CONFIDENTIAL PRESENTATION

of

Ted Nelson's
Zigzag™
and
Ted Nelson's
Dimensia™

March 24,
1994

Paradoxical Discrete Hyperspace

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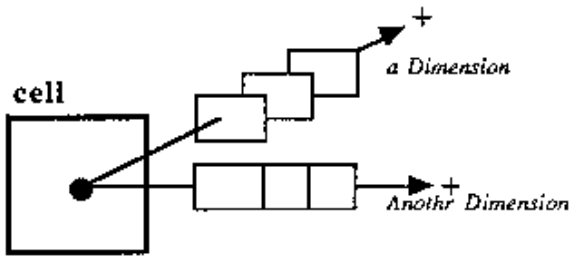
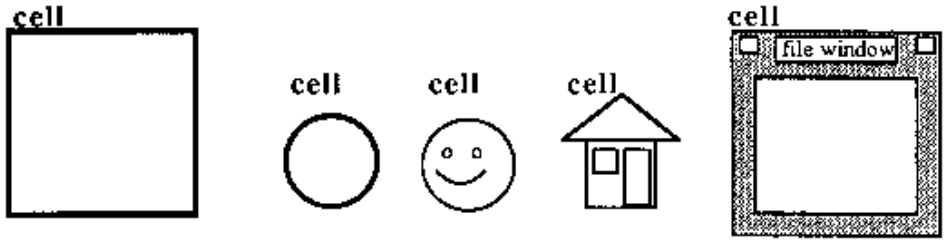


A CELL CAN LOOK MANY DIFFERENT WAYS



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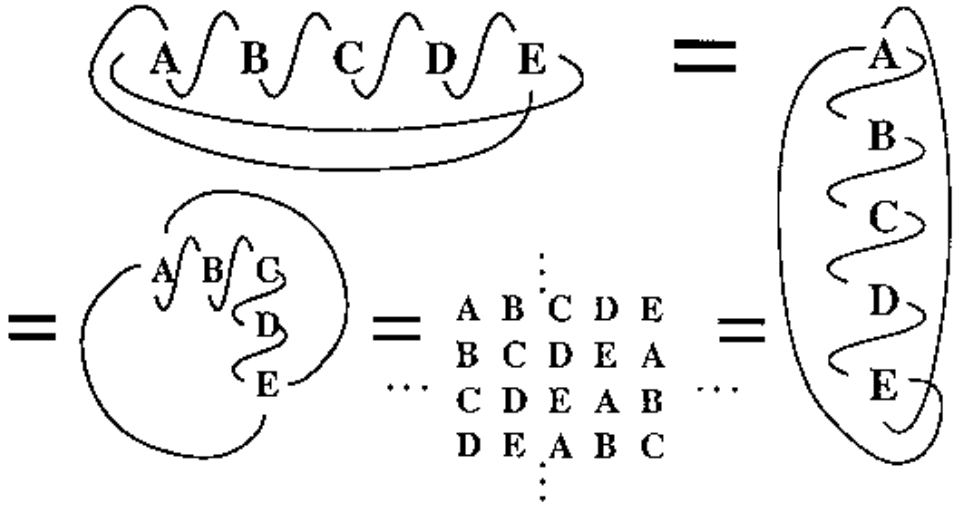
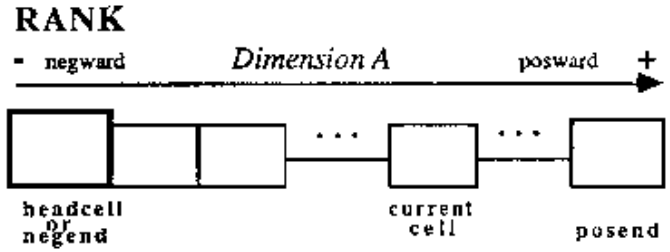
Connect TOP TO BOTTOM, LEFT SIDE TO RIGHT

(orthogonal connections not shown)





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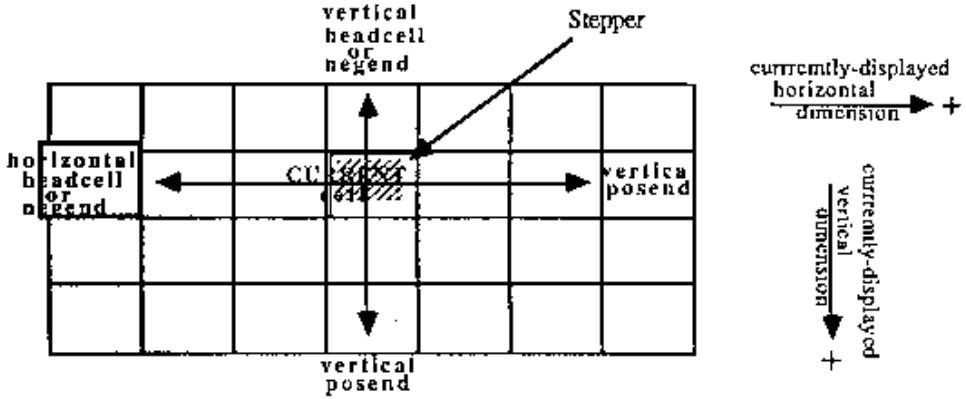
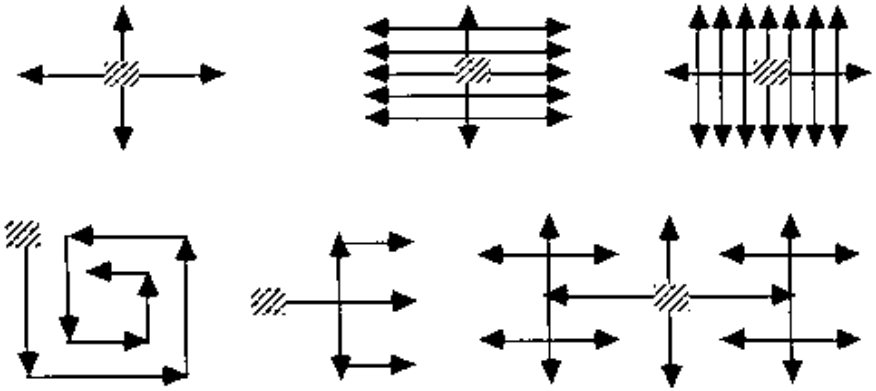
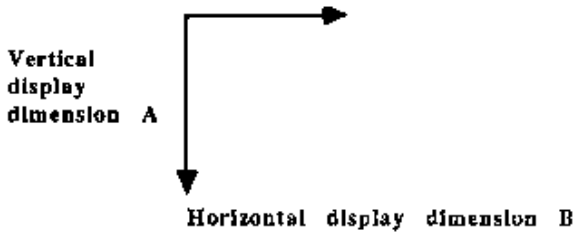
RANKS AS USUALLY SEEN, IN A GRID



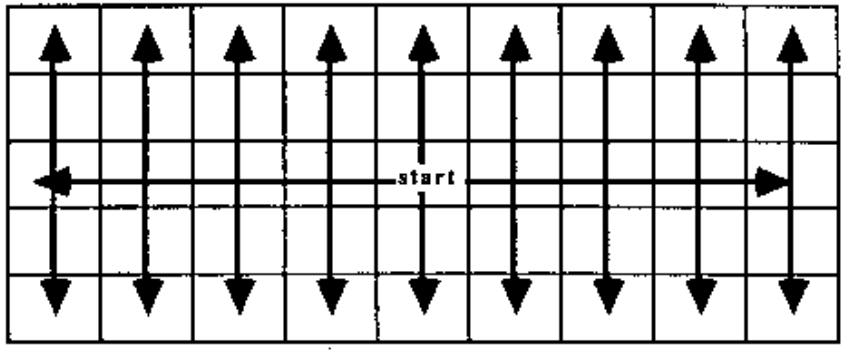
DIFFERENT VIEWS,
Refreshed Outward from a Cursor ("Stepper")



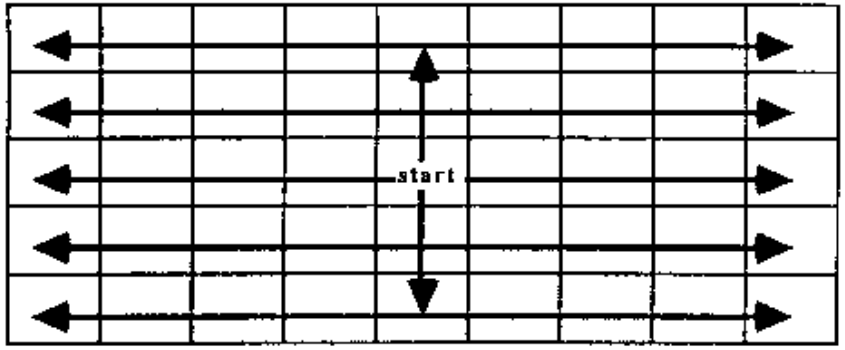


THE TWO MAIN REFRESH RASTERS

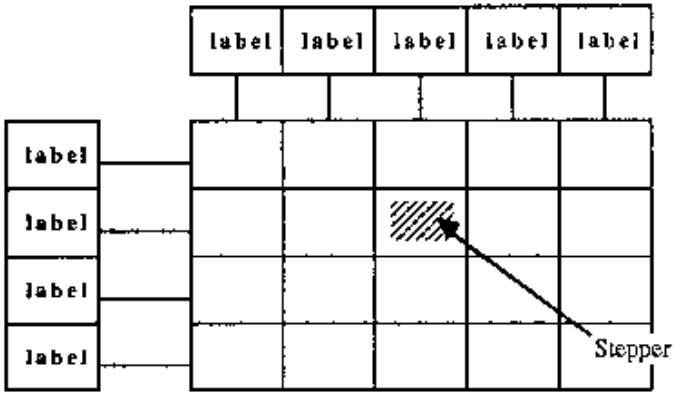
H mode raster



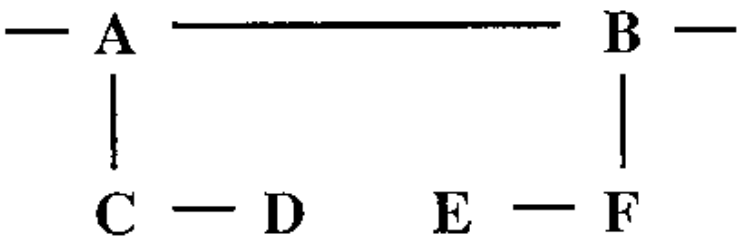
I mode raster



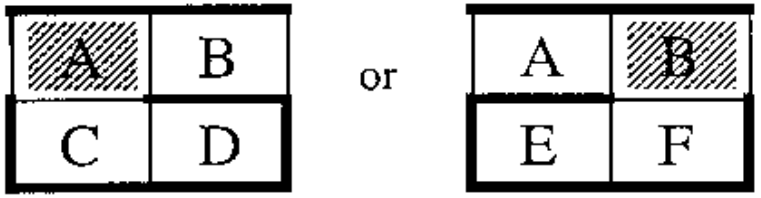
FLOATING-HEADCELL RASTER



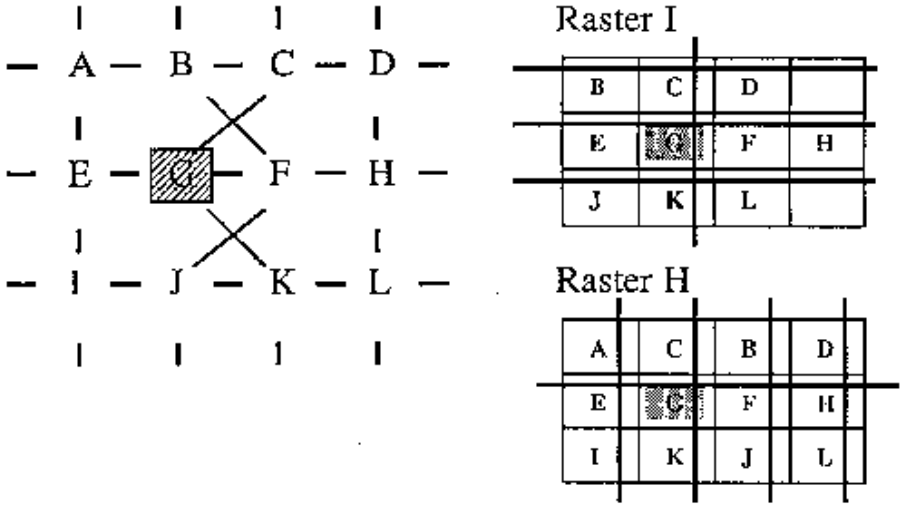
Where's the Paradox? Consider:



Shows (depending on Stepper) as:



THE VIEW FROM THE STEPPER



THE PARADOX IS ABOUT YOUR FLAT-PAPER EXPECTATIONS--

Row-and-column view changes depending on

CENTER OF REFRESH
RASTER OF REFRESH.

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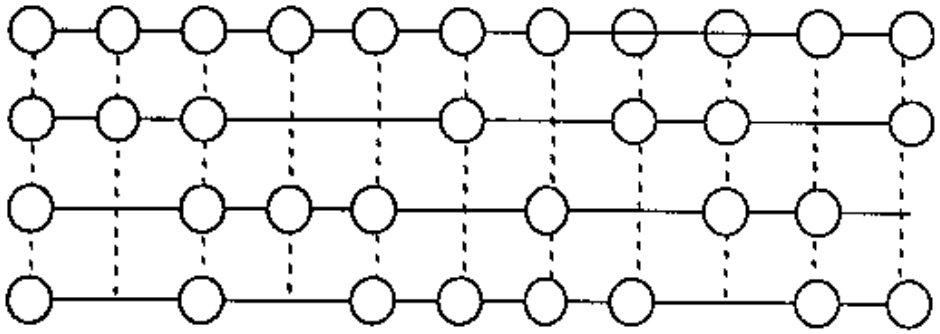
WYSIWYG usually means

USE THE COMPUTER as a PAPER SIMULATOR!

Viewing in Row-and-Column Format

MAKES IRREGULARITIES LIE DOWN TOGETHER



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Visual cues to help in grid--

Unconnected

Connected but Not Shown

Connected to other shown cell

Edge highlighting

Pips and Marks
Color
Size
Color
Icons
Animations

VIEWFLIPS

(all just change the view)

FLIP RASTER	EXCHANGE COORDINATES
FLIP CELLVIEW	REVERSE COORDINATE
HOP STEPPER	SPIN DIMENSION

NAIL Stepper Position	RELEASE Stepper Position

Keep Showing Inactive Stepper

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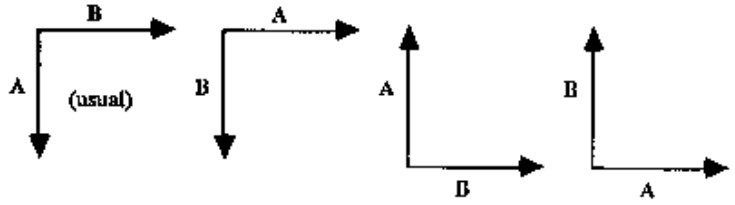
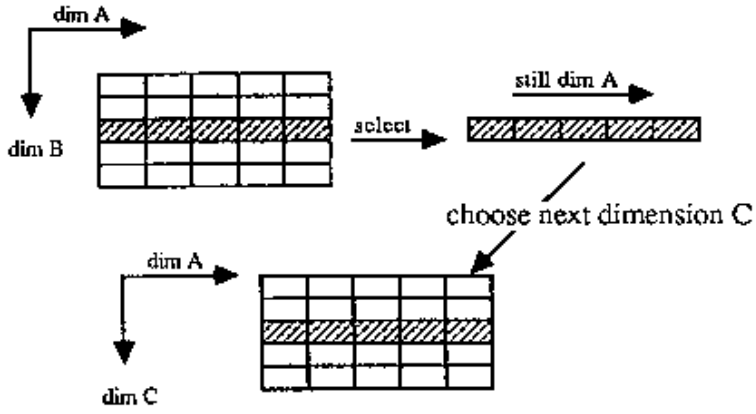
ROTATION FLIPS

~~DIMENSIONAL FLIPS~~ Some of the Variations



ROTATION: Pick a Rank, New Dimension Comes In



SIMPLE DATABASE BY STEPPER
(H Raster)

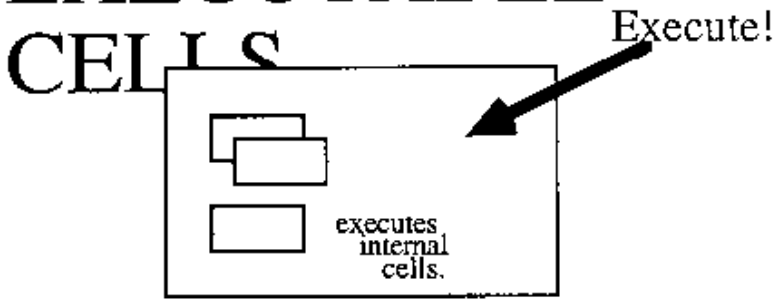
stepper

Jill	Hansen	444 McC	New Yo	NY	19081
Charles	Harris	1459 Du	New Pro	NJ	99404-6
Michael	Hawking	7924 Re	South Bo	IN	82056
Michael	Henry	27 Rudo	Houston	TX	44029

stepper

Ceelia	Tweedal	Bird's L	Wilming	DE	88876
Charles	Harris	1459 Du	New Pro	NJ	99404-6
Colton	Rantles	555 The	Boston	MA	08568
Culpepp	Zsigmon	666 Ruft	Denver	CO	56565

EXECUTABLE CELLS



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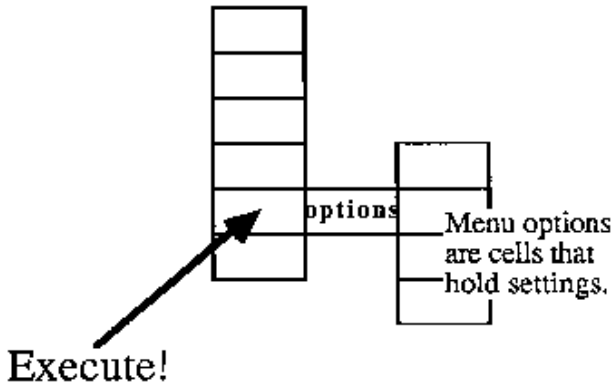
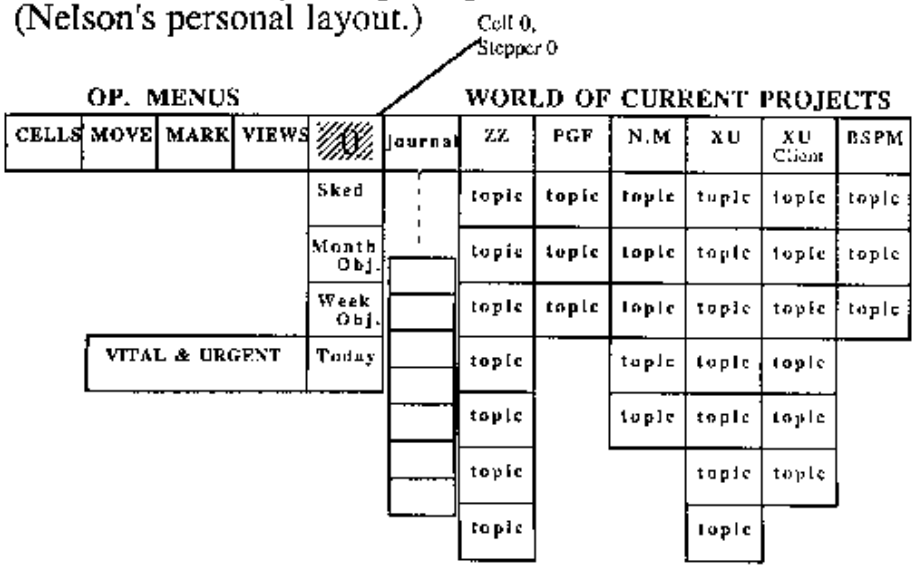
EXECUTABLE CELLS
ARE YOUR MENUS.



GAMEBOARD, your opening/control screen
(Nelson's personal layout.)



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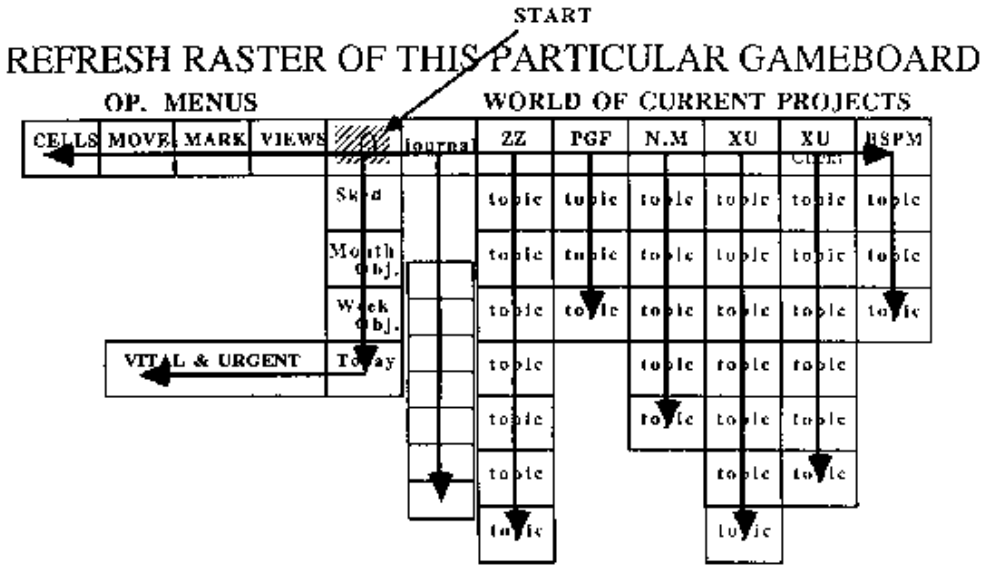
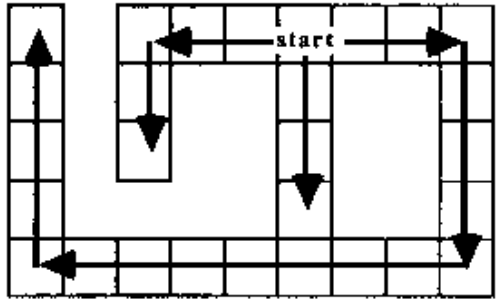


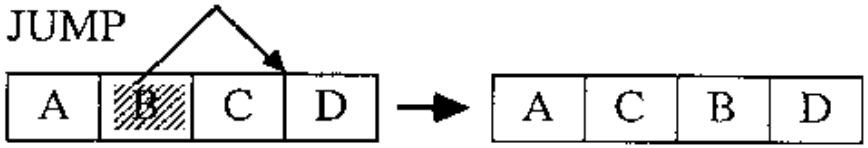
The Zig Raster

(Some particular zigzagging algorithm)

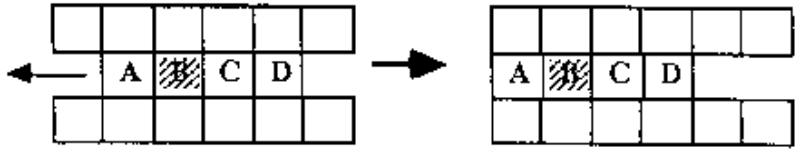


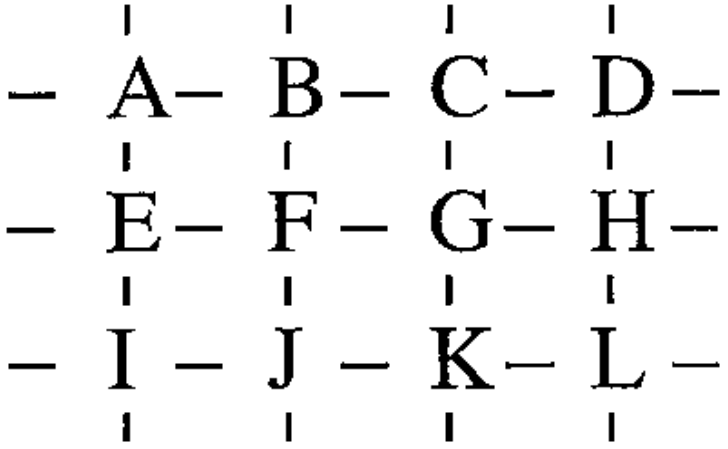
RECONNECTIVE MOVES IN THIS SPACE

JUMP



SLIDE or SHEAR





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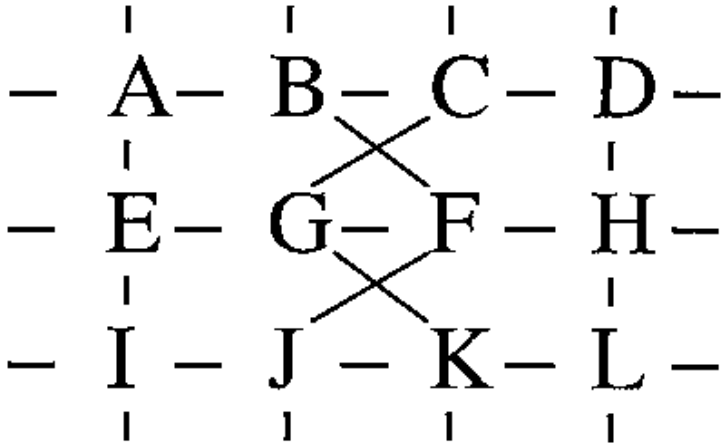
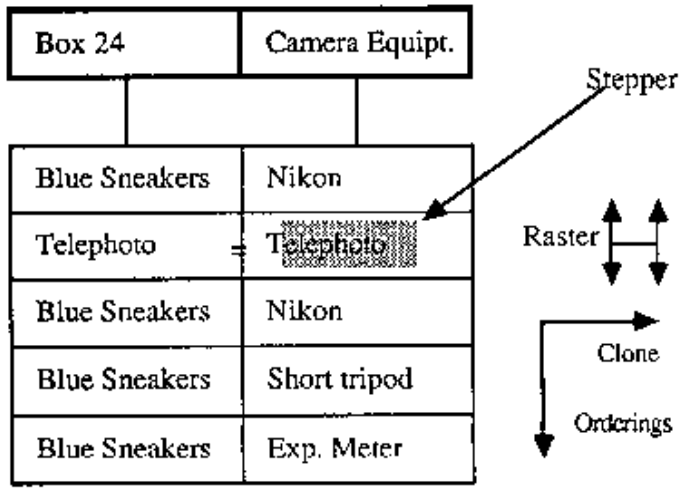
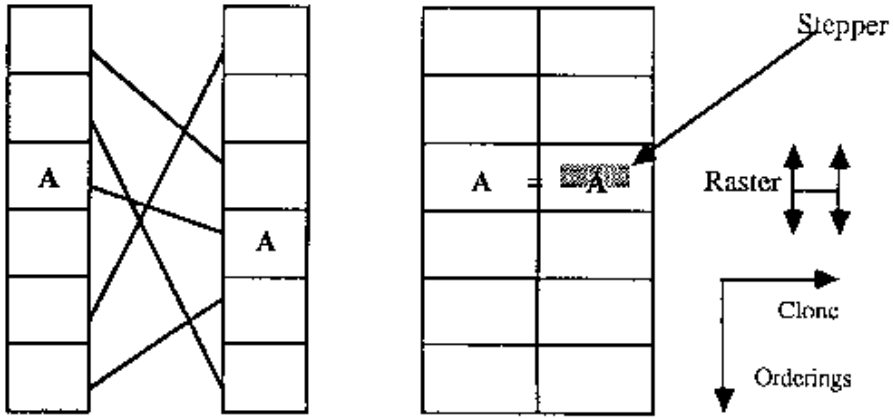


LIST COORDINATION WITH ZIGZAG: STORAGE LISTS



SEEING TWO DIFFERENT ORDERINGS AT THE SAME TIME

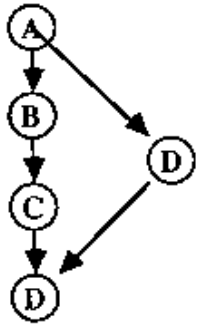


Structure

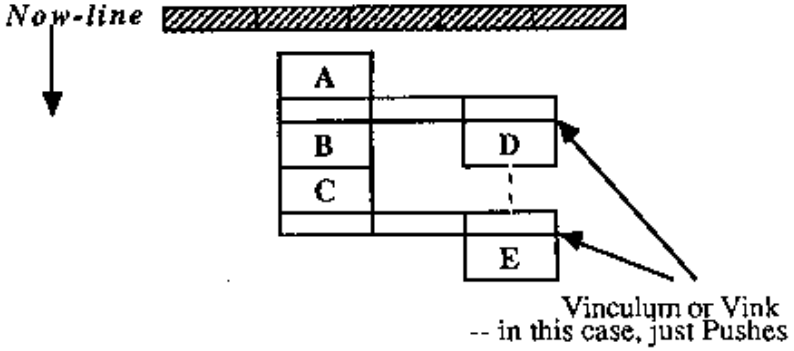
PERT / Planalog

For project schedules, showing conditional dependencies

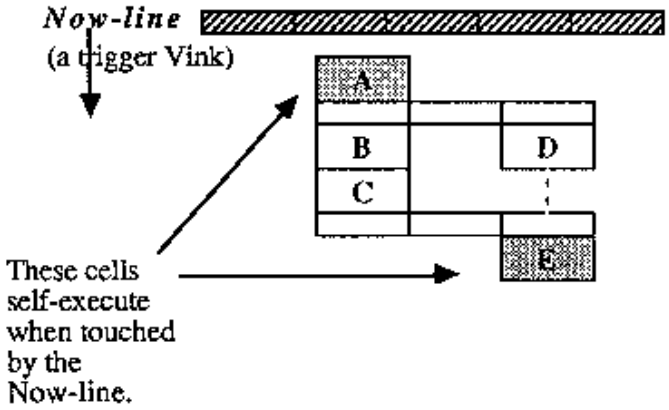
1950s notation



As physically implemented with blocks in the 1960s "Planalog," and implemented in ZigZag

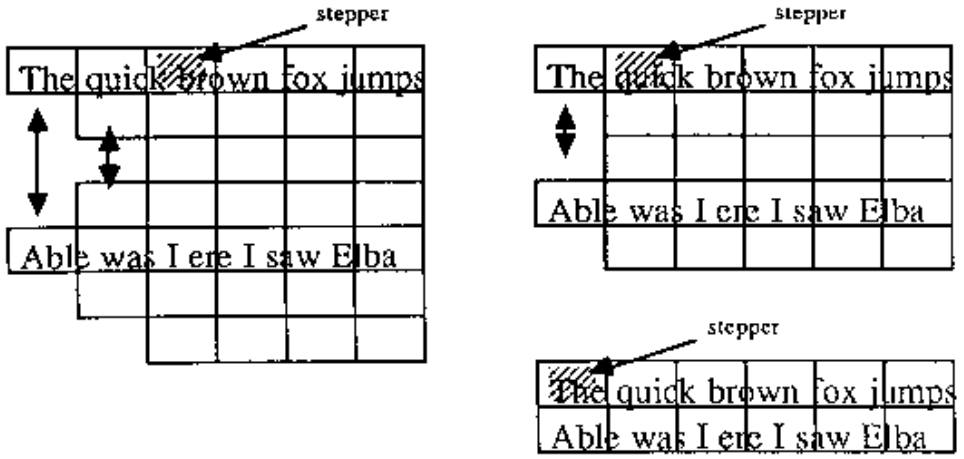


PROGRAMMING with PERT model



OUTLINING:

Indentation simply determined by Stepper



User-Extensible, User-Customizable

DEFAULT VISUALIZATIONS FOR EVERYTHING

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COMPRESSION

NO EMPTY CELLS

(unless for connective functions)

EVERYTHING IS ADJACENT OR NEAR

(Even if you need to add another dimension to bring it close)

NEAR PAYOFFS

COMPLEX INTERCONNECTIVITY A SNAP with BUILT-IN VISUALIZATION

Surprise ease of Database Exploration

Surprise ease of Outlining

FAR PAYOFFS

Deep Interconnection among Complex Objects

A Better User Environment

Programmable at 1-2-3 Level

DEEPLY INTEGRATED "APPLICATIONS"

Then generalize to N-Space.

