPS.....(613) 523-0878
TONY HOPKINS.....(FORMER) ADVERTISING REP.....(613) 746-4463
DAVE MORRISON.....LIBRARY CHAIRMAN.....(613) 737-4889
STEVEN BRIDGETT.....CASSETTE LIBRARIAN.....(613) 521-3631
HENRI MONAT.....ARCHIVES.....(613) 824-0941
LUCIE DORAIS.....MEMBERSHIPS.....(613) 232-0393
BOB BOONE.....HARDWARE/SOFTWARE.....(705) 476-9391
ART GREEN.....ASSEMBLY HELP.....(613) 837-1955
DICK PICHE.....TECH.....(613) 521-8667
DAVID CARON.....TECH, EXTENDED BASIC, ASSEMBLY HELP..(613) 837-1397
PHILIP HARRIS.....NEWSLETTER EDITOR.....(613) 836-5049
CLUB BBS.....SET MODEM TO 8N1.....(613) 738-0617

ELECTIONS OCTOBER MEETING

ASK NOT WHAT THE CLUB CAN DO FOR YOU;
BUT WHAT YOU CAN DO FOR THE CLUB.

J. F. FROGGEDY



EPK 31 072



FROM

**P.O. BOX 2144, STATION D, OTTAWA
*** ONTARIO, CANADA K1P 5W3 *****

EDMONTON 99er COMP.US.SOC
PO BOX 11983
EDMONTON, ALB
TSJ 3L1