QDP [Quick and Dirty PAPER?]

~~SPL~~

5 JN 69

[NO CHANGES]

FANTICS DRAFT 5 JUNE
~~MOST COMPLETE~~
FOLLOWED BY MANY NOTES

START

J6070837

MONDAY, JUNE 2, 1969
AT THE END OF THE PRINTOUT FOR EACH JOB STEP, FOLLOWING THE 'REGION, CORE USED'
LINE, THERE IS A NEW LINE CONTAINING THE COUNT OF I/O OPERATIONS PERFORMED
DURING THE STEP.   DA IS DIRECT ACCESS, TP IS TAPE, UR IS UNIT RECORD, GR IS
GRAPHICS, CE IS COMMUNICATION EQUIPMENT.

```
//TEXT360 JOB (1518,DER,9,4),'PRINT NELSONB',MSGLEVEL=1
//JOBLIB DD DSNAME=SYS1.P1518.AVD.T360,DISP=(SHR,PASS),UNIT=SYSDA,      X
//          VOLUME=SER=AVDPAK
//     DD DSNAME=SYS1.P1518.AVD.T360S5,DISP=(SHR,PASS),UNIT=2314,       X
//          VOLUME=SER=AVDPAK
// EXEC TEXT360,IN=NELSONB,PARM.STEP5=S
X* TEXT360     PROC    OUT=A                                            0C00001C
X> STEP1    EXEC  PGM=FMAINT                                            0C000020
X> SYSIN DD DISP=(SHR,PASS),UNIT=2314,VOLUME=SER=AVDPAK,                X0C000030
X>          DCB=(RECFM=FB,LRECL=80,BLKSIZE=1600),                       X0C00004C
X>          DSNAME=SYS1.P1518.AVD.&IN                                   0C000050
X> SYSPRINT DD  SYSOUT=A,DCB=(RECFM=VA,LRECL=137,BLKSIZE=141)           0C000060
X> INTER    DD  DSNAME=&WORK1,DISP=(,PASS),SPACE=(CYL,(15,15)),         X0C000070
X>           DCB=(BLKSIZE=2400,LRECL=600,RECFM=FB),                     X0C00008C
X>           UNIT=SYSDA                                                 0C000090
Y>FXCEPTN DD  DSNAME=&EXCFILE,DCB=(,BLKSIZE=300),                       X0C000100
X>           SPACE=(TRK,(100,20)),DISP=(NEW,PASS),                      X0C00011C
X>           UNIT=(SYSDA,SEP=INTER)                                     0C000120
IEF236I ALLOC. FOR J6070837 STEP1
IEF237I JOBLIB    ON 236
IEF237I           ON 236
IEF237I SYSIN     ON 236
IEF237I SYSPRINT ON 232
IEF237I INTER    ON 233
IEF237I EXCEPTN  ON 231
071854000              BEGIN PHASE 1
072010300              END PHASE 1
```

```
IEF285I    SYS'.P1518.AVD.T360                              PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P151R.AVD.T360S5                            PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.NELSONB                           PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS69156.TO70811.SVC00.J6070837.R0000008         SYSOUT
IEF285I    VOL SER NOS= MVTSPL.
IEF285I    SYS69156.TO70811.RVC0C.J6070837.WORK1            PASSED
IEF285I    VOL SER NOS= BU0008.
IEF285I    SYS69156.TO70811.RVC0C.J6070837.EXCFILE          PASSED
IEF285I    VOL SER NOS= BU0004.
REGION = 150K CORE USED =   86K CPU TIME = 0.018 WAIT TIME = 0.002
I/O COUNT=(DA=       261,TP=         0,UR=         0,GR=         0,CE=         0)
X STEP2     EXEC  PGM=BLDLIN                                          00000130
X> SYSPRINT DD  SYSOUT=A,DCB=(RECFM=VA,LRECL=137,BLKSIZE=141)         00000140
X  INTER    DD  DSNAME=*.STEP1.INTER,UNIT=SYSDA,                    X 00000150
X>            DISP=(SHR,DELETE),VOLUME=REF=*.STEP1.INTER,           X 00000160
X>            DCB=(BLKSIZE=2400,LRECL=600,RECFM=FB)                   00000170
X> EXCEPTN DD DSNAME=*.STEP1.EXCEPTN,DISP=(MOD,PASS),UNIT=2314,     X 00000180
X            DCB=(BLKSIZE=300),VOLUME=REF=*.STEP1.EXCEPTN             00000190
X> LAYFILE  DD  DSNAME=&WORK2,UNIT=(SYSDA,SEP=(INTER,EXCEPTN)),     X 00000200
X>            DCB=(,BLKSIZE=1056,RECFM=FB,LRECL=176),DISP=(NEW,PASS),X 00000210
X            SPACE=(CYL,(20,20))                                      00000220
IEF236I ALLOC. FOR J6070837 STEP2
IEF237I JOBLIB   ON 236
IEF237I          ON 236
IEF237I SYSPRINT ON 232
IEF237I INTER    ON 233
IEF237I EXCEPTN  ON 231
IEF237I LAYFILE  ON 235
072045540               BEGIN PHASE 2
ALTER                   PAGE
ALTER                   SWIDTH
ALTER                   LENGTH
ALTER                   DEPTH
ALTER                   LIST
ALTER                   LIST
ALTER                   HEADB
ALTER                   NOHYPH
ALTER                   FRONT
ALTER                   DATE
ALTER                   DOUBLE
ALTER                   SWIDTH
ALTER                   LENGTH
ALTER                   LENGTH
ALTER                   FRONT
ALTER                   DATE
ALTER                   DOUBLE
ALTER                   SWIDTH
ALTER                   NOHYPH
ALTER                   NOJUST
ALTER                   COLJUSTOFF
ALTER                   SWIDTH
ALTER                   LENGTH
ALTER                   MARGIN
ALTER                   DEPTH
ALTER                   DEPTH
072440560               END PHASE 2




IEF285I    SYS1.P1518.AVD.T360                              PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.T360S5                            PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS69156.TO70811.SVC00.J6070837.R0000009         SYSOUT
IEF285I    VOL SER NOS= MVTSPL.
IEF285I    SYS69156.TO70811.RVC00.J6070837.WORK1            DELETED
IEF285I    VOL SER NOS= BU0008.
IEF285I    SYS69156.TO70811.RVC00.J6070837.EXCFILE          PASSED
IEF285I    VOL SER NOS= BU0004.
IEF285I    SYS69156.TO70811.RVC00.J6070837.WORK2            PASSED
IEF285I    VOL SER NOS= BU0007.
REGION = 150K CORE USED = 110K CPU TIME = 0.055 WAIT TIME = 0.002
I/O COUNT=(DA=       858,TP=         0,UR=         0,GR=         0,CE=         0)
X STEP3     EXEC  PGM=PLAOUT                                          00000230
X>SYSPRINT DD   SYSOUT=A,DCB=(RECFM=VA,LRECL=137,BLKSIZE=141)         00000240
X>LAYFILE DD DSNAME=*.STEP2.LAYFILE,DISP=(SHR,DELETE),UNIT=SYSDA,   X 00000250
X>            DCB=(,BLKSIZE=1056,RECFM=FB,LRECL=176),              X 00000260
X            VOLUME=REF=*.STEP2.LAYFILE                              00000270
X>EXCEPTN DD DSNAME=*.STEP1.EXCEPTN,DISP=(MOD,PASS),UNIT=SYSDA,     X 00000280
X>            DCB=(BLKSIZE=300),VOLUME=REF=*.STEP1.EXCEPTN            00000290
X>MASTER  DD DSNAME=&MASTFIL,UNIT=(SYSDA,SEP=(LAYFILE,EXCEPTN)),    X 00000300
X>            DISP=(,PASS),SPACE=(CYL,(20,20)),                    X 00000310
X            DCB=(BLKSIZE=132)                                        00000320
X>PRTOT DD DSNAME=SYS1.P1518.AVD.PRTFILE,UNIT=2314,DISP=SHR,        X 00000330
X            VOLUME=SEP=AVDPAK                                        00000340
IEF236I ALLOC. FOR J6070837 STEP3
IEF237I JOBLIB   ON 236
IEF237I          ON 236
IEF237I SYSPRINT ON 232
IEF237I LAYFILE  ON 235
IEF237I EXCEPTN  ON 231
IEF237I MASTER   ON 233
IEF237I PRTOT    ON 236
072501410               BEGIN PHASE 3
072856690               END PHASE 3
```

```
IEF285I    SYS1.P1518.AVD.T360                          PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.T360S5                        PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS69156.T070811.SVC00.J6070837.R0000010     SYSOUT
IEF285I    VOL SER NOS= MVTSPL.
IEF285I    SYS69156.T070811.RV000.J6070837.WORK2        DELETED
IEF285I    VOL SER NOS= BU0007.
IEF285I    SYS69156.T070811.RV000.J6070837.EXCFILE      PASSED
IEF285I    VOL SER NOS= BU0004.
IEF285I    SYS69156.T070811.RV000.J6070837.MASTFIL      PASSED
IEF285I    VOL SER NOS= BU0008.
IEF285I    SYS1.P1518.AVD.PRTFILE                       KEPT
IEF285I    VOL SER NOS= AVDPAK.
REGION = 150K CORE USED = 104K CPU TIME = 0.036 WAIT TIME = 0.025
I/O COUNT=(DA=    6439,TP=        0,UR=        0,GR=        0,CE=        0)
X STEP4    EXEC  PGM=POSTPR                                         00000350
X SYSPRINT DD   SYSOUT=A,DCB=(RECFM=VA,LRECL=137,BLKSIZE=141)       00000360
X PRTOT DD  DSNAME=*.STEP3.PRTOT,DISP=(MOD,PASS),UNIT=SYSDA,       X00000370
X              VOLUME=SER=AVDPAK                                    00000380
XXEXCEPTN  DD   DSNAME=*.STEP1.EXCEPTN,VOLUME=REF=*.STEP1.EXCEPTN, X00000390
XX             DISP=(SHR,DELETE),UNIT=SYSDA,DCB=(BLKSIZE=300)       00000400
X MASTER   DD   DSNAME=*.STEP3.MASTER,VOLUME=REF=*.STEP3.MASTER,   X00000410
XX             DISP=(SHR,DELETE),DCB=(BLKSIZE=132),UNIT=SYSDA       00000420
X DICT DD DSNAME=SYS1.P1518.AVD.DICT,DISP=SHR,UNIT=SYSDA,          X00000430
XX             VOLUME=SER=AVDPAK                                    00000440
IEF236I ALLOC. FOR J6070837 STEP4
IEF237I JOBLIB   ON 236
IEF237I          ON 236
IEF237I SYSPRINT ON 232
IEF237I PRTOT    ON 236
IEF237I EXCEPTN  ON 231
IEF237I MASTER   ON 233
IEF237I DICT     ON 236
072906690               BEGIN PHASE 4
072915710               END PHASE 4
```

```
IEF285I    SYS1.P1518.AVD.T360                          PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.T360S5                        PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS69156.T070811.SV000.J6070837.R0000011     SYSOUT
IEF285I    VOL SER NOS= MVTSPL.
IEF285I    SYS1.P1518.AVD.PRTFILE                       PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS69156.T070811.RV000.J6070837.EXCFILE      DELETED
IEF285I    VOL SER NOS= BU0004.
IEF285I    SYS69156.T070811.RV000.J6070837.MASTFIL      DELETED
IEF285I    VOL SER NOS= BU0008.
IEF285I    SYS1.P1518.AVD.DICT                          KEPT
IEF285I    VOL SER NOS= AVDPAK.
REGION = 150K CORE USED = 104K CPU TIME = 0.000 WAIT TIME = 0.001
I/O COUNT=(DA=     161,TP=        0,UR=        0,GR=        0,CE=        0)
X STEP5  EXEC  PGM=PRINTOUT                                         00000450
X FINALPRT DD DSNAME=SYS1.P1518.AVD.PRTFILE,DISP=SHR,UNIT=2314,    X00000460
X              VOLUME=SER=AVDPAK                                    00000470
XX SYSPRINT DD  DCB=(,BLKSIZE,LRECL=132),SPACE=(TRK,(100,20)),     X00000480
X              SYSOUT=&OUT                                          00000490
IEF236I ALLOC. FOR J6070837 STEP5
IEF237I JOBLIB   ON 236
IEF237I          ON 236
IEF237I FINALPRT ON 236
IEF237I SYSPRINT ON 232
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THE NELSON ORGANIZATION, INC.

NEW YORK, N.Y.

PRELIMINARY MANUSCRIPT. NOT FOR SALE OR PUBLICATION.

1

5 JUNE, 1969

FANTICS

THEODOR H. NELSON

THE NELSON ORGANIZATION, INC.

NEW YORK, N.Y.

2

PREFACE.

THIS IS NOT A BOOK ABOUT "COMPUTERS."   I HAVE
WRITTEN SEVERAL OF THOSE.   IT IS A BOOK ABOUT
THOUGHT AND CREATIVITY, IN WHICH COMPUTERS WILL
PLAY AN UNSEEN, BUT BASIC PART. PEOPLE WILL HAVE
TO UNDERSTOOD WHAT THE SYSTEMS WILL BE ABOUT AND
WHAT THE MACHINES ARE DOING UNDERNEATH, AND NOT
LEAVE THESE MATTERS TO THE JUDGMENT OF "EXPERTS"--
FOR IN THIS NEW FIELD, THERE ARE NONE.

THIS IS A BOOK ABOUT,AMONG OTHER THINGS,
COMPUTERS   AND   SHOWS AND THE HUMAN MIND.THE
COMPUTER MAKES POSSIBLE UNDREAMED-OF WONDERS IN
THE SHOWING OF THINGS TO PEOPLE. AS AN INSTRUMENT
FOR PRESENTING, THE COMPUTER IS ALADDIN'S LAMP.
TO USE IT RIGHT WE MUST NOT BE FOOLED BY IT, ANY

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MORE THAN WE SHOULD FOOL ANYBODY WITH IT. I WANT
TO INTRODUCE THE WORD "FANTICS" TO MEAN THE
PRESENTATION AND STORING OF IDEAS AND IMPRESSIONS.
WE ARE ABOUT TO ENTER A FANTIC AGE AND A FANTIC
WORLD. RIGHT NOW WE ARE SURROUNDED WITH TRASHY
GIMCRACKS AND AUDIO-VISUAL TOYS; WE ARE ABOUT TO
MAKE THEM USEFUL AT LAST, AND BE ABLE TO CONTROL
SMOOTHLY OUR NEW TOTAL ENVIRONMENTS OF LIGHT,
SOUND, PICTURES AND WORDS.

THIS BOOK ENDEAVORS TO DELINEATE THE WAY SUCH A
WORLD SHOULD BE.1

BY FANTICS I MEAN THE HANDLING AND PRESENTATION
OF IDEAS; ESPECIALLY WITH REGARD TO MAKING THINGS
LOOK GOOD, FEEL RIGHT, AND COME ACROSS CLEARLY.
IN THE COMING TIME WE CAN TIE TOGETHER SOUND AND
LIGHT, WORDS AND PICTURES, AND INSTANTANEOUS
WITHDRAWALS FROM GREAT LIBRARIES.   THE   PETTY
DETAILS WILL BE HANDLED BY THOSE FINICKY BUT
CAPABLE MACHINES, THE COMPUTERS.

IT IS TIME TO DESIGN MAGICAL CASTLES TO LIVE

----
1. IT DOES NOT TELL THE READER VERY MUCH ABOUT
COMPUTERS, EXCEPT WHAT THEY WILL DO IN CERTAIN
CONTEXTS. IF THE READER WANTS TO KNOW WHAT
COMPUTERS   ACTUALLY   ARE   AND   DO,   WITHOUT
MATHEMATICAL ABRACADABRA OR TECHNICAL POMPOSITIES,
I REFER HIM TO MY LITTLE BOOKS THE__COMPUTER,
COMPUTER__SOFTWARE__AND__DESIGN, AND THE_COMPUTER
MYSTERIES.

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5 JUNE, 1969

IN; WE WILL DECORATE THEM WITH TAPESTRIES OF SOUND
AND PROJECTION, AND HANG THEM WITH MOBILES OF
WORDS. JUST AS TELEVISION TRANSFORMED THE WORLD
OF THE NINETEEN-FORTIES, THE COMPUTER DISPLAY AND
AUXILIARY CONTROLS WILL TRANSFORM THE WORLD OF THE
NINETEEN-SEVENTIES.WONDER WORLDS TO EXPLORE ONYOUR
SCREEN: FAIRYLANDS AND ENACTMENTS

NOT ALL WILL BE PROGRAMMERS, ALL WILL BE USERS
(JUST AS EVERYONE RIDES IN CARS, BUT FEW REACH
UNDER THE HOOD). BUT TO BUILD THIS WORLD RIGHT,
WE MUST UNDERSTAND THE CHARACTERISTICS OF
PRESENTATIONAL SYSTEMS: NOT PRETEND THEY ARE WHAT
THEY ARE NOT, ABSTRUSE TECHNICAL CLOCKWORK TO BE
ENGINEERED BY EXPERTS, BUT NEW THEATERS FOR THE
DRAMATIZATION OF IDEAS, THE EXPLORATION OF
THOUGHT, AND THE AMALGAMATION OF EFFECT. IF
PEOPLE IN GENERAL DO NOT UNDERSTAND WHAT IS
POSSIBLE, THE ENGINEERS WILL BUILD THEM PRISONS
INSTEAD OF PALACES.

MY POINT OF VIEW IS DIFFERENT FROM THAT OF
OTHERS, ESPECIALLY MARSHALL MCLUHAN AND
BUCKMINSTER FULLER, IN THAT I BELIEVE I CAN SAY
HERE VERY SPECIFICALLY WHAT IS TO COME. BY 1980
THE BOOK WILL BE OBSOLETE; THE SCHOOL WILL BE, IF
NOT REPLACED, DEEPLY RETRENCHED; AND MOST OF THE

5

AUDIO-VISUAL TEACHING EQUIPMENT NOW BEING MADE,
AND HAILED AS REVOLUTIONARY, WILL BE ON THE SCRAP
HEAP.

ONE THING THE READER SHOULD UNDERSTAND ABOUT
THIS BOOK. I DISAGREE WITH ALMOST EVERYONE.MY
IDEAS ABOUT COMPUTERS AND THE HUMAN MIND DO NOT
APPEAR TO BE THE SAME AS THOSE OF ANYONE ELSE IN
THE PRESENT CENTURY.2 TO STATE IT MORE POSITIVELY,
THIS BOOK ASSERTS AND ADVOCATES VARIOUS THINGS
WHICH EXPERTS AND EXPERIENCED OBSERVERS IN A GREAT
VARIETY OF FIELDS APPEAR NOT YET TO HAVE THOUGHT
OF, OR MAY HAVE ALREADY REJECTED. BUT I THINK I
AM RIGHT, AND CONSEQUENTLY THAT I WILL NOT BE IN
DISAGREEMENT WITH PEOPLE VERY LONG.

MANY PEOPLE HAVE TOLD ME, "I AGREE WITH SOME
THINGS THAT YOU SAY, BUT I CAN'T GO ALONG WITH ALL
OF IT-- AND YOUR EXTREMER VIEWS THROW PEOPLE OFF.
YOU COULD GET FARTHER IF YOU PRESENTED IT IN A WAY
THAT WOULD RELATE MORE TO WHAT PEOPLE ARE USED TO,
AND TONE DOWN THE BITTER AND CYNICAL ASPECTS."
BUT THAT WOULD DEFEAT THE PURPOSE OF THIS BOOK.
THE PURPOSE OF THIS BOOK IS TO COMMUNICATE A
UNIFIED POINT OF VIEW,A VISION. TO DILUTE THIS,

----
2. THERE MAY BE ONE OR TWO PEOPLE IN THE PENTAGON
THAT HOLD SOME VIEWS SUCH AS THESE, BUT THEY ARE
TACITURN AND DO NOT SAY.

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TO SWEETEN IT OR PRESENT IT INGRATIATINGLY WOULD
BE DISHONEST.

DIFFERENT PEOPLE HAVE HEARD DIFFERENT PARTS OF
THIS VISION-- FROM A TO B, OR FROM J TO N-- BUT
NOT FROM A TO Z. THAT IS THIS BOOK.

I DO NOT HAVE ANY "TECHNICAL BACKGROUND" IN
THIS FIELD, WHATEVER THIS FIELD IS. MY FIRST
INTEREST WAS AS A WRITER AND SHOWMAN. SINCE 1960,
FOR EIGHT YEARS NOW, I HAVE BEEN BURDENED BY THESE
VIEWS-- WHICH OTHERS FOUND EXTREME, SINISTER AND
INCOMPREHENSIBLE.

MY ADVENTURES IN THIS ODYSSEY HAVE BEEN MOST
CURIOUS AND INSTRUCTIVE, AND SHOULD BE TOLD
ELSEWHERE. IN ANY CASE, THIS BOOK IS THE
UNBURDENING.

I WANT TO GIVE MY HEARTFELT THANKS TO ANDRIES
VAN DAM, MY FRIEND AND COLLABORATOR IN THE
CREATION OF THE BROWN UNIVERSITY HYPERTEXT SYSTEM,
FOR A GREAT DEAL-- NOT THE LEAST BEING THE
OPPORTUNITY TO USE THE SYSTEM TO WRITE THIS BOOK.
I THANK ALSO BROWN UNIVERSITY, WHERE THIS WORK WAS
DONE, AND THE MANY HARD-WORKING YOUNGSTERS OF THE
VAN DAM COMPLEX, PARTICULARLY STEVEN CARMODY AND
DAVID RICE, WHO, AFTER ACTUALLY PROGRAMMING THE
SYSTEM, SAW ME THROUGH THE EXTENSIVE USE OF IT.

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I WOULD ALSO LIKE TO THANK THOSE MEMBERS OF THE
COMPUTING PROFESSION WHO ENCOURAGED ME, ESPECIALLY
ROBERT TAYLOR, DR. J.C.R. LICKLIDER, AND DOUGLAS
ENGELBART. ASIDE FROM THESE, I HAVE FEW PEOPLE TO
THANK.

I DO NOT SAY THE THINGS IN THIS BOOK WILL CURE
DISEASE, END THE THREAT OF NUCLEAR WAR, OR STAMP
OUT RATS. BUT I DO THINK THEY WILL GIVE US BETTER
MINDS, ANSWER OURNEEDS FOR BEAUTY, AND MAKE THE
STATE OF WISDOM MORE ATTAINABLE. IT MAY ALSO
SURPRISE THE READER TO REALIZE THATI BELIEVE THIS
WORLD WILL COME _ABOUT. THERE ARE ALSO THE HINTS
OF DARK FUTURES AND "1984"-- ABOUT WHICH, GENTLE
READER, I AM AS CONCERNED AS YOU.

IT SHOULD SUFFICE FOR THESE VIEWS TO BE CLEARLY
EXPRESSED, FOR THEM TO GET A FAIR HEARING AND GO
ON TO HAVE THEIR PROPER INFLUENCE. IT SHOULD
SUFFICE, THAT IS. HOWEVER, I WAS NOT BORN
YESTERDAY, AND I CANNOT MAKE ANY SUPPOSITIONS
ABOUT THE FATE OF THIS BOOK. NOR CAN YOU, GENTLE
READER. PROCEED. I WOULD LIKE TO CONSECRATE THIS
BOOK TO THE SPIRIT OF P.T. BARNUM, D.W.
GRIFFITH, AND SYLVIA ASHTON-WARNER. I HAVE BEEN
LIVING IN THIS WORLD FOREIGHT YEARS. COME JOIN
ME.*

5 JUNE, 1969

CONTENTS

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5 JUNE, 1969

THE HERITAGE AND ITS PRESERVATION

      SPL, HORIZONTAL FORMAT---------SPL?
      001 NICE PARA. DISPLAY METHOD: DOTS
      INDICATE DEGREE OF INDENTATION, VIZ.:
      ((ILLUSTRATION)) (IN LIKERT, _NEW
      PATTERNS_..., 44) CN#00526---------
      SPL002 NEOLOGISM FOR... IRD = IDEA &
      INFORMATION STORAGE, TRANSMISSION,
      PRESENTATION DISPLAY, RETRIEVAL,
      INTEGRATION CN#00580 SPL 003
      <SPLANDESICS> 1,2 SPLANDREMICS 1,3
      SPLANDROMICS 1,4,5 1) SUGGESTS DISPLAY,
      SPLASH, SPLENDOR 2)SUGGESTS GREASINESS
      3) " DREAMINESS 4) SUPPLIES USEFUL NOUN
      5) SUGGESTS TORPOR CN#00580_____
      SPL 004 SPLAN/DRATION /TACTICS
      <FRES>TIMOTHY CN#00580_____ SPL 005
      I WOULD LIKE AN (ARITHMETICAL-)
      ALGEBRAIC NOTATION OR ALGEBRA WHICH
      1)PERMITS LISTING IN A STRAIGHT
      TYPOGRAPHICAL LINE 2) PERMITS
      EQUIVALENCES TO BE LISTED _WITHIN

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STATEMENTS, MUCH LIKE THE BLACKBOARD
WRITEOVER ((SYMBOL: X>Y, WITH NUMBERS
SOMEHOW)) CN0628_____BEWARE THIS
UNDERLINE, IT HAS A BUG IN IT<<<<< SPL
006 <TEXT> SPLANDREMICS <CONCEPT>
SPLANDREMICS <NEUROMUSCULAR &
PROSTHETIC> SPLANDREMICS <TACTILE,
SENSATE> SPLANDREMICS <DRILL>
SPLANDREMICS (PROGRAMMED INSTRUCTION)
<MOVIE & TAPE> (SQUIGGLE) ETC.
CN0637_____ SPL 007 <SPLANDREMICS>
SUBSUMES AUDIO-VISUAL PRESENTATION
PROGRAMMED LEARNING INFORMATION
RETRIEVAL MNENOMICS CARTOGRAPHY DISPLAY
CONFIGURATION STUDY AS WELL AS REFERENCE
BOOKS, ANTHOLOGIES 'SCHOLARSHIP'
(FOOTNOTING & CROSS-CHECKING) ARCHIVING
(INTENTIONAL STORAGE) INDEXING
CN0638_____ SPL 008 <SPLANDREMICS>
((AND WRITTEN AT RIGHT ANGLES FROM THIS
WORD, USING IT FOR THEIR INITIALS:))
DISPLAY RETRIEVAL INTEGRATIVE,
INTEGRATION CONTROL SYSTEMS
CN0641_____ SPL 009 CALENDARS DAILY
REMINDERS CN0642_____ SPL 010 IT

ALL COMES FROM THIS: AT A POINT THE
COST OF BUILDING ONE SPECIAL PURPOSE
MACHINE IS NO MORE THAN THE COST OF
BUILDING A GENERAL PURPOSE MACHINE WHICH
CAN FULFILL ALL THE SPECIAL PURPOSES.
CN0642_____SPL 011 SOMETHING ELSE
THAT CAN BE PLANNED WITH AIDS BLOCKING
IN THEATER MOVEMENT OF FURNITURE,
FACILITIES CN0642_____ SPL 012
INTRO. SECTION FEASIBILITIES UNITY &
GENERALITY (IT'S ONE BALL OF WAX THE
REAL PROBLEMS CN0644_____ SPL 013
CHAPTERS MODALITIES OF TEXT MANIPULATION
AND SUMMARY (INDEXES & THE CATEGORY
PROBLEM BRUTE SEARCH (& ITS INUTILITY
CN0644_____ SPL 014 ICS ((AND
DEPENDING FROM THESE AS INITIALS:))
INSTRUMENTAL CONTROL SYSTEMS
CN0646_____SPL 015 CRUCIAL
DEVELOPMENTS: THE BUFFER.
MULTI-PURPOSE AUTOMATIC SWITCHING
DEVICES. FAST-ACTION REPRODUCTION
MATERIALS (XEROX, THERMOFAX,
MICRO-CHIPS.) CN0646_____SPL 016
"SPL" SUGGESTS E/ IRRUPTION AND

DIVERSITY... CN0647_____ SPL 017
CHH EFFECTS ON HIGHER EDUCATION AND
RESEARCH " SECONDARY EDUCATION " PRIMARY
EDUCATION CN0648_____ SPL 018
<INCREASE> OF PERSONAL FACE-TO-FACE
INFLUENCES LIKELY, WITH INCREASED
SEAMLESS, MONOLITHIC APPEARANCE OF THE
_S_PLANDREMIC _W_HOLE. (BUT THIS LIKELY
TO VARY WITH AGE GROUPS.)
CN0649_____ SPL 019 ANY NUMERICAL
ORDERINGS THAT APPEAR IN THE
PRESENTATION OF A LIST OF AUTHORS OF A
PAPER WILL _TEND TO BECOME APRESTIGE OR
SENIORITY RANKING CN0649_____ SPL
020 CH. ON <ONTOLOGY> (I.E.,
IMPLICATIONS FOR OUR WAYS OF THINKING
ABOUT TEXTS) CN0649_____SPL 021
CONFIGURATIONS THAT WILL DEVELOP DEPEND
ON ECONOMICS TECHNOLOGY EFFECTIVENESS
SALESMANSHIP FORESIGHT CN0649_____
SPL 022 SPL:AC WOODS HOLE OCEANOGRAPHIC
INSTITUTION NUMBERS ITS DISTRIBUTED
PAPERS CONSECUTIVELY. CN0649_____
SPL 023 AN UNBOUNDED FIELD. ((MESSY
GRAPH-DIAGRAM CONTAINING THE FOLLOWING

WORDS, WITH ARROWS BETWEEN THEM:)) TEXTS
WRITING CHOICE CONTROL PROGRAMMED
EDUCATION DISPLAY AUTOMATIC DEVICES
STORAGE RETRIEVAL MULTIDIMENSIONAL
CONTROL; PROSTHETICS CN0650_____SPL
024 <D> _HAS TO STAND FOR 'DISPLAY' CN
0650_____SPL 025 ONE OF THE DUTIES
OF THIS BOOK IS TO SHOW THAT THE WORD IS
NECESSARY, BY SHOWING THAT THIS IS A
SINGLE, SOLID AND INDIVISIBLE SET OF
PROBLEMS AND POSSIBILITIES.
CN0651_____SPL 026 THE BASIC
DEVELOPMENTS GENERAL-PURPOSE AUTOMATIC
PROCESSORS GENERAL AUTOMATIC SWITCHING
NETWORKS (DISTINGUISHED FROM ABOVE FOR
THE PRESENT EXPOSITION) VERY LARGE FAST
AND MEDIUM-FAST-ACCESS FILES
INTERCHANGEABILITY OF PROGRAMS _____
LOW-COST TV NETWORK FAST CHEAP SLIDE
SYSTEMS FAST FACSIMILE REMOTE FACSIMILE
(PROGRAMED EDUCATION) CHARACTER &
PICTURE GENERATION CN0651_____ SPL
027 THE FEEL OF FUNCTIONS
('KINAESTHETIC' UNDERSTANDINGS. E.G.G.
<LINK TRAINER> <FEEL OF BIKE GEARS> ETC

ETC) PROPOSAL TO STANDARDIZE JOY-STICKS
ETC. CN0651_____ SPL 028 PRINTING
CREATED-- OR FURTHER DEVELOPED-- THE
FUNCTION OF EDITORSHIP. SO AUTOMATIC
SPLANDREMICS... CN0651_____ SPL
029 THE AVERAGE MAN IS MISLED BY FACES
IN THE STREET AND THE COLOR OF THE SKY
INTO THINKING THE WORLD IS MORE OR LESS
THE WAY IT ALWAYS WAS. THIS DECEPTION
IS AIDED BY THE FLIPPANCY OF NEWS MEDIA
AND THE CONTINUITIES OF SOCIETY.
DESPITE MOON ROCKETS AND THE UNTHINKABLE
POWER OF ATOMIC WEAPONS, MOST PEOPLE ARE
INSULATED FROM UNDERSTANDING THAT
TECHNOLOGICAL PROGRESS IS PROCEEDING AS
FAST IN A YEAR NOW AS IN A HUNDRED YEARS
ANYTIME BEFORE THIS CENTURY. AND READY
OR NOT, IT IS THE THESIS THAT WE ARE
ABOUT TO BE PITCHED SIX MONTHS OR TEN
YEARS FROM NOW-- INTO THE _S_PLANDREMIC
_A_GE, FOR WHICH WE ARE LESS THAN READY.
CN0651_____ SPL 030 <PRIVACY OF
PERSON SITTING AT THE SET>: IN TERMS OF
DISTURBANCES FROM EMPLOYER ETC.
CN0651_____ SPL 031 SPEED READING

TEACHING MACHINES ((BRACKET BOTH OF
THESE TOWARD:)) NEW DEVTS IN 'HUMAN
ENGINEERING', TO GIVE IT A SPURIOUS
SOUND OF PERFECTION & CERTAINTY
CN0651_____ SPL 032 <THE OBSCENITY
CUT-OUT> ON RADIO-PHONE CONNEX. (FIND
<TIME> ARTICLE ON DISK-JOCKEY)
CN0651_____ SPL 033 ((PICTURE
SHOWING TWO GRAPH-STRUCTURES BETWEEN
UNLABELLED LITTLE SQUARES, AND ONE
PECULIAR ARRANGEMENT OF LITTLE CIRCLES,
LIKE PEBBLES, WITH AN ARROW AND A LINE;
OBVIOUSLY MEANS SOMETHING FOR A
CREATIVITY SYSTEM OR THE LIKE.))
CN0652_____ SPL 034 ANOTHER RECENT
BIG-DEAL WORD-BOOK <CYBERNETICS>
CN0653_____ SPL 035 <SPLANDREMICS>
THE _A_UTOMATION OF _I_NFORMATION,
_I_DEAS, _C_ONTROL _S_EQUENCES, AND
_D_ISPLAY CN0659_____SPL 036
_CHECK-LISTS HEATHKITS AIRLINE-COCKPIT
ROUTINES CN0662_____ SPL 037 SORT
OF NEED PUNCTUATION MARKS LIKE
"CORRECTED IN ALL CARBON COPIES"
CN0664_____ SPL 038 'GRAPHICS' TERM

SEEMS TO VIEW 'DISPLAY'
CN0666_____ SPL 039 FRIDEN
'COLLECTADATA' SYSTEM HAS 'TAMPERPROOF'
REMOTE UNITS WHICH AUTHENTICATE IDENTITY
OF EMPLOYEE BEFORE ACCEPTING DIGITAL
'REPORT' INTO CORPUS OF INFORMATION.
CN0666_____ SPL 040 I AM IMPRESSED
BY THE _COMPRESSION _AND _ZEST THAT A
DISK JOCKEY'S DELIVERY CAN HAVE.
CN0667_____ SPL 041 SAME 'BASICS'
CAN BE PRESENTED WITH, OR IN A WAY TO
GENERATE, A SENSE OF BOREDOM OR
EXCITEMENT; WITH INSULT OR
EGO-BOOSTING;... CN0667_____ SPL
042 AS LATE AS FEBRUARY 1956 (AD ON REAR
COVER OF _SCIENTIFIC _AMERICAN FOR THAT
MONTH-- ALTHOUGH THAT WAS PREDICTED FOR
1960) IT WAS VIEWED AS A GREAT
DEVELOPMENT OF THE FUTURE THAT MACHINES
COULD TYPE LETTERS FROM DICTATION AND
MAIL THEM AUTOMATICALLY. BY 1960.
CN0667_____ SPL 043 (CAN/SHOULD WE
HAVE BIBLIOGRAPHIES THAT SAY WHAT THE
AUTHOR HAS & HASN'T READ?) SOME
ARTICLES ACTUALLY SAY, "((SQUIGGLE)) HAS

AN ARTICLE ENTITLED ((SQUIGGLE)),
UNFORTUNATELY NOT AVAILABLE TO THE
AUTHOR." CN0667_____ SPL 044
BRANCH-INDEXING OF SPECIES (PRACTICE IN
BIOLOGY) CN0667_____ SPL 045 THEY
SAY "FIGURE 1" EVEN IF IT'S THE ONLY
ONE. CN0668_____ SPL, ((OTHER TAGS
CROSSED OUT)) 046 1)DISPLAY MODEL & 2)
PRACTICE MODEL 1) ROMER'S "IDEALIZED
VERTEBRATE" ((P. 4, _THE _VERTEBRATE
_BODY.)) 2) RCA'S IDEALIZED
PROGRAM-LANGUAGE FOR INSTRUCTION
CN0672_____ SPL 047 WHAT ABOUT A
CUT-OFF DEFINITION OF A "_S_PLANDREMIC
_S_YSTEM" AS SOMETHING WHICH INVOLVES AT
LEAST TWO MODALITIES, E.G., SWITCHING,
DISPLAY, STORAGE, ETC.
CN0678.3_____ SPL 048 DEPENDING ON
THE NUMBER OF BITS REQUIRED AND THE
STORAGE SPACE AVAILABLE, IT MIGHT BE
MORE ECONOMICAL TO RECORD THE HUMAN
VOICE IN DIGITAL FORM, PARTICULARLY IF A
LARGE AMOUNT OF ROCKING AND BUFFERING IS
GOING TO BE USED. OVER THE LONG RUN,
THIS WILL PRESERVE CLARITY FOR RECORD

KEEPING.   CN 0678.3_____ SPL 049
N.B.   NEW NOTATION FOR CHEMICAL BONDS
THAT DANIEL TOLD ME ABOUT.   THIS IS
SIMILAR TO THE LINNAEAN SYSTEM IN ITS
DISPLAY ASPECTS.   0678.3_____ SPL
050 SPL, INV IT WELL MAY BE THAT THE
RAMO-WOOLDRIDGE WAY OF SETTING UP A
COMPUTER-- THAT IS, WITH COMPONENTS
UNASSEMBLED AND TO BE ASSEMBLED BY THE
PROGRAM, WILL BE THE WAY OF THE FUTURE
FOR A AN ENTIRE HOME SPLANDREMIC SYSTEM.
VARIOUS PROGRAMS OF ASSEMBLY, CHECKOUT
AND CONTROL WILL STORE THE aa
((APPARENTLY DICTATION IPCRESS))
THEIR COMBINATIONS, SOME OF WHICH MAY BE
QUITE TEMPORARY FORMATIONS: HI_FI SETS|
AMPLIFIERS| OSCILLATORS| COMPUTER
MEMORIES| AND HOME SPLANDREMIC
RECORD-KEEPING SYSTEMS.
CN0678.3_____ SPL 051 SPL INV IT
MAY WELL BE THAT I CAN SOLVE THE PROBLEM
OF 'UNIQUE LISTING', WHICH GAVE ME SO
MUCH TROUBLE IN <NELTRAN>, WITH SOME
SORT OF AN ON-LINE DISPLAY DEVICE-- A
MATRIX, PERHAPS, WHOSE FLICKERING LIGHTS

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INFORM WHERE ONE HAS PRODUCED A LINEAR
LINEUP, OR ONE WITH WITH CONTRADICTORY
SEQUENCING.   CN0678.3_____ SPL 052
PRESUMABLY IN THE FUTURE SOME COMPANIES,
TO PRESERVE A LOOK OF PERSONALIZED
ELEGANCE, WILL TYPE THEIR LETTERS ON RAG
BOND OR EVEN HAVE THEM WRITTEN BY HAND.
CN0678.3_____ SPL 053 THE ABILITY
TO ESTABLISH PRIORITIES AS TO SIGNALS
YOU WILL RECEIVE.   FOR EXAMPLE, IN THE
COMBINATION OF RADIO-VISUAL DISPLAY
SIGNALLING SYSTEMS USED BY MOTORISTS AND
HIGHWAY AUTHORITIES.   NOTE, HOWEVER, ONE
PROBLEM: WHICH IS THAT PRESUMABLY THE
AUTHORITIES CAN OVERRIDE ANY
PRIORITY-SYSTEM MERELY BY ARRANGING FOR
LOW-PRIORITY MESSAGES TO APPEAR IN
HIGH-PRIORITY CATEGORIES.   ((DON'T
FORGET: IT MAY DEPEND ON PROGRAM
ACCESS, ETC., WHICH YOU MAY KEEP OUT OF
THEIR HANDS.)   CN0678.4)_____SPL
054 OF LATE, AUTOMATIC CONTROL FUNCTIONS
IN INDUSTRY, AND GENERALIZED LARGE-SCALE
APPLICATIONS (<SAGE>, TV, TELEPHONE) ARE
WELL-KNOWN.   ((SQUIGGLE: IPCRESS?)) (I

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AM) ((?)) THEM FOR PRIVATE INDIVIDUALS,
WHERE THE NEED IS LESS OBVIOUS BUT THE
APPLICATION, IF THE THING EXISTS, FAR
MORE SPECTACULAR IN ITS EFFECTS ON OUR
DAILY LIVES. CN0678.6_____SPL 055
(NOW OPERATING AUTOMATIC THROTTLE FOR
PRIVATE AUTOMOBILES CN0678.6_____
SPL 056 WHAT'S HOLDING UP THE BIG
SYSTEMS ARE <PROBLEMS OF COST>
<RELIABILITY> <STANDARDIZATION>
CN0678.7_____SPL 057 THE
ATOMIC-BOMB WARNING DEVICES PLANTED
ALONG ELECTRIC LINES ALL THROUGH THE
UNITED STAGES. CN0678.7_____SPL
058 SILVER SPRINGS, FLORIDA, HAS THESE
MILEAGE INDICATORS AT VARIOUS TURNPIKE
STOPS, WHERE YOU TURN A DIAL AND SEE HOW
FAR IT IS TO ANYWHERE FROM THAT POINT.
CN0678.7_____SPL 059 AUTOMATIC
DISPLAY OF PHASED & INTERVAL MAINTENANCE
NEEDS. CN0679_____SPL 060 LOW COST
OF VARIABLE PROGRAM COMPARED TO INITIAL
COMPONENT-SET. CN0682_____SPL 061
NUCLEAR-CHICAGO PUTS OUT A
VARIABLE-PROGRAM SCINTILLATION COUNTER.

SAMPLE BOTTLES CHUG REPETITIVELY THROUGH
THE MACHINE. ARRANGEMENTS CF BOTTLES &
OTHER ADJUSTMENTS DETERMINE WHICH GET
SAMPLED WHEN. (_SCIENCE 138, AD 970-1.)
CN0682_____ SPL 062 CLAY-ADAMS
_MEDICHROMES IS A LINE OF 10,000
KODACHROME SLIDES, FOR STUDY &
DEMONSTRATION. CN0682_____ SPL 063
THE "BROWN BLOOD GROUPING AND CROSS
MATCHING BOARD" HAS LABELED WORK SPACES
& RECEPTACLES. SEE CLAY-ADAMS CATALOG,
1953, 50-1. CN0683_____ SPL 064
<CPAM BOOKS KEYED TO TEXTS> (BARNES &
NOBLE ((NEVER WHOLLY SATISFACTORY
CN0685_____ SPL 065 KENNE,
_UNDERSTANDING MATHEMATICS WITH VISUAL
AIDS LITTLEFIELD, ADAMS CN0685_____
SPL 066 EVIDENTLY THE STANDARD BRANCHING
LIST OF BIOLOGY HAS NO USE, BECAUSE IT
(ORDINARILY) DESCRIBES ANY OLD
DIFFERENTIA. WHAT GOOD IS IT TO KNOW
HOW I MIGHT IDENTIFY A SKULL OF WHICH
ONE IS EXTANT? ((COULD LIST ECOLOGICAL
NICHES WITH IT, THOUGH.))
CN0686_____ SPL 067 CAN MAYBE SOON

CHEAPER BUILD COMPLEX MODELS OF
UNCONNECTED COMPONENTS, ELECTRONICALLY
CONNECTABLE, THAN STOCK THE COMPONENTS
THEMSELVES. CN0689_____ SPL 068 IT
IS THE _DUKANE SOUND SLIDE PROJECTOR
THAT SWITCHES PIX FROM A BLIP ON A DISC.