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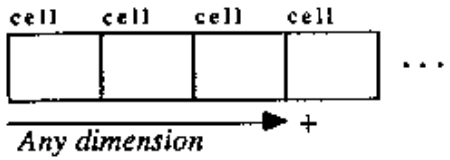
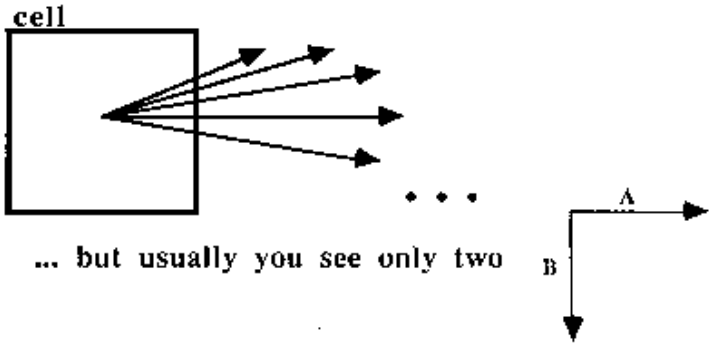


A CELL IS IN ALL DIMENSIONS AT ONCE



... but usually you see only two

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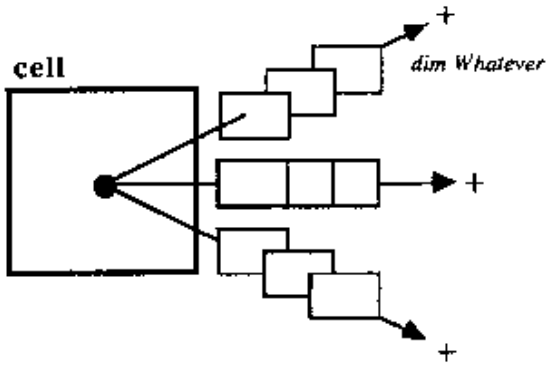

First two User Dimensions:

T1 (first direction of text)

T2

(second direction of text,
truncated and stacked
for the page)

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OTHER DIMENSIONS:

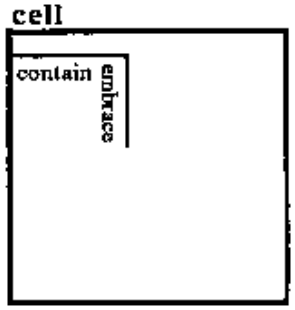
Whatever You Like

(things to see Together or Apart)

EVERY VIEW IS A ROTATION IN TEDSPACE

SYSTEM DIMENSIONS

Date	Clone
Stepper	Multiclone
Contain	Subclone
Embrace	Metastepper
Stack	Disk Slice



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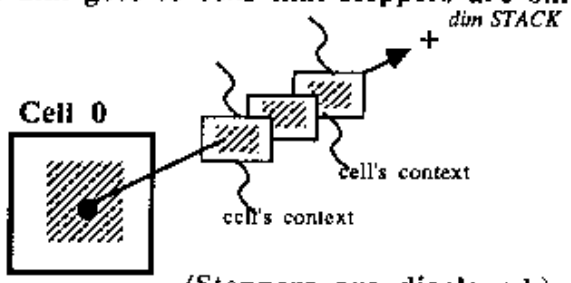
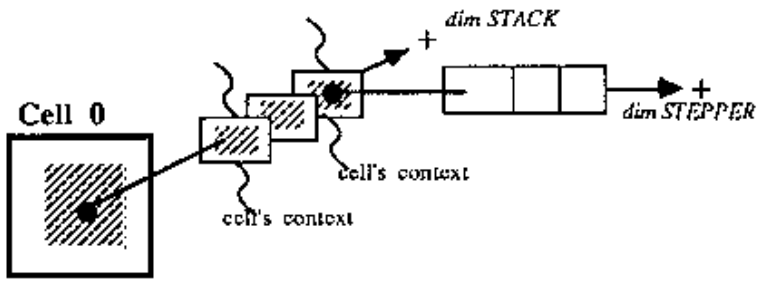
Stack dim goes to cells that steppers are on.



(Steppers are displayed.)



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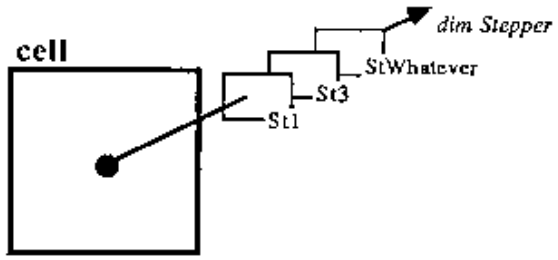

(These are really

GENERAL GRAPH STRUCTURES

-- left and right are conventions to order the rows and columns.)

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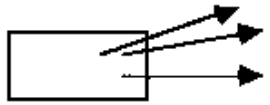
These are 1-to-1 UNTYPED CONNECTIONS

Typed Connections handled by:

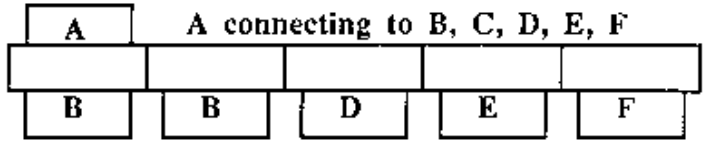
CLONING

instances in Clone Dimension

OTHER DIMENSIONS



VINCULAE (Vinks)



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Ted Nelson's Dimensia™

The full system and language (without application templates).

Ted Nelson's Zigzag™

and

Ted Nelson's Dimensia™

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Ted Nelson's
Zigzag™

The smaller,
introductory product
(undefined).

MARKETS

Small Intro Product
(desk accessory?)

Major System, programmable

Portable Code for Other's Software

PDA!

LET OTHERS BUNDLE THE APPLICATIONS?

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THIRD-PARTY OFFERINGS

Machine-Language Cells
(graphics, audio, video...)

C-Language Cells

Microcode

Application Templates

KILLER TEMPLATES

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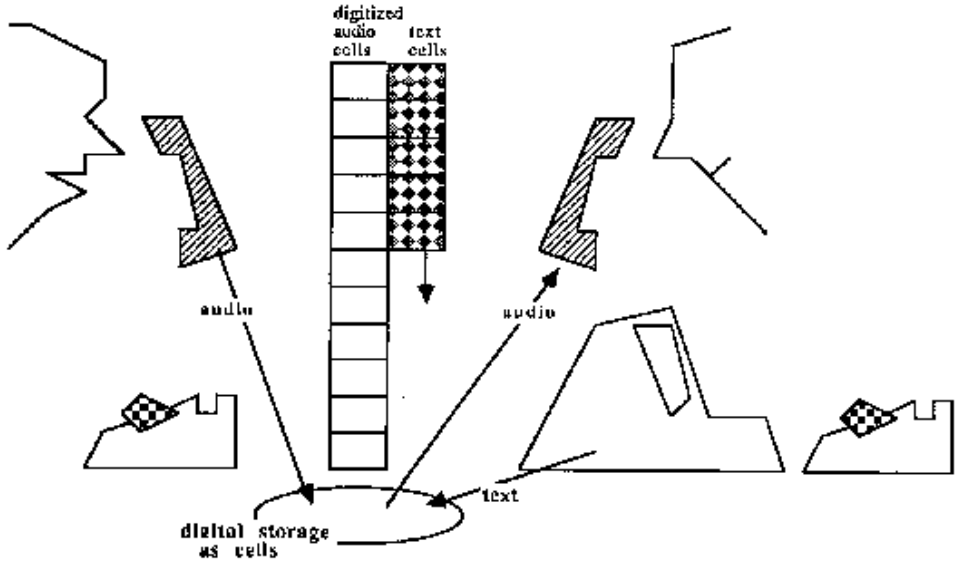
DICTATION INTO PHONE, Touch-Tone controls

TRANSCRIPTION FROM PHONE, Touch-Tone controls



E-MAIL READER

Create your own interface

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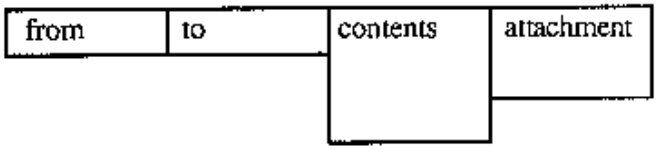
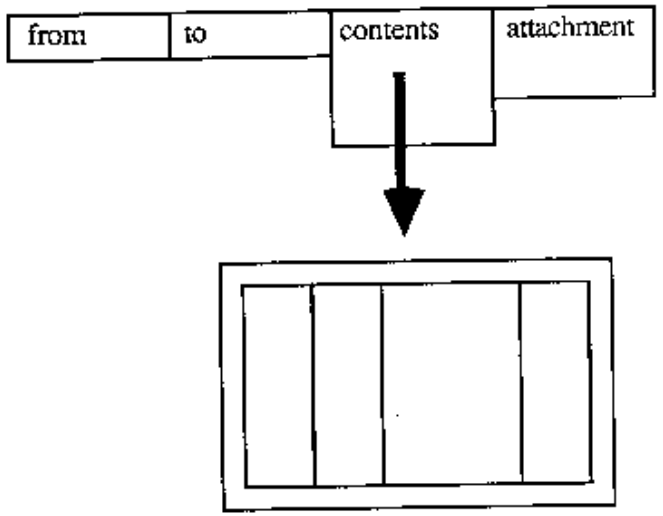
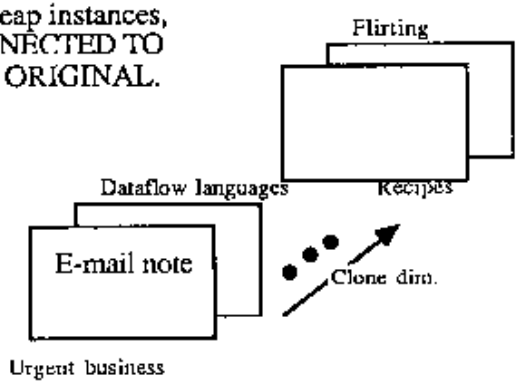
STORE E-MAIL IN ACCESSIBLE FORMAT



... ENCAPSULATED INTO ONE CELL



FILE YOUR E-MAIL
LOTS OF PLACES AT ONCE
as cheap instances,
CONNECTED TO
THE ORIGINAL.



Multi/Hyper-Media System

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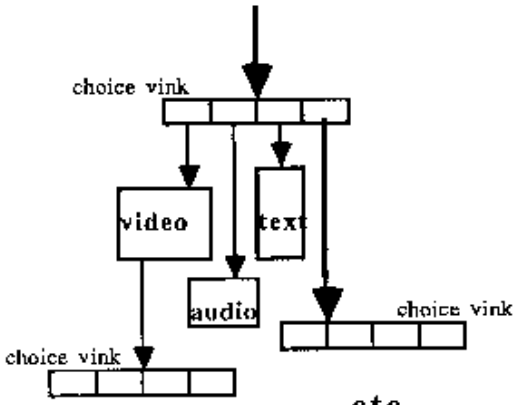
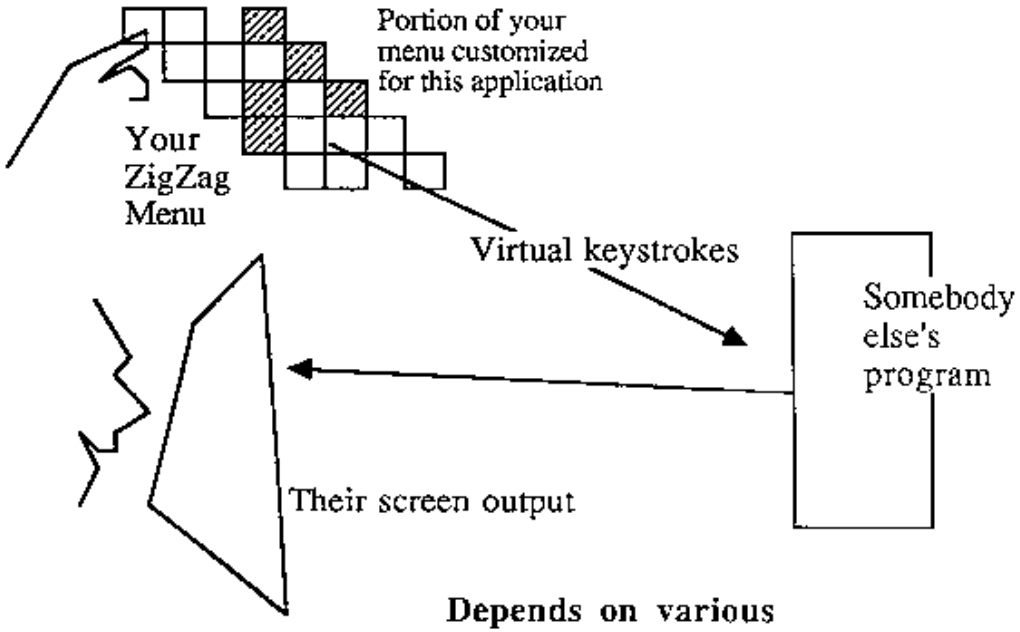
MULTIMEDIA AUTHORING AND USER SYSTEM



TO WHAT DEGREE IS THIS POSSIBLE?