CN0691_____ SPL 069 TO BE
"HARDHEADED" AND "REALISTIC" IN THIS
AREA, RIGHT NOW, IS TO EXERCISE AS MUCH
IMAGINATION & EXPLORE THE MOST
FARFETCHED.. POSSIBLE... 0693_____SPL
070 <STIRRING END-SECTION> NO KIDDING
ABOUT FIGHT FOR LIFE OF PLURALISTIC
(NON-COMMUNIST) SOCIETIES. GOTTA GET ON
STICK <FAST> AND <NOW> AND GET THE HELL
INTO OPERATION. CN0693_____ SPL
071 <'SPLANDREMIC AGE'> TIME IN WHICH
_RECORD-KEEPING, _AND _PRESENTATIONAL,
_COMPLEXITY MAY BE DONE CHEAPLY AND
WELL... CN0693_____ SPL 072 THE
VARIORUM EDITION CN0697_____ SPL
073 'GENERALIZED SPLANDREMIC FILES,
LISTS, DISPLAYS & CONTROLS.'
CN0704_____ SPL 074 <SPL> BECOMES
APPROPRIATE IN CERTAIN DOMAIN.

((ILLUSTRATION OF AXES OF FOUR
DIMENSIONS:) COST ACCESS TIME NEED ETC.
CNP704_____SPL 075 NAILING THIS
WORD TO CERTAIN THINGS IN THE WORLD IS
NOT AN END IN ITSELF. THE WORD IS AN
_ACCESSORY TO A UNIFIED KIND OF
OPERATION... WHICH THIS BOOK IS ABOUT.
CN0705_____ SPL 076 POISON
INFORMATION CENTRAL, U.S.A. (SUCH AS
THERE IS) CN0705_____ SPL 077 THAT
SOFT FEMININE VOICE THAT WARNS PILOTS.
CN 0705_____SPL 078 INFORMATION
RETRIEVAL; & INTEGRATED DISPLAY
RECORD-KEEPING, CONTROL.
CN0707_____ SPL 079 TWO-COLUMN
MOVIE SCRIPT CN 0707_____ SPL 080
HISTOMAP CN0707_____SPL 081 HANS
KOEBNER, "ELECTRONIC FILM EDITING."
_AMERICAN _CINEMATOGRAPHER DEC. '62,
730-54+ (V. 43, NO.12). <TELEDUO>
SYSTEM, PRODUCT OF W. STEENBECK,
HAMBURG, GERMANY. TWO 16MM CHANNELS, 1
TAPE (2 CHANNELS SYNCH SIGNAL) FORWARD &
REVERSE, 2 TV'S & ONE MONITOR. (CAN GO
NEGATIVE, OF COURSE.) CN0723_____

5 JUNE, 1969

SPL 082 ULTRONIC SYSTEMS, INC.,
<STOCKMASTER> GIVES INSTANTANEOUS QUOTES
ON A 3-DIGIT READOUT. CN0737_____
SPL 083 PREVIOUS INACCESSIBILITY,
DISPARATENESS, SEPARATENESS OF VITAL
<COLLATERAL INFORMATION>
CN(07)56_____ SPL 084 DON'T BE
MISLED BY YOUR FAMILIARITY WITH SPATIAL
ANALOGIES, LIKE THE LINEAR ORDER OF
WORDS, TEXTS, OTHER INVENTORIES. CN
0756_____ SPL 085 REASON I LIKE
TERM 'SPLANDREMICS' OVER 'INFORMATICS'
IS THAT THE FORMER CONVEYS SUGGESTION OF
_COMMUNICATING _DOMAINS _WITH
_MULTIDIMENSIONALTHESE CARDS ARE SPL
((HORIZONTAL)) 101 TO 367 FINISHED 3 DEC
68 THESE CARDS ARE IN WHAT MAY BE CALLED
"LONG FORMAT," WITHTEN SPACES INDICATING
THE CENTER OF A CARD OR A MAJOR BREAK
LATER IN THE CARD, FIVE SPACES
INDICATING A PARAGRAPH OR LESSER BREAK
OF SIGNIFICANCE. THE SYMBOLS < AND >
ARE USED FOR BEGIN AND END
CAPITALIZATION, RESPECTIVELY.
****

5 JUNE, 1969

****************************SPL 101
<THERE ARE NO BIG THINGS TO BE
INVENTED.> THINGS WILL BE INVENTED, BUT
UNLESS THEY INVOLVE TELEPATHY,
TRANSMISSION DIRECTLY FROM MACHINES TO
NERVE FIBERS (WITHOUT HUMAN SENSE ORGANS
OR RECEPTORS INTERVENING...) THEY WILL
BE <MORE OF THE SAME.> CN0789_____
SPL 102 MY INTENT NOT SO MUCH TO POINT
OUT DAZZLING POSSIBILITIES SO MUCH AS
THE NECESSITY OF SYSTEMS CHOICE, AND THE
DISASTROUS POTENTIAL OF _BAD SYSTEMS
CHOICE. CN0789_____ SPL 103
<CRITICAL THRESHOLD I PREDICT> IT IS ALL
BUT INEVITABLE THAT WE WILL HAVE <REMOTE
(HOME) SYSTEMS OF LIBRARY ACCESS,>
PRESUMABLY DIGITAL RATHER THAN
PHOTOGRAPHC. HOWEVER, IT IS _CRUCIAL
THAT BAD SYSTEMS NOT BE INSTALLED, YET
QUITE FORESEEABLE THAT THEY MIGHT BE.
FOR INSTANCE (OWING TO ILL-CONCEIVED
BUFFER LINKAGES, ETC.,) IT MIGHT COME IN
LARGE CHUNKS (('BOOKS',)) WITH NO
PROGRAM CONTROL POSSIBLE FROM THE
RECEIVING STATION. I.E., FORBIDDING

5 JUNE, 1969

SKIMMING, SKIPPING, RANDOM (OR LOOKUP)
EXCERPTING, & RESTRICTING _GENERAL
LIBRARY MATERIALS TO EITHER THE WRITERS
OR THE + CN0789_____ SPL 104
<THRESHOLD 2> LIBRARIAN'S, OR THE SYSTEM
DESIGNER'S, NARROWMINDEDNESS. <BILLING
SYSTEMS> COULD FUCK THIS THING AS BADLY
AS THE DESIGN OF COMPONENTS & SWITCHING
NETWORKS... JUST AS THEY DO FOR
TELEPHONES. CN0789_____ SPL 105
EARLY SECTION ON <SYSTEMS & GADGETS
OPERATING NOW;> .'SYSTEMS'> VS
<'INVENTIONS'> CN/M,._____STEMS &
GADGETS OPERATING NOW;> <'SYSTEMS'> VS
<'INVENTIONS'> CN0789_____ SPL 106
ACHRONYM ITEMS PRESENTATION HANDLING
DISPLAY TRANSMISSION SORTING PROGRAM
CONTROL AUTOMATIC CONSUMER INFORMATION
<HIPCAT> HANDLING INFORMATION (UNDER)
PROGRAM CONTROL & AUTOMATIC TRANSMISSION
CN0789 _____SPL 107 <AUTOMATIC
QUERY BANKS> & REFERENCE FILES READY FOR
TELEPHONE ACCESS ((MUCH EASIER TO DO IN
DIGITAL.)) CN0790 108 PREPARE A
TIMETABLE ((ON A LOGARITHMIC SCALE?)) OF

5 JUNE, 1969

THINGS IN DEVELOPMENT AND TO COME.
(((FOUR-COLUMN ILLUSTRATION. FIRST
COLUMN IS "YCEAR." (TO BE FILLED IN.)
SECOND COLUMN IS APPARENTLY "SUPPORTIVE
INVENTIONS":))) PARCHMENT PAPER BOOK
PUNCTUATION LIBRARY (((THIRD COLUMN:
INVENTIONS:))) SPEECH. PICTURES.
PICTOGRAMS. ALPHABET BLOCK PRINTING
MOVABLE TYPE LINOTYPE MIMEO BLUEPRINT.
OFFSET DITTO PHOTOGRAPH PHOTOSTAT CARD
FILE FILING CABINET PHONOGRAPH TELEPHONE
TELEGRAPH CN0790 109 'MULTIPLE' MOVIE
PROJECTION <MAKES THE CUTTER'S ART
SOMETHING ELSE AGAIN.> (BUT CLOSE TO
MONTAGE; AND LIKE WHAT THEY DID AT
SEATTLE.) (((ILLUSTRATION: SEVERAL
RECTANGLES, THE LARGE CALLED "MAIN
FRAME"; THE OTHERS LABELLED "SAME THING
FROM OTHER ANGLES"))) CN0790 110
<HYPOTHEGM:> NEED A WORD FOR <MULTIPLE,
VARIANT, SUMLTANEOUS> AND/OR
<REDUNDANT,> DISPLAYS <COLLATERAL>
CN0790 111 SPLANDRE<M>ICS (((AND READING
DOWNWARDS FROM THE M:))) MANIPULATION
CN0792 112 ABOUT ALL THE PHRASES YOU

NEED TO KNOW <DIGITAL STORAGE ON-LINE
INPUT OUTPUT BUFFERING CN0792 113 <SOUND
FILMS> THE FIRST 'COLLATERAL' SYSTEM
CN0793 114 <LUXURIES? CRUTCHES?> (WHAT
ABOUT PAPER & TV?) CN0793 115 <NB THE
TRUTH ABOUT ACCOUNTING:> NOT FIXED,
HARD-&-FAST, BUT QUITE FLEXIBLE, &
REALLY TIED DOWN BY THE INSUFFICIENCIES
OF RECORD SYSTEMS & TABULATION-SYSTEMS
ASEEPING> E.G. BUDGETS NOT DIVIDED INTO
SUCH HARD & FAST CATEGORIES, BUT
PARTITIONED DFTLY. CN0799 117
<MULTIDIMENSIONAL DISPLAY> <FLYING A
PLANE> A MULTIDIMENSIONAL PROBLEM (NOT
JUST 3.) DRIVING A CAR, TOC-- OR A
RACING CARE, SURELY. CN0799 118
DISPLAYING ALL AT ONCE THE
INTER-PULSATIONS OF COMPLEX MATERIALS...
E.G., BASIC CAPACITANCE & INDUCTANCE, OR
KEYNESIAN ECONOMICS (CITE THAT LITTLE
BOOK.) CN0799 119 <SETS OF ALTERNATIVE>
(CONDITIONAL) <POSSIBILITIES>
INTERPRETATION OF (VAST & DIVERSE)
ESPIONAGE DATA WRITING MOTION PICTURE
EDITING OTHER PLANS, E.G. PERSONAL

CN0799 120 INFO THAT RADIO STATIONS CAN
PACK IN BY FAST TALK, MUSIC-&-SOUND
CONVENTIONS... CN0799 121 THAT GUY
(BERKELEY? HUME?) WHO ALMOST WENT TO
AUSTRALIA. CN0799 122 IF SETS OF
ALTERNATIVES COULD HAVE BEEN SUITABLY
DISPLAYED PRIOR TO BAY OF PIGS...
CN0799 123 <P> PRESENTATIONAL <I>
INDEXING CN0802 124 <AVTO>
AUDIO-VISUAL-TEXTUAL-ORGANIZATIONAL
CN0802 125 DIGITAL TEXT OUTPUT NOT NEW,
E.G., TIMES SQUARE HEADLINES. CN0809
126 THE ADMINISTRATION OF EDUCATIONAL
PROGRAMS IS CONTROLLED EITHER BY SCHOOL
BOARDS WHOSE OUTLOOK IS ABSURDLY LOCAL
AND PREJUDICED, OR BY PROFESSIONALS WHO
SLANT TEACHING USUALLY (((?))) TOWARD
MAKIKNG THE PUPIL (IF HE IS TO BE
SUCCESSFUL) AS MUCH LIKE THEMSELVES IN
ATTITUDES AND STYLE OF LIFE AS POSSIBLE.
CN0809 127 'A COMPUTER PROGRAM IS RATHER
LIKE A POEM... EVERY LITTLE PART MUST
BE _JUST RIGHT.' CN0809 128 SHIT-PARTS
OF EDUCATION <INSULT> <THE LEARNING OF
MATERIALS MADE MONOTONOUS & COLORLESS>

CN0812 129 <THE POWER> OF THE SIMPLE,
DIRECT ANSWER TO EXCITE SOMEONE, IF IT
COMES AT THE MOMENT OF CURIOSITY CN0812
130 CHAPTER SEQ.? <CHAPTER ON A-V AT
HAND & ABUILDING> TEASER ENDING: 'BUT
FURTHERY AVAILABLE PARAMARK
PAPER-TO-DIGITAL SYSTEMS NOW A ROUTINE
LIBRARY SERVICE DEVELOPMENTS HANG ON
DEVELOPMENTS OF AUTOMATIC DATA HANDLING
AND SWITCHING SYSTEMS, MISCALLED
'COMPUTERS.' <CHAPTER ON COMPUTER A-V>
ETC. <CAPABILITIES.> NO. CN0813 131
(TIMETABLE ((CRUCIAL WATERSHEDS IN SPL
AS CONCERNS _OUR _FEELINGS (AT LEAST)
ABOUT THE MACHINES, AND ABOUT THE
CANONICAL EXISTENCE OF NON-LITERARY
WORKS OF ART, WILL HINGE ON:))
<IMPROVEMENT OF AUTOMATIC DISPLAY
GRAPHICS.> CN0813 132 YOU CANNOT STORE A
PAINTING IN A COMPUTER. BUT CONSIDER
THIS: HOW MANY BITS TO A SKIRA ART
REPRODUCTION? ASSUME _64 GRADATIONS OF
DOTS, 512 DOTS (PER COLOR) TO THE INCH.
A REPRODUCTION 16 X 32 INCHES REQUIRES
(((WHAT FOLLOWS HAS BEEN ADAPTED TO

FORTRAN NOTATION))) 4 (COLORS) * 64 *
512 * 16 * 32 2**2 * 2**6 * I**9 * 2**4
* 2**5 = 2**26, A VERY LARGE NUMBER.
HOWEVER, THIS AMOUNT OF INFORMATION FITS
ON FOUR NEGATIVES, SO ITS STORAGE CAN'T
BE _THAT MUCH OF A PROBLEM. CN0813 133
<MUSIC> HAS BEEN REPRESENTED BY A
DIGITAL CODE FOR A MILLENIUM. CN0815
134 DEFINITION THE STUDY, ART AND
SCIENCE OF THE ORGANIZATION,
MODIFICATION, PRESERVATION, OF DISPLAYS
AND INFORMATION, ES. (BUT NOT
EXCLUSIVELY) TEXT & PICTURES CN0816 135
CROSSOVER-POINT COMING SOON: <PRINTING
MORE COSTLY THAN SATELLITE QUERY
STATIONS.> (FOR CATALOGS,
INSTRUCTIONS...) CN0816 136 DATES IN MY
SCHEDULE PARAMARK MOST OR ALL MATERIAL
NOW PUBLISHED EXISTS AS DIGITAL DATA
PARAMARK ALL LIBRARY MATERIAL OF
CONTEMPORARY INTEREST NOW DIGITALLY
AVAILABLE PARAMARK PAPER-TO-DIGITAL
SYSTEMS NOW A ROUTINE LIBRARY SERVICE
CN0816 CN0816 137 THE AUTHOR IS NOT AN
ENGINEER, NOT A PROGRAMMER ... BUT A

GUESSER. CN0813 138 <HANDLES TO
MANIPULATE> THAT CHANGE VISUAL DISPLAYS,
CAUSING GEARS TO TURN, CURVES TO SHIFT,
3-D THINGS TO CHANGE THEIR DEPTH
RELATIONS. CN0821 139 <VARIABLE DISPLAY
MODES> OF SAME TEXT MATERIALS CN0823 14.
NO FURTHER DEVTS NECESSARY. THOSE THAT
WILL COME WILL ONLY INCREASE THINGS
CN0824 141 _KNITTING INSTRUCTIONS ARE
DIGITAL CN0825 142 SIMPLE STORINGOF
TEXTS FOR THEIR PRESERVATION &
OCCASIONAL READING OR BROWSING, PRINTING
IS CHEAPER. COMPLEX INDEXING, REVISING,
REORDERING AND UPDATING, THE _D_IGITAL
FORM IS CERTAINLY CHEAPER AND EASIER.
CN0826 143 <OBSOLETE LAWS> ABOUT
PHOTO-REPRODUCTION (CURRENCY,
COPYRIGHTED MATERIAL) 'PHOTOGRAPHY'
MEANS _ALL AUTOMATIC METHODS FOR COPYING
THE APPEARANCE OF SOMETHING. SUCH
METHODS NOW _UNIVERSALLY NECESSARY.
CN0826 144 GLORIOUS GRAPH-CHART OF
COMPARATIVE & LOCAL GRAVITATIONAL FIELDS
WITHIN THE SOLAR SYSTEM.
(((ILLUSTRATION: SORT OF

BUTTOCKS-CLEFT))) _NATURAL _HISTORY
LXXII:8 (OCT 63,) 12-13 CN0826 145
IMPORTANCE OF 'LISTS' IN LITERATURE
QUOTE ZOOEY T.H. WHITE (MERLIN'S
COTTAGE)? CN0826 146 SUMMATIVE SYSTEMS
FOR EXPLAINING OR NOTATING FILE
CONTENTS, COMPLETION, ETC. CN0827 147
<SUMMARY, REVIEW & MEMORIZATION>
STRUCTURES CN0829 148 THE BURNING OF THE
LIBRARY AT ALEXANDRIA-- PERHAPS THE
GREATEST CALAMITY IN THE HISTORY OF
CIVILIZATION. COULD IT NOT HAPPEN
AGAIN? <ESP. W. UNIFORM MAG STORAGE,>
PROGRAMS RUNNING AMUK, SOME DESTRUCTIVE
_B_IG _B_ROTHER. CN0848 149
UNIVERSAL-CHARACTER PATTERNS ON SIDE OF
BLIMP (ACTUALLY TWO SQUARES, I.E.
TALLER?) (((ILLUSTRATION))) CN0849 150
OPENING IT SEEMS TO BE THE IMPRESSION OF
MOST PEOPLE-- PARTICULARLY HOUSEWIVES,
INTELLECTUALS ... THAT "COMPUTERS" ARE
"TAKING OVER," AND SOON WE ARE GOING TO
BE "RUN" BY "THE NUMBERS." (THERE ARE
ELEMENTS OF THIS IMPRESSION THAT DESERVE
EXAMINATION...) ...BUT IT IS MY

CONVICTION THAT AUTOMATIC DATA SYSTEMS
("COMPUTERS"--) PRESENT SOME OF THE MOST
MAGNIFICENT POTENTIALITIES THAT HAVE
EVER FACED MANKIND. THE MISUSE OF THESE
MACHINES, THE IMPROPER REALIZATION OF
THESE POTENTIALS-- IN WAYS THAT I
ENDEAVOR TO EXPLAIN LATER ON-- WILL BE
THE GREATEST POSSIBLE LOSS FOR MANKIND.
THE REAL PROBLEMS, AS I ENVISION THEM,
WILL BE MUCH SUBTLER. CN0850 151
COMPUTER AS _M_OST _V_ERSATILE
_P_OSSIBLE _S_WITCHING _E_NGINE. CN085)
152 ABILITY TO ACCEPT & DIGEST
<MULTI-FORMAT INPUTS> CN0850 153 'LIST
FINDER' DEVICES (= LIST FINDERS.)
CORRECT NAME. (((ILLUSTRATION))) CN0850
154 FILE-ORIENTED TERMS: <RECORD>
<FILE> <'SLOT'> <TABLES & ARRAYS, CELLS,
DIMENSIONALITY> CN0853 155 <INTRO
WRAPUP> 1 THIS BOOK HAS SEVERAL
PURPOSES. ONE IS TO INFORM THE GENERAL
PUBLIC OF THE EXPLOSIVE, REVOLUTIONARY
AND ASTOUNDING WAYS IN WHICH ' COMPUTER
MEN' ARE EXPECTING TO REVOLUTIONIZE THE
BUSINESS OF + CN0854 156 INTRO WRAPUP 2

FINDING INFORMATION-- THE FUNCTIONS NOW
PERFORMED BY READING AND PUBLISHING,
LIBRARIANSHIP, AND FINALLY READING BOOKS
AND PAPERS. THE SECOND INTENT OF THIS
BOOK CN0854 157 I.W. 3 IS TO /_PRESENT
MY_/ CLAIM THAT THIS REVOLUTION WILL NOT
BE OF THE _FORM WHICH TECHNICAL MEN ARE
PLANNING; IT WILL BE MORE SWEEPING AND
MORE DRASTIC, AND WHEN IT HAS HAPPENED
THE WORLD WILL CN0854 158 I.W. 4 WHEN
IT HAS HAPPENED (1975?) THE WORLD WILL
BE AS DIFFERENT AS THE WORLD OF 1963 IS
DIFFERENT FROM THE GONE DAYS THAT HAD
NEITHER TELEPHONE NOR TELEVISION. LIFE
WILL BE VERY DIFFERENT. + CN0854 159
I.W. 5 I WILL TRY TO ARGUE AND PREDICT
ABOUT THESE THINGS IN SOME DETAIL.; THAT
IS, AS FAR AS (((BRACKET:))) AS I HAVE
SPECULATIONS THAT I THINK ARE RELEVANT.
/ AS I THINK I CAN REASONABLY SPECULATE.
THIRD, I WANT TO PRESENT THE THESIS THAT
ALL + CN0854 160 I.W. 6 THESE
DEVELOPMENTS ARE POINTING TOWARD A NEW,
UNIFIED, SET OF SYSTEMS: AN ENTIRE
SINGLE FIELD: OF A PIECE, UNIFIED,

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SEAMLESS-- DESERVING RECOGNITION +
CNC854 161 I.W. 7 AND ATTENTION AS A
WHOLE. FOR IT IS MY FINAL POINT THAT
NOT ONLY ARE THESE THINGS INEVITABLE,
BUT THAT THEY ARE GOOD: + CN 0854 162
I.W. 8 THAT IS, THEY POSSESS THE
POTENTIALITY OF MANY BEAUTIFUL,
EXCELLENT AND HAPPY THINGS. LIKE ALL
GOOD THINGS, HOWEVER, THEIR USE DEMANDS
0855 163 I.W. 9 THE MOST INTELLIGENCE
AND CONCERN WE CAN POSSIBLY BRING TO
THEM. 'THE MACHINES ARE TAKING OVER,'
PEOPLE SAY. 'THEY ARE + CN0855 164 I.W.
10 TURNING US INTO NUMBERS.' THESE
THINGS ARE NOT TRUE. BUT THE
DEHUMANIZATION THESE PHRASES SUGGEST IS
SURELY POSSIBLE-- IN WORSE AND SUBTLER
WAYS CNC855 165 I.W. 11 THAN IS
GENERALLY SUSPECTED-- UNLESS MEN OF GOOD
WILL AND SENSE FIND OUT WHAT IS
WONDERFUL ABOUT INFORMATION MACHINES,
WHAT IS POSSIBLE CN0855 166 I.W. 12 FOR
THEM TO DO, AND BEGIN THINKING AND
TALKING ABOUT THE SYSTEMS THAT WILL PUT
THE MACHINES OF TOMORROW CN0855 167 I.W.

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13 TO THE BEST USES OF MANKIND. /
CHANGE ABOVE SENTENCES TO: MEN OF S &
GW TO UNDERSTAND THE POTENTIALITIES AND
THE OPTIONS: CHANGE FIRST POTEN. TO
'POSSIBILITIES.' CN0855 168 THE 'TANK'
VIEWER IN _STRANGER _FROM _A _STRANGE
_LAND. CN085M 169 WOMAN IN "MILK TRAIN
DOESN'T STOP HERE ANY MORE' WHO HAS HER
HOUSE SET UP FOR DICTATION FROM ANYWHERE
IN IT, AT ANY TIME, TO AN UNSEEN
SECRETARY. (THIS IS, OF COURSE, SIMPLY
A DRAMATIC DEVICE. BUT ITS INTENT CAN
BE BETTER SERVED...) CN0857 170 UNIV.
OF DELFT SYSTEM GOING IN TO OPERATION AT
A NEW 4-YEAR UNIVERSITY: <PARK FOREST
COLLEGE.> (JOHN K. MALONE, CHAIRMAN OF
TRUSTEES.) 64 BOOK-PAGES TO A 3 X 5
SHEET, TO BE READ FROM PORTABLE
BOOK-SIZE PROJECTORS. 1 X 10**6 VOL.
$2 X 10**6 INSTEAD OF 25. CN0873171
<SPLANDREMICS> _A_N _U_PHEAVAL. CN0877
172 (ILLUSTRATION OF JUKE BOX) THE
CONSOLE OF AN AUDIO STORAGE SYSTEM. IT
IS "RANDOM-ACCESS,' AND PROGRAMMED BY
THE USER'S CHOICES. CN0877 173 (JUKE

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BOX ILLO) AN ADDRESSABLE AUDIO MEMORY
SYSTEM. IT MAY BE PROGRAMMED IN ADVANCE
TO PLAY A NUMBER OF DIFFERENT SONGS
WITHOUT STOPPING. HOWEVER, YOU CANNOT
SPECIFY THEIR ORDER, AND YOU CANNOT
REQUEST THE SAME SONG SEVERAL TIMES IN A
ROW UNLESS YOU WAIT FOR IT TO BEGIN.
CN0877 174 THE MYSTIQUE OF 'CYBERNETICS'
CN0878 175 <PEOPLE ARE> <TIPTOEING
AROUND A MONOLITH> BECAUSE IT SEEMS SO
GHOSTLY CN0878 176 SOME OF THE MOST
DRAMATIC DEVELOPMENTS IN HISTORY HAVE
BEEN ESCAPING THE PUBLIC EYE, FOR RATHER
SILLY AND STUPID REASONS. THE
'EXPERTS,' WHO SUPPOSEDLY KNOW WHAT THEY
ARE DOING, APPEAR TO HAVE NO CLEAR
UNDERSTANDING OF THE UPHEAVAL THAT IS
BEFORE US. AND UNLESS WE CONFRONT IT ON
ITS OWN TERMS, THINGS WILL BE NOWHERE
NEAR AS NICE / GOOD AS THEY SHOULD BE.
CN0879 177 (WRITE TO GERNSBACK PUBS., OR
BETTER, GERNSBACK PERSONALLY, AND ON
ACCOUNT OF HIS _G_REAT _F_ORESIGHT &
SUCH ASK FOR REPRINTS OF ANYTHING HE'S
WRITTEN ABOUT <ELECTRONICS IN TEACHING>

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<THE AUTOMATIC PRESENTATION OF TEXTS BY
MACHINERY> (I.E. COMPUTERS <COMPUTER
LIBRARIES> CN0879 178 POP 1 THIS IS NOT
A POPULARIZATION, EVEN THOUGH IT HAS
BEEN WRITTEN SO THAT ANYONE CAN READ IT,
EVEN _SATURDAY _REVIEW DEVOTEES. IT
PRESENTS A SET OF PREDICTIONS, BUT THEY
DO NOT REHASH ANY CONVENTIONAL POINT OF
VIEW-- EVEN IN THIS DAY OF WILD
PREDICTIONS IN ALL DIRECTIONS. RATHER,
IT PRESENTS WHAT IS IN FACT A _RADICAL
_POINT _OF _VIEW, TOGETHER WITH A SET OF
URGENT PROBLEMS, WHICH I WANT TO MAKE
CLEAR AS BEST I CAN AND BACK UP WITH
WHAT EVIDENCE I CAN MUSTER. + CN0879
179 POP 2 I MUST EMPHASIZE ALSO THAT
THIS VIEW DIVERGES SOMEWHAT SHARPLY FROM
EXPERT OPINIONS. IN THE NATURE OF THE
CASE, THOUGH,'THE 'EXPERTS' SEEM TO HAVE
TAKEN SHARPLY LIMITED VIEWS OF THE
POTENTIALITIES AND OF THE BOUNDARIES OF
THE PROBLEM. CN0879 180 PETE 1 A
REVOLUTION IS IMMINENT-- ACTUALLY IN
PROGRESS-- IN THE NATURE AND TREATMENT
OF THE WRITTEN WORD. WE ARE BACKING

INTO THIS REVOLUTION IN TIMIDITY AND
CONFUSION; BUT IT WILL BE / IS A
REVOLUTION IN EVERY WAY THAT WE READ,
WRITE, SAVE THINGS, TAKE NOTES, USE
NUMBERS, TRY TO REMEMBER, AND TRY TO
LEARN. IT IS NO LESS THAN ALL THAT.
CN0879 181 PETE 2 THE READER MAY THINK,
'OH, IT HAS SOMETHING TO DO WITH
COMPUTERS,' AND BE ANNOYED AND MISLED;
SENSING SOMETHING OMINOUS AND NUMERICAL,
HE MAY PUT THE BOOK DOWN AND MISS THE
IDEA ENTIRELY. THIS IS NOT A BOOK ABOUT
COMPUTERS. IT IS A BOOK ABOUT SOME OF
THE THINGS WE ARE SUDDENLY ABLE TO _DO--
AND IF THE MECHANICS CN0879 182 PETE 3
OF THESE AFFAIRS IS GOING TO BE HANDLED
BY MACHINES, THEY HAVE TO BE THE MOST
GENERAL AND VERSATILE MACHINES, THAT CAN
EVER BE: THE SO-CALLED, UNIVERSALLY
MISUNDERSTOOD, "COMPUTERS." CN0879 193
"SPLANDREMICS" DEFINED <DISPLAY MODES,>
<SYSTEM SPECIFICATION,> <INTERLOCKS,> &
<SYSTEM DESIGN> FOR DISPLAY & RECORDS
HANDLING CN 0880 184 'EVER MORE
VERSATILE AND AUTOMATIC MICROFILM

SYSTEMS' CN0880 185 EVERYTHING THAT YOU
COULD POSSIBLY ENVISION FOR A MACHINE TO
DO CAN BE PROGRAMMED AS A TASK FOR AN
AUTOMATIC DIGITAL SYSTEM. CN0880 186
AFTER <INFORMATION REGRIEVAL> ...