Depends on various script-compliant technicalities of the foreign program, I guess.

MULTIDIMENSIONAL DATA TEMPLATES

MOVIE PRODUCTION TEMPLATE

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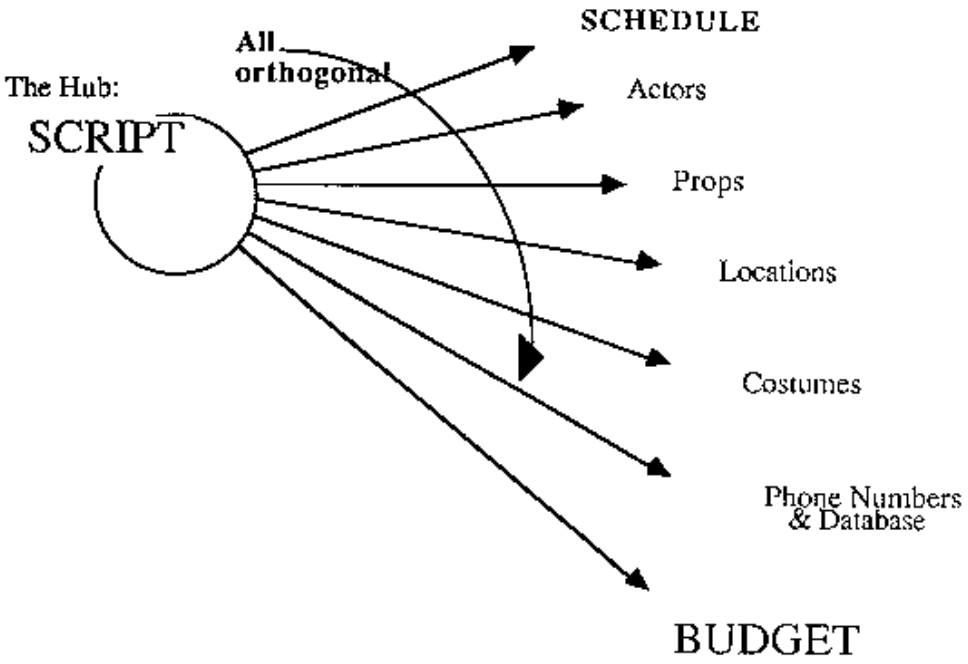
MULTIDIMENSIONAL TEMPLATE for MOVIE PRODUCTION



INDIVIDUALS AND COMPANIES

Staff	data	data	data	data	data				
Actors	data	data	data	data	data	data	data		
Tech	data	data	data						
Crew	data	data	data	data					
Support	data	data	data	data	data	data	data	data	data
FX	data	data							
...	data	data	data	data	data	data	data	data	data

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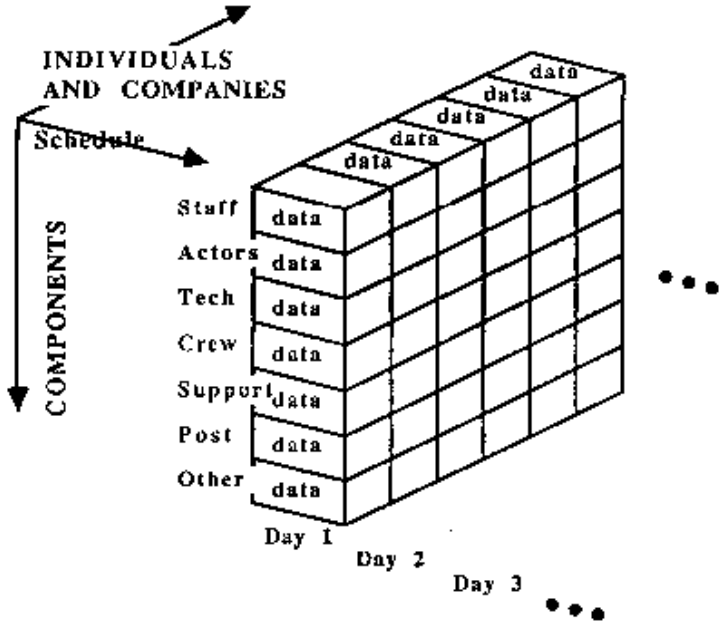

SHOOTING SCHEDULE X SCENE (in hours)

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Scene 1					6	
Scene 1 inserts	1		2			1
Scene 2	6			8		
Scene 2 inserts						2
Scene 3		4				
Scene 3 inserts			1			2
...						

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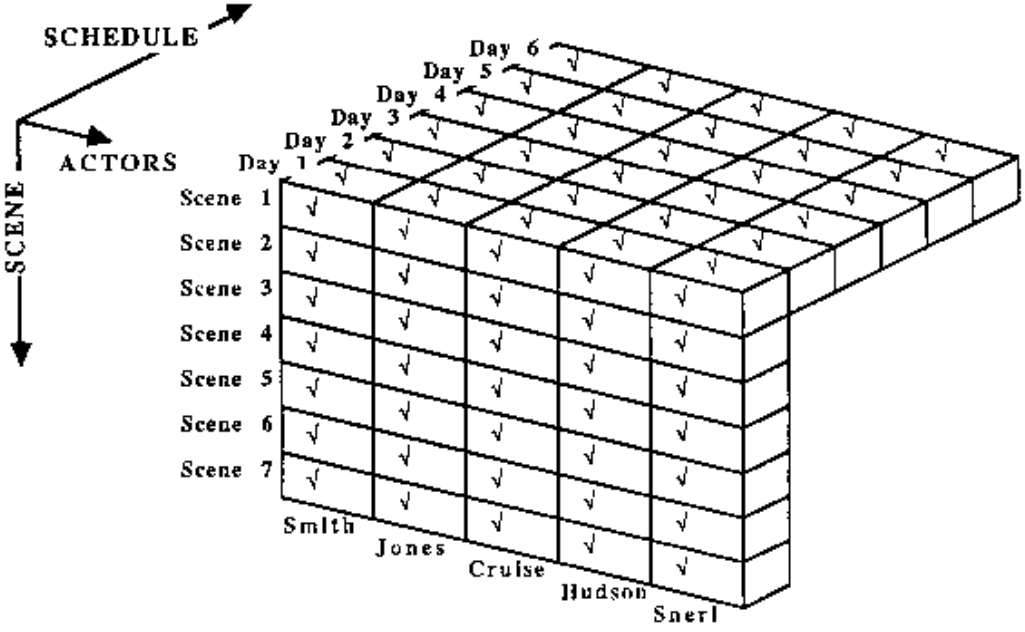