<DOCUMENTATION> HAVE A CHAPTER CALLED,
_S_ECRETS? AROUND THE BEGINNING OF THIS
DECADE, HARVARD'S WINDER LIBRARY CALLED
IN IBM AND ASKED WHAT IT SHOULD DO. IBM
SAID, 'WAIT.' WHAT ARE THEY BUILDING?
WHY IS EVERYONE SO SILENT? ... CN0880
187 I AM GOING TO MAINTAIN THAT, WHILE
CERTAIN TECHNICAL APPROACHES AND
CONFIGURATIONS ARE VITAL AND NECESSARY,
THE HEART OF THIS SUBJECT IS _NOT
TECHNICAL, ANY MORE THAN
(((SQUIGGLE)))... THE PRINCIPLES...
ARE ABOUT AS INTRINSICALLY TECHNICAL AS
_L_OVE OR _T_RUTH OR FOOD: THAT IS, IT
WILL FIGURE CLOSELY IN OUR LIVES. WHILE
EXPERTISE MAY PROVIDE INSIGHTS, IT
SHOULD NOT ADJUST OUR UNDERSTANDING.
CN0881 188 A NEW REVOLUTION IS COMING,
AS DRASTIC FOR OUR DAILY LIVES AS THE
TELEPHONE, THE AUTOMOBILE AND

TELEVISION. IT IS MORE DRASTIC AND MORE
IMMEDIATE THAN ANYONE REALIZES.
SCARCELY ANYONE IS AWARE OF IT.
PERHAPS, LIKE AUTOMATION, IT FIRST MUST
HAVE A NAME. I CALL IT (((SQUIGGLE)))
(TITLE PAGE CN0881 189 CHAPTER ON THE
COMPUTER ENTITLED <THE ALL-PURPOSE
MACHINE> CN0881 190 CHAPTER? <FORMS AND
INFORMATION GATHERING> GATHERING DATA
AND <'FILLING OUT FORMS'> CN0881 192
CHAPTER? <MAGIC BOOKS AND BLACKBOARDS>
CLOSING CHAPTER ON UNIFIED SPLANDREMIC
SYSTEMS? (TEXT, PICTURES AND ALL)
CN0882 193 READING, WRITING AND
RECORD-KEEPING CN0882 194 THE EVOLUTION
OV <AUDIO-VISUAL> CN0882 195 <TOTAL
DISPLAY THE MOVING, CONSTANT SURROUNDING
BY IDEAS, SYMBOLS & IMAGES OF A FIELD...
CN0882 196 RATHER THAN REDUCING US TO
AUTOMATONS, IT WILL FREE US FROM OUR
LEAST HUMAN CHORES... CN0882 197 THE
ADVANTAGE TO BE GAINED BY LEAPFROGGING
OVER THE STAGES OF PAPER TO ONE OF
COMPLETE AUTOMATIC ... IS STUPENDOUS.
CN0882 198 <ASSOCIATIVE & CONNOTATIONAL

CHAINING STRUCTURES> HAVING ARBITRARY
PATTERNS; ASSOCIATED ARBITRARILY W WORDS
CN0882 199 CHAPTER? NEW FORMS OF
COMPOUND DISPLAYS CN0882 200 CHAPTER?
_D_ISPLAY _M_ODES _B_EYOND CONCEPTUAL
ENVIRONMENTS MULTIDIMENSIONAL,
CONNOTATIONAL SPACES INTRICATELY
RESPONSIVE ENVIRONMENTS CN0882 201
POSSIBLE NOW NEED TWO MACHINES:
<INDEXABLE, BACKSPACING &
RE-TRANSFERRING TAPE RECORDER> <16MM
FORWARD-&-BACK AUTOMATIC PROJECTOR
CN0882 202 PARTIAL ORDER IN FICTION &
ENTERTAINMENT <(EDWIN DROOD)> _MR
_SARDONICUS THAT KIDDIE-RECORD WITH
SEVERAL POSSIBILITIES CN0882 203 ABE 1
THE ARGUMENT FOR LIMITED SYSTEMS ...
MANY PEOPLE IN THE TECHNICAL FIELDS ARE
LIKELY TO SAY AT THIS POINT, CN0882 204
ABE 2 YES, BUT WHAT WE NEED NOW IS
LIMITED SYSTEMS WITH LIMITED GOALS.
OBVIOUSLY THIS IS TRUE IN THE TRIVIAL
SENSE THAT ONE MUST START SOMEWHERE.
BUT CN0882 205 ABE 3 IN THE LARGER
SENSE, TAKING SUCH A STATEMENT TO MEAN,

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'LET US HOLD BACK ON THE GRANDER SYSTEM
PLANNING UNTIL WE HAVE (((SQUIGGLE))) I
TEND TO DISAGREE WITH THIS. WHY? +
CN0882 206 ABE 4 THE ADVANTAGE TO BE BE
DERIVED FROM DOING ALL THESE THINGS AT
ONCE IS THOUSANDS OF TIMES GREATER THAN
THAT WHICH RESULTS FROM TRYING + CN0882
207 ABE 5 TO DO THEM SEPARATELY. (&
OTHER COST/BENEFIT NOTIONS.) CN0882 208
BILLY 1 HOW MUCH TIME DO WE SPEND
FILING, COPYING AND RE-WRITING? HOW
MUCH TIME DO WE SPEND CHECKING OUR
RECORDS, TRYING TO FIND OUR PERSONAL
RECORDS, WRESTLING + CN0882 209 BILLY 2
WITH PAST FINANCIAL ITEMS AND TRYING TO
KEEP TRACK OF THEM? ALMOST ALL OF THIS
IS TIME THAT _CAN _BE _SAVED. CN0882
210 SAM 1 ONE MUST BEGIN SOMEWHERE.
OBVIOUSLY THE THOUSANDS OF PAPER-FORMS
ASSOCIATED WITH JOBS AND
/_BUREAUCRACIES_/ ARE NOT GOING TO FALL
AT ONCE. BUT + CN0882 211 SAM 2 BUT
THERE ARE PLACES-- SMALL BUSINESS, RICH
WRITERS, NEW SCHOOLS BUILDING-- THAT
WILL DARE TO BEGIN THE TOTAL COMMITMENT

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TO AUTOMATIC + CN0882 212 SAM 3
RECORD-KEEPING AND TEXT HANDLING. AND,
OF COURSE, EVERYTHING THAT WORKS SELLS
ANOTHER. CN0882 213 ? FOR $20,000, A
MAN WITH LEISURE TIME (AND WHO CAN DO
HIS OWN PROGRAMMING) CAN BUY A SYSTEM
THAT WILL DO IT ALL. ... CN0882 214
(((ILLO THAT SAYS: "ILLO"))) SAC
COMMAND CENTER, UNDERNEATH OMAHA. THIS
SYSTEM IS A PROTOTYPE, IN THE AUTHOR'S
OPINION, OF THE KIND OF TOTAL
READING-DISPLAYING-PICTURE-PRESENTING
STATION WE ARE GOING TO GROW UP TO.
CN0884 215 DUST JACKET? DIGITALLY
PROGRAMMED MACHINES ("COMPUTERS",)
ACCORDING TO THE AUTHOR, PRESENT
FANTASTIC POSSIBILITIES: THEY CAN BE
THE WORLD'S GREATEST STENOGRAPHERS,
LIBRARIANS, MEMO PADS, AND SLIDE
PROJECTIONISTS. HOWEVER, THE AUTHOR IS
ESPECIALLY CONCERNED BECAUSE "COMPUTER
PEOPLE" SEEM NOT TO REALIZE HOW BROAD AN
UPHEAVAL IS DESIRABLE. HE SAYS THAT
'SPLANDREMICS,' A WHOLE NEW APPROACH TO
THE AUTOMATIC HANDLING OF WORDS AND

PICTURES, WILL HAVE A BIGGER EFFECT THAN
AUTOMATION. CN0884 216 THE
<TELL-ALL-O-SCOPE> CN0885 217 TEASER?
(ALSO FOR DR. LAKE.) DESPITE THE
FANFARE, COMPUTER PEOPLE ACTUALLY HAVE A
VERY LIMITED VIEW OF THE REVOLUTIONS
THEIR TECHNOLOGY WILL BRING. CHANGES
ARE DUE IN OUR DAILY LIVES AND ENTIRE
SOCIAL STRUCTURE THAT WILL PROBABLY BE
MORE SWEEPING THAN THOSE BROUGHT BY THE
TELEPHONE, RADIO OR TV. CN 0897 218 "IS
THE CLACK OF THE COMPUTER DROWNING OUT
THE VOICE OF THE _M_USE _F_OREVER?"
CHET HUNTLEY ON _ESSO _REPORTS: _THE
_THOUSAND _MILE _CAMPUS, 15 MARCH 64.
CN0898 219 <'MISCHIEVOUS PROGRAMMING'>
CN0898 220 TWAIN BOUGHT A REMINGTON
TYPEWRITER IN 1874. IN A LETTER (DEC.
9 '74:) <"... THE MACHINE HAS SEVERAL
VIRTUES ((.)) I BELIEVE IT WILL PRINT
FASTER THAN I CAN WRITE. ONE MAY LEAN
BACK IN HIS CHAIR & ((SIC)) WORK IT. IT
PILES AN AWFUL STACK OF WORDS ON ONE
PAGE. IT DONT MUSS THINGS OR SCATTER
INK BLOTS AROUND. OF COURSE IT SAVES

PAPER." (PHOTOGRAPHED ON P. 192 OF
MILTON MELTZER, _MARK _TWAIN _HIMSELF,
BONANZA (N.Y.) 1960?) (((NOTE: SUBTLE
VARIATIONS OF SPACING MAY HAVE EXISTED
IN THE ORIGINAL THAT WERE NOT
SUFFICIENTLY ANNOTATED ON MY CARD.)))
CN0903 221 <PATENT ON 'TOUCH' OUTPUT TO
HUMAN.> IBM HAS PATENT ON CABLE
ATTACHMENT TO PERSON: DIFFERENT
IMPULSES GO TO DIFFERENT PARTS OF DEVICE
(E.G., DIFFERENT PARTS OF THE ARM).
DESCRIBED IN _RADIO-_ELECTRONICS, APRIL
'64, P. 97. CN0907 222 OF <THE UNIFIED
ART OF INFORMATION> (& IDEA) <HANDLING
AND DISPLAY> CN0910 223 (TITLE PAGE)
<SPLANDREMICS> THE _U_NIFIED _A_RT OF
THE _H_ANDLING AND _D_ISPLAY OF
_I_NFORMATION AND _I_DEAS CN0910 224
DEVICE INVENTED BY JAMES L. TANNER
COUNTS HOUSEHOLD TV SETS' RADIATIONS TO
CHECK CHANNELS-- FROM A MOVING VEHICLE.
_TIMES APRIL 6 '64 P. 1 & 63 AUGURY FOR
PRIVACY. CN0913 225 (MACHINE THAT
CAN... MACHINES OPERATE ON <'PATTERNS
OF DOTS'> CN0913 226 <ACCREDITATION OF

PROGRAMS & PROGRAMMERS> IN ORDER TO GET
TEXT SYSTEMS STANDARDIZED CN0916 227
POSSIBLE COPYRIGHT SYSTEMS 1 <REGISTER
<REGISTERS A RENTAL ON PRESENTATION OF A
TEXT UNIT AT AN OUTPUT DEVICE CN0916 228
MAKING PAPERWORK EASIER: <TRANSFER OF
TITLE OF AUTOMOBILE>. CN0917 229
'TERMATREX' DATA STORAGE & RETRIEVAL
SYSTEM. STORES INFORMATION ON
PATHOLOGICAL CASES ON OPAQUE 9 X 11
CARDS, THEN COUNTS HOLES. WRITE TO
SCIENTIFIC PRODUCTS, DIVISION OF
AMERICAN HOSPITAL SUPPLY CORPORATION.
1210 LEON PLACE, EVANSTON, ILLINOIS
60201. CN0918 230 HYPERTEXT TEXT THAT
PARAMARK RESPONDS PARAMARK MAY BE
PROGRAMMED PARAMARK LEAVES SOME OPTIONS
TO VIEWER CN0921 231 HAVE AN APPENDIX
GIVING TECHNICAL TERMS I DID _NOT
INVENT. (AND PUTTING ONES I DID IN
BOLDFACE?) CN0922 232 ISN'T THIS THE
WORD I'VE BEEN WANTING (<NOT>
'SPLANDREMICS'?) <HYPER-PHANTICS> OR
<HYPERFANTICS> BUT THEN WHAT'S THE UNIT?
HYPERFANE? HYPERFANT? (BETTER THAN

HYPERPHANT. TOO LIKE 'ELEPHANT.')
CN0922 233 <GENERAL PHANTICS> MIGHT VERY
WELL BE THE <S>CIENCE OF <D>ISPLAY (IN
WHICH CASE, 'THE GENERAL FANTASTIC
CORPORATION...') <HEH HEH> CN0922 234
THE DESIGN OF <UNITS, SYSTEMS, (TYPES)>
AND <MODES OF DISPLAY> APPROPRIATE
<MACHINE & PROGRAM INTERFACE,>
APPROPRIATE <FILE ORGANIZATION> AND
<TRANSACTION SYSTEMS.> CN0926 235
MCTAVISH SYSTEMS <M>ACHINE <C>ONTROLLED
<P>RESENTATION <A>UDIO <V>ISUAL STUFF
<A>ND <T>EXTS (((AND ON THE RIGHT SIDE
OF THE CARD, WRITTEN AS AN ACRONYM, WITH
DEPENDENT WORDS SLANTING DOWN:))) MCTAV
SYSTEMS (((AND DEPENDING:))) MACHINE
CONTROLLED TEXT AUDIO VISUAL CN0927 236
(((CLIPPING FROM A BUNKER-RAMO
NEWSLETTER, WITH THE FOLLOWING
ENCIRCLED: IN THE AIR FORCE 473L
HEADQUARTERS COMMAND POST AND CN0928 237
<OEXT HANDLING & COMPLEX DISPLAYS>
<TRANSACTION PROGRAMMING> <COMPLEX
(UNIMAGINABLE) DISPLAYS> <COMPOUND>
(((WAS THAT LAST MEANT TO BE AN INSERT

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ON THE PREVIOUS ITEM?))) CN0931 238
'AUDIT TRAIL' MACHINE'S MEANS OF
CHECKING HAPPENINGS & TRANSACTIONS
'REAL-TIME <M>ANAGEMENT <I>NFORMATION
<S>YSTEMS,' DATAMATION APRIL 64, 46**-2
CN0931 239) (((THERE IS NO SUCH CARD.
ONE WAS PUT HERE IN ERROR.))) 2616 NE
WAS PUT HERE IN ERROR.))) CN2616 240
(GENERAL) PHANTICS HYPER-PHANTICS
PHANDREMICS <THE SELECTION OF UNITS AND
PROCESSES FOR THE MOST EFFECTIVE
DISPLAYS & UNDERSTANDING CN0947 241
CONJECTURAL CH. ON <T>HE <N>EW &
<I>NEVITABLE FILM / TEXT/ AUDIO /
BRANCHING <A>RT CN0948 242 MORE A
DESCENDANT OF <TELEGRAPHY> THAN OF RADIO
TECHNOLOGY " DANT OF <TELEGRAPHY> THAN
OF RADIO TECHNOLOGCN0949 243 IT IS A
COMMON VIEW HAT COMPUTERS ARE DANGEROUS
TO ALL THAT IS HUMAN. 'THEY'RE TAKING
OVER THE WORLD." "THEY'RE GOING TO TURN
US ALL INTO NUMBERS." THIS VIEW, I
BELIEVE, IS MONSTROUSLY FALSE. THERE
ARE DANGERS IN THE COMPUTER, BUT THESE
ARE DANGERS WHICH THE LIGERATI CAN ONLY

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ENHANCE BY STAYING AWAY. CN0953 244 DF?
HYPER-PHANT DF. <A FILE ORGANIZED FOR
USE & (INTERLOCKING) DISPLAY> CN0956 245
PEOPLE WHO MAY WANT PRINTOUTS JUST TO
MAKE SURE THAT THE 'PHYSICAL' BOOK STILL
EXIST-- LIKE THE (((BRACKET))) LEGENDARY
/ STORIED YOKELS WHO KEEP GOING TO THE
BANK TO "LOOK AT" THEIR MONEY,
WITHDRAWING IT AND DEPOSITING IT AGAIN.
CN0957 0246 DFS. THE CREATION OF
DISPLAYS, THE DESIGN AND INVENTION OF
METHODS OF DISPLAY, THE DESIGN OF FILES
TO BE INVOLVED IN DISPLAY, THE DESIGN OF
UNITS AND SEQUENCES OF THINGS TO BE
DISPLAYED CN0958 247 JERROLD R.
ZACHARIAS, M.I.T. SEEMS TO BE THE BIG
MAN IN PHYSICS TEACHING BY FILMS.
CN0960 248 INSTITUT FU:R DEN
<W>SISSENSCHAFFTLICHEN <F>ILM, GERMANY,
IS COMPILING THE _ENCYCLOPEDIA
_CINEMATOGRAPHICA. (_GOTTHARD _WOLF
SEEMS TO BE THE TRAVELING SPEAKER.)
CN0960 249 <'SPLANDREMICS'S DF.
<AUTOMATIC INFORMATION HANDLING SUCH AS
TO INTERFACE WITH AUTOMATIC DISPLAY

SYSTEMS> CN0969 /.L. 250 I SOMETIMES
FEEL LIKE ARGUING THAT THESE
REVOLUTIONARY DEVELOPMENTS ARE
INEVITABLE BECAUSE THEY ARE GOOD, AND
TGHAT THEY HAD BETTER BE GOOD BECAUSE
THEIR ARE INEVITABLE. BUT AS REASONING
THIS IS OPEN TO OBJECTION. CN0976 251
ASSOCIATION FOR (((SQUIGGLE)))? 88 ST.
STEFAN'S / STEPHEN'S ST. BOSTON <HAS
BOOKS ON MAG TAPE FOR THE BLIND> -- SAYS
WABC CN0986 252 SUBTITLE <SPLANDREMICS>
THE NEW FIELD OF <M>AGIC <P>PESENTATION
CN1002 253 TITLE? <MAGIC PRESENTATION
AND CONTROL> CN1002 254 <PRIDE> SYSTEM
IS GENERICALLY-- <CLOSED-STRUCTURE>
<HIGHLY EXPANSIBLE> <FILE SYSTEM> CN1013
255 <IRGENERATING TO PROBABILISTIC
SELECTION & ABSTRACTION ALGORITHMS
CN1045 256 LIGHTS AROUND TIMES BUILDING
_1928 TO 1962 OR 3 CN1047 257 EMPIRICAL
STUDY OF USE OF EXISTING INFORMATION
SYSTEMS SHOULD NOT BE OVERRATED, SINCE
USAGE OF SYSTEMS WE _MIGHT BUILD WOULD
BE _ENTIRELY DIFFERENT. CN1050 258
CONSEQUENCES OF <OR> (WAGE, 'NEED')

STUDIES ARE ONLY IN THE DISPERSAL AND
HIERARCHICAL ARRANGEMENTS OF STORAGE--
_NOT IN THE BASIC CRT DISPLAY PRINCIPLE.
CN1050 259 NB BUSH'S MEMEX HAD MOST OF
THE FEATURES I WANT CN1051 260 <LIST
HYPERFILE> IS PARAMARK <A PACKAGE OF
ITEMS & RELATIONSHIPS> PARAMARK <OUTPUT
FUNCTION> CN1083 261 DFS. <FILE> DF.
<FORMS OF STORAGE> WITH <STRUCTURED
RELATIONSHIPS> AND <PARTICULAR METHODS
OF USE & ACCESS.> (OUTPUT FUNX.) <FILE
STRUCTURE> THE RELATIONSHIPS. CN1120
262 _HYPERFILE _DF. FILE IN WHICH AURE>
THE RELATIONSHIPS. CN1120 262
_HYPERFILE _DF. FILE IN WHICH _ANY
_CONNECTIONS ARE POSSIBLE CN1121 263 SEE
<LIFE> VOL 58 NO. 4 29 JAN 65 P. 3
"CHURCHILL: WRITER IN THE GRAND MANNER"
(OF HIS 24-HOUR SUPPLY OF SECRETARIES
FOR INSTANT DICTATION, AND OF HIS
NUMEROUS DRAFTS.) CN1144 264 (((ARROW
RIGHTWARD))) MENTION ECONOMICS OF USING
COMPANY CRT'S FOR <N>IGHT <C>OURSES-- AS
A COMMUNITY SERVICE, IF NOT ECONOMICAL.
CN1154 265 'EXTENDED VISUALIZATION,

KINAESTHETIC CONCEPTUALIZATION FIELDS OF
IDEAS AND RELATIONS. CN1246 266
ANALOGOUS COORDINATE SYSTEMS FOR INPUT
CN1247 267 <EXTENSION OF ANALOGICAL
MOVEMENTS> E.G., (((LEFTWARD ARROW)))
LEFT PEN MOVEMENT CONTROLLING SCREEN
DRUM ROLL CN1247 268 (I SHOULD GET IN
TOUCH WITH SOME OF THE <ELECTRONIC
MUSIC> GUYS, ESP. MILTON BABBITT.)
CN1311 269 (JEAN SAYS FURTHER THAT THE
TOLSTOY STORY WAS TOLD BY A DAUGHTER AT
RRANCIS PARKER _WHILE _BOBBIE _WAS
_THERE. ('PROBABLY '34 OR '35.') CN1312
270 CF. <THE DESIGN OF NEON LIGHTS>
CN1326 271 LET US <DEPART TO A NEW
REALM> <OF POSSIBILITIES> CN1328 272
'PHANTICS'-- <INFORMATION AND
PRESENTATION> CN1328 273 <THE LORD'S
HAND (?) TRACING THE STONE TABLETS IN
_TEN _COMMANDMENTS> (FIRST VERSION)?
CN1338 274 _WHATEVER THE DEVICES
ORMETHODS, E.G. DIRECT NEURAL
TRANSDUCTION (((BRACKET OPENING RIGHT)))
SPLANDREMICS / PHANTICS / ETC. WILL GO
ON FOREVER. CN1352 275 CRAM CARDS

VIZ-ED FACT SHEETS SCHAUM'S OUTLINE
SERIES CN1358 276 LIKE AUTOMATION,
PHANTICS BEGAN A VERY LONG TIME AGO, IF
WE COUNT THE SIMPLER CASES. CN1362 277
MUCH EFFORT GOING INTO _REFINEMENT _OF
_INDEXING _PROCESS. BUT YIELD OF THAT
VEIN IS NOW KNOWN, & PROBABLY CAN'T BE
_IMPROVED _TOO _MUCH. CN1388 278
<MOVIES ARE SEEN BY MORE PEOPLE THAN
READ THE REVIEWS;> <BOOKS ARE READ BY
_LESS PEOPLE THAN READ THE REVIEWS.>
CN1398 279 <DOCKETS> (AREN'T THESE
_DIGESTS?) CN1411 280 QUESTION OF
WHETHER 'PHANTICS' WILL BE A _SINGLE
_THING, UNIFIED, PRACTICED BY A SINGLE
SPECIALIST. DOUBTFUL. POSSIBLE. CF.
<A>RCHITECTURE. (SOCIOLOGICAL PROBLEM.)
BUT, LIKE 'AUTOMATION,' IT REFERS TO A
SIMILAR ACTIVITY AND TREND. CN1429 281
POSSIBLE APPENDIX FOR _PHANTICS ONE
CHAPTER OF <A>PPENDIX: <INTERMEDIATE
ALTERNATIVES> TALKING ABOUT
<I>NFORMATION <R>ETRIEVAL, <P>ROGRAMMED
<L>EARNING AND SO FORTH AND SO ON. CN
1435 282 CHAPTERS OF _PHANTICS LATER

CHAPTERS <E>DUCATION <P>HANTIC
<S>CHOLARSHIP (WHEN SEPARATE ARTICLE;
<S>CHOLARSHIP' WHEN IT'S A CHAPTER)
<I>NFORMATION FOR <S>PECIALISTS POSSIBLE
TITLE FOR FIRST CHAPTER: <T>HE <B>REAK
EARLY SECTIONS WILL INCLUDE: <T>
<B>REAK <W>HAT'S <N>EW (I.E., THE CN1435
283 CHAPTERS   2 TECHNIQUES AND
EQUIPMENT THAT ARE WORKING NOW) <T>HE
<P>AST (I.E., THE VARIETY OF INVENTIONS
BUILT AROUND THE OLD MEDIA) <A> <N>EW
<U>NITY (<P>HANTICS) <N>EW <S>YSTEMS
(I.E., LICKLIDER-NELSON TYPE
<H>YPERTEXTS) <N>EW <A>RTS (ESP.
<FANTASM>) <N>EW <L>IVES (ESP. THE
DISPLAY SYSTEMS IN OUR HOMES)
<E>DUCATION CN1435 284 CHAPTERS   3
<S>CHOLARSHIP <T> <H>ERITAGE AND THAT'S
IT. CN1435 285 ADVERTISEMENT ON
<H>-FANT (((THE FIRST WORD HAS LETTERS
WHICH WILL BE SUCCESSIVELY REPLACED BY
THE OTHER SETS))) <FORCEFUL > AR E AN I
(((ARROW TOWARD THE ABOVE))) THESE
REPLACE THE OTHERS CN1442 286 PREFACE
ANY ORIGINAL IDEAS IN THIS BOOK I HAD

.

DURING A VERY SHORT PERIOD IN 1960, WHEN
I WAS TAKING A COURSE IN COMPUTER
PROGRAMMING. EVERYONE I TRIED TO TALK
TO, INCLUDING PROSPECTIVE EMPLOYERS,
THOUGHT I WAS CRAZY. SIX YEARS LATER,
WITH NO MODIFICATION OF THESE VIEWS, I
FIND THAT THEY ARE PUBLISHABLE AND
CONSIDERED INTERESTING. SO THERE YOU
ARE. CN1446 287 V-MAIL CN1454 288 (<IBM
OWEGO> IS IN SIMULATION TRAINERS. SEE
AD IN _COMPUTER _DESIGN, JAN 66, P.
67.) CN1504 289 MEPHISTOPHELIAN COSTUME
(CRTS) (((ILLUSTRATIONS OF TWO
DOUBLE-CRT HELMETS. THE ONE WITH THE
CRTS OVER THE EARS IS LABELLED:)))
COZIER CN1537 290 <TOKENS> POCKET
OBJECTS TO REMEMBER THINGS BY. CN1570
291 (((RIGHT-OPENING BRACKET)))
<"ENVIRONMENTAL" ART> / <ALL-SURROUNDING
DISPLAYS & FILMS> VS. <BRANCHING,
GRASPABLE, MANIPULABLE DISPLAYS> CN1576
292 (((CROSSED DOUBLE-ARROWS: ONE
POINTING UP-DOWN, OTHER POINTING
LEFT-RIGHT))) FAIRCHILD-HILLER MICROFILM
SLEW NCOMBINABLE) CN1580 293 <TOOLS OF

THOUGHT> CN1584 294 LASERS WILL _NOT
CHANGE CHARACTERISTICS OF 'THE MOVIE.'
CN1586 295 (((NEWSPAPER FILLER ITEM,
PROB. _POUGHKEEPSIE _JOURNAL))) THE
JEWISH <T>ORAH MUST BE HANDWRITTEN ON A
SCROLL MADE FROM THE SKIN OF A KOSHER
ANIMAL, USUALLY A SHEE POR LAMB. CN1588
296 <STORE DISPLAYS> ESP. STAND-UP CAR)
FRAMES CN1590 297 WRITE INFORMATION
MANAGEMENT FACILITIES, INC. (WHO MAKE
CONTROL ROOMS, CORPORATE NERVE CENTERS.)
CN1604 298 NSTANDARD TELEPROMPTER
APPARENTLY USES 5/8" LETTERING) CN1618
299 <CUTANEOELECTRIC> (SP?)
<STIMULATION> CN1631 300 IBM'S LOS
ANGELES DATA CENTER HAS A GRAPHIC
DISPLAY (<ALPINE?> MORE COMPLEX, IN
PICTURE, THAN 2250.) APPARENTLY FOR
CUSTOMER USE. ILLUSTRATED IN
_ELECTRONIC _INDUSTRIES, MAY 66, P.
1609 CN1634 301 <SWITCHABLE-TRANSPARENCY
GLASS> (MARKS POLARIZED CORP., NYC)
CN1723 302 FANTICS EMBRACES DECIDING
WHAT SHOULD BE SHOWN IN THE LIGHT OF HOW
TO DO IT CN1758 303 FANTICS EMBRACES:

<DECIDING WHAT TO SHOW> <ON THE BASIS
OF> <WHAT IS POSSIBLE> CN1760 304 <AIR
CONTROLLER SCREEN CONVENTIONS>
_DATAMATION NOV 66, 12. CN 1815 305
ACCORDING TO WILLIAM MANCHESTER (_DEATH
_OF _A _PRESIDENT), THE NUCLEAR-WAR CODE
MANUAL IS A _GARISH _COMIC _BOOK.
CN1999 306 _FANTICS. 29 MAR 67 I'VE
JUST REALIZED, TODAY OR LATELY, THAT
"FANTICS" WAS MEANT FOR THE _OUTPUT
_SIDE OF COMPUTER DISPLAY RATHER THAN
THE _<I>NTERACTION. (EXCEPTION: LINK
TRAINER, VARIABLE-HANDLING AUTO.) I
MUST THINK THIS OVER. CN2000 307
<FANTICS> OF. <FORMS OF PRESENTATION
AND THE PRESENTATIONAL ASPECTS OF
EVERYTHING> CN2010 308 MULTI-SCREEN
COMBINES THE <MOVIE> AND THE <ROLLER
COASTER> CN2094 309 THE _INTREPID, AN
EXPERIMENTAL YACHT, HAS FANCY CONTROLS
FOR ITS DUAL RUDDERS, AND SAILS IN
SILENCE TO CLARIFY VISUAL HAND-SIGNALS.
(<LIFE> 28 JULY 67, 60+9) CN2135 310 THE
TERM 'PHANTOM' IS TO BE FOUND IN
OLD-FASHIONED ADVERTISING ILLUSTRATION.

CN2160 311 VARIABLE-RASTER TV-TYPE
SYSTEMS. CN2320 312 TABLE AT END (ONE
OP SEVERAL?) (((THE WHOLE CARD IS AN
ILLUSTRATION OF PARALLEL ROWS. ROW 1
MAY BE TAKEN AS A LOGARITHMIC DIVISION
OF SHORT VERTICAL LINES,, LABELLED:)))
(LOG DIVISION OF YEARS) (((ROW 2:)))TEXT
/ PUBLISHING / STATIONERY (((AND IN
IT:))) X <ALPHABET> INVENTED SOMEWHERE
PUNCTUATION X GUTENBERG X BUSH 'MEMEX'
LICKLIDER (((ROW 0:))) <NON-VERBAL
SYMBOLIC INFO / <BOOKKEEPING> (((AND IN
IT:))) * DOUBLE-ENTRY * CHECKS *
BASEBALL * FISHER BLACK * DCN WALKER
(((ROW 4:))) <AUDIO-VISUAL> (((AND IN
IT:))) X PHOTOG * HOLOG * PHOTOPLASTIC *
ROMNEY-WYLIE * NELSON, FANTASM (((NOTE
THAT THESE LATTER TWO SHOULD BE SORT OF
STREAKY MARKERS, TO INDICATE CERTAIN
CHRONOLOGICAL SUBTLETIES))) (((ROW 5)))
VISUAL, COGNITIVE (((AND IN IT:))) *
SUTHERLAND, SKETCHPAD CN2338 313 SHOW
THAT LOVELY 2-PIECE MOLD MONSTER
FIGURE-- POWER OF ARTIST. CN2339 314
(THAT ALL-B&W PICTURE OF LINCOLN) CN2339

315 (((ILLUSTRATION OF HUGE SHARP-EDGED
'SHADOWED' LETTERS: F U O))) (((WITH
ARROWS INTO THE LETTERS:))) DISPLAYS
THAT SIMULATE REALISM EXCEPT AT CERTAIN
KEY PLACES. CN2341 316 (APPARENTLY THE
TERM 'AUDIT TRAIL' IS STANDARD, PERHAPS
PREDATING BUSH'S USE OF 'TRAIL.') CN2478
317 EXEMPLARY FEELY (((ILLUSTRATION OF
SOME KIND OF MECHANICAL ARM)))
ELECTROMAGNET GIVES EXACT, VARYING SENSE
OF PRESSURE-PATTERNS CN2502 318
KINAUTOMAT (_BOOKS JUNE '68 49) IT SAYS
THERE WERE _6 MOMENTS OF DECISION.
THOUGH RADU(S?) CINCERA INVENTED IT,
JAN ROHAC DIRECTED. CN2507 319
<ACCORDION MENUS> ((VAN DAM LIKES
THESE)) CN2512 320 EXCELLENT QUOTES ON
DASHBOARDS & FEEL-- CALLED
"PROJICIENCE"-- BY T.N. WHITEHEAD,
1934, IN _THE _DESIGN _& _USE _OF
_INSTRUMENTS _AND _ACCURATE _MECHANISM.
(DOVER REPRINT, 1934.) REVIEWED &
DISCUSSED IN _<IEEE> TRANSAX _ON _HUMAN
_FACTORS _IN _ELECTRONICS, DEC 1967,
285+. CN2512 321 (BADDY: THE ILLINOIS

COMPUTER-MUSIC MAKER) CN2533 322 PREFACE
THIS IS A BOOK ABOUT, /_AMONG OTHER
THINGS,_/ COMPUTERS /_AND SHOWS_/ AND
THE HUMAN MIND. MY IDEAS ABOUT
COMPUTERS AND THE HUMAN MIND DO NOT
APPEAR TO BE THE SAME AS THOSE OF ANYONE
ELSE IN THE PRESENT CENTURY. CN2561 323
<FANTICS> <PRESENTATION SCIENCE AS AN
ART> CN2577 324 CHAPTER ONE?
"PRESENTATION SCIENCE: NEWEST OF THE
ARTS" CN2578 325 HYPERGRAMS--
<PERFORMING PICTURES> CN2584 326 <INTRO>
1 SOME OF THE MOST EXTRAORDINARY
ADVANCES IN THE HISTORY OF CIVILIZATION
ARE NOW BEING MADE. YET I THINK IT IS
UNFAIR TO SAY THAT MOST OF THOSE WHO ARE
MAKING THESE ADVANCES DO NOT UNDERSTAND
WHAT THEY ARE DOING, AND THE PUBLIC, WHO
OUGHT TO KNOW, + CN2585 327 <INTRO> 2
HAVE NOT THE SLIGHTEST IDEA OF WHAT IS
HAPPENING. THE BASIC MISUNDERSTANDING
IS THE IDEA THAT NEW FORMS OF
INFORMATION STORAGE AND DISPLAY ARE
BASICALLY "TECHNICAL" MATTERS, WHOSE
DESIGN AND OVERALL CHARACTERISTICS +

CN2585 328 <INTRO> 3 ARE TO BE
ESTABLISHED BY "TECHNICAL" MEANS AND
THUS BESTOWED AN UNCRITICAL WORLD.
THESE SYSTEMS WILL HAVE THE MOST EXTREME
EFFECTS ON LIFE AND CULTURE SINCE THE
PRINTED BOOK. AND WHILE THEY ARE
SWAMPED WITH TECHNICAL DETAILS + CN2585
329 <INTRO> 4 OF EXECUTION, THEIR
NATURE IS VERY SIMPLE. THEY ARE WAYS OF
SHOWING AND REMEMBERING IDEAS AND
IMPRESSIONS. WITHOUT A PUBLIC THAT CAN
UNDERSTAND, CRITICIZE AND PARTICIPATE IN
THE DESIGN OF THESE SYSTEMS, THEY ARE
NOT GOING TO BE WHAT WE OUGHT TO HAVE, +
CN2585 330 <INTRO> 5 AND OUR LIVES AND
FUTURES MAY BE POLLUTED AS A RESULT.
CN2585 331 MCLUHAN, IN AN EARLY ARTICLE,
POINTED OUT THAT WESTERN PUNCTUATION
BEGAN BY IMITATING SPEECH AND GOING ON
TO EXTEND IT. (INTERNAL VOCALIZATION?)
CN2586 332 * YOU CAN GIVE AN IDEA, BY
THE PLACEMENT OF AN ASTERISK, OF WHAT
SORT OF THING IT IS SUPPOSED TO BE.
CN2586 333 (USED QDP) <FANTICS> OF. THE
<P>RESENTATION AND <S>TORING OF <I>DEAS

AND <I>MPRESSIONS CN2588 334 A LIGHT PEN
IS LIKE YOUR FINGER. SOMETIMES IT MEANS
ONE THING WHEN YOU POINT WITH IT,
SOMETIMES ANOTHER. CN2588 335 <KEEPING
TRACK OF THINGS> CN2591 336 ENGELBART'S
"BRICK" GEDANKENEXPERIMENT. CN2591 337
THE FICTION OF TECHNICAL EXPERTS
PREPARING / BOUND TO REVISE THE WORLD
FROM A LOFTY PERCH ... THESE PEOPLE ARE
ORDINARILY HUMAN BLUNDERERS. OFTEN VERY
SMART; OFTEN, THROUGH THEIR TECHNICAL
PRECONCEPTIONS, VERY DUMB. ... EVERY
SYSTEM BEARS THE PERSONALITY OF THE MAN,
OR WORSE, THE COMMITTEE, THAT DESIGNED
IT. CN2603 338 (USED QDP) <'PETTY
DETAILS'> CN2603 339 INTRO THE HISTORY
OF THIS WORK IS A SET OF AMUSING TALES
THAT SHOULD BE TOLD ELSEWHERE. CN2604
340 (USED QDP) INTRO MY FIRST INTEREST
WAS AS A WRITER AND SHOWMAN ... CN2605
341 (USED QDP) INTRO IN THIS BOOK I
DISAGREE WITH ALMOST EVERYONE. CN2605
342 (USED QDP) CH <COMPUTER AS
PERFORMER> (NON-INTERACTIVE SHOWS)
CN2605 343 RAMO: "<I>NTELLECTRONICS"

CN2605 344 MISC CHAPTERS? SECTIONS? A
<UNIFICATIONS AND AD VIABLE MEDIA> <INTO
THE STILL WATER: THE CRAZY ECONOMICS OF
COMPUTERS> CN2605 345 B <TEXT
WORKSPACES> <INNER THOUGHT AND
CREATIVITY SYSTEMS> <TEXT-CONTROLLED
ACTIVITIES AND ADVANCED WORKSPACES>
<EDUCATION> <SCHOLARSHIP> <THE
PRESENTATION OF OUR HERITAGE AND
CULTURE> <WHAT ELSE?> (HOLOG. ETC.
CN2605 346 (USED QDP) <NOT ALL WILL BE
PROGRAMMERS; ALL WILL BE _USERS> (CF.
AUTO MECHANICS) CN2605 347 ALT.
VIEWPOINTS <'EVERYTHING IS POSSIBLE'>
VS. <'ONLY CERTAIN THINGS WILL WORK.'>
CN2606 348 'THE TRUE COPY' IS THE ONE IN
DIGITAL FORM. CN2606 349 (USED QDP)
<INTRO> MY ADVENTURES IN THIS ODDYSSEY
HAVE BEEN MOST CURIOUS AND INSTRUCTIVE,
AND SHOULD BE TOLD ELSEWHERE. CN2606
350 THE ORDINARY CLASSROOM IS A
GROTESQUE SOCIAL SITUATION. THE TEACHER
IS DISPENSING FAVORS* AND PUNISHMENTS**
IN A FRAMEWORK OF COMMON ATTENTION. A
FRACTION, USUALLY A LARGE FRACTION, OF

5 JUNE, 1969

THE CLASS IS DISORIENTED (LOST OR
BEHIND) AND/OR DAYDREAMING. *GRADES,
THE OPPORTUNITY FOR INITIATIVE AND
REWARD **FIRST RIDICULE; LATER GRADES
AND BAD REPORTS TO PARENTS. CN2607 351
((DUP. W SKY, PRES. STRUX))
<'SIMPLICITY' IS A MATTER OF EXPRESSIVE
CONVENTIONS> & WHAT MAY BE EXPRESSED
BRIEFLY IN THEM (& LATER EXPANDED OR
PROBED). CN2608 352 <THE FUTURE AS SEEN
BY IBM> <IR> 'TELEPROCESSING' <THE
FUTURE AS SEEN BY THE PHONE CO.> COMM.
BET. COMPUTERS MICKEYMOUSE CLASSROOM
STUFF PICTUREPHONE <THE FUTURE AS SEEN
BY MCLUHAN> (PROB. LEAVE OUT: MINSKY,
ETC.) CN2608 353 (USED QDP) <WE ARE
DESIGNING MAGICAL CASTLES> CN2609 354
<GENERAL SYSTSEM> (SOFTWARE-GENERALIZED)
PLUS <SPECIAL RIGGING> CN2609 355 QUOTE
FROM THE 1930 _ENCYC. _BRIT. CN2609
356 (USED QDP) <FANTICS> OF. THE
HANDLING AND PRESENTATIONOF IDEAS;
ESPECIALLY WITH REGARD TO MAKING THINGS
LOOK GOOD, FEEL RIGHT, AND COME ACROSS
CLEARLY. CN2610 357 (USED QDP) UG 1

5 JUNE, 1969

MANY PEOPLE HAVE TOLD ME, "I AGREE WITH
SOME THINGS THAT YOU SAY, BUT I CAN'T GO
ALONG WITH ALL OFIT-- AND YOUR EXTREMER
VIEWS THROW PEOPLE OFF. YOU COULD GET
FARTHER IF YOU PRESENTED IT IN A WAY
THAT WOULD RELATE MORE TO WHAT PEOPLE
ARE USED TO, AND + CN2610 358 (USED QDP)
UG 2 MAKE IT LESS (((SQUIGGLE))) BUT
THAT WOULD DEFEAT THE PURPOSE OF THIS
BOOK. THE PURPOSE OF THIS BOOK IS TO
COMMUNICATE A UNIFIED POINT OF VIEW, A
VISION. TO DILUTE THIS, TO SWEETEN IT
OR PRESENT IT INGRATIATINGLY WOULD BE
DISHONEST. DIFFERENT PEOPLE HAVE HEARD

IEF314I SYSIO

```
COMPLETION CODE - SYSTEM=522   USER=0000
IEF285I    SYS1.P1518.AVD.T360                              PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.T360S5                            PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.PRTFILE                           KEPT
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS69156.T070811.SV000.J6070837.R0000012         SYSOUT
IEF285I    VOL SER NOS= MVTSPL.
REGION = 150K CORE USED =    8K CPU TIME = 0.006 WAIT TIME = 0.035
I/O COUNT=(DA=     7605,TP=        0,UR=        0,GR=        0,CE=        0)
X STEP6 EXEC PGM=IEFBR14                                                      00000500
X DELETE DD DSNAME=*.STEP1.SYSIN,DISP=(SHR,DELETE),UNIT=SYSDA,     X00000510
X               VOLUME=SER=AVDPAK                                  00000520
IEF236I ALLOC. FOR J6070837 STEP6
IEF285I    SYS1.P1518.AVD.T360                              PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.T360S5                            PASSED
IEF285I    VOL SER NOS= AVDPAK.
IEF272I - STEP WAS NOT EXECUTED.
REGION =    0K CORE USED =   0K CPU TIME = 0.000 WAIT TIME = 0.000
I/O COUNT=(DA=        0,TP=        0,UR=        0,GR=        0,CE=        0)
IEF285I    SYS1.P1518.AVD.T360                              KEPT
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.T360S5                            KEPT
IEF285I    VOL SER NOS= AVDPAK.
IEF285I    SYS1.P1518.AVD.NELSONB                           KEPT
IEF285I    VOL SER NOS= AVDPAK.
(1518,DER) DATE = 69156 FINISH TIME = 07.54 CLASS = A CPU TIME = 0.130 WAIT TIME = 0.066 FUNDS LEFT IN ACCOUNT =        2413.41
```

FROM BROWN TAPE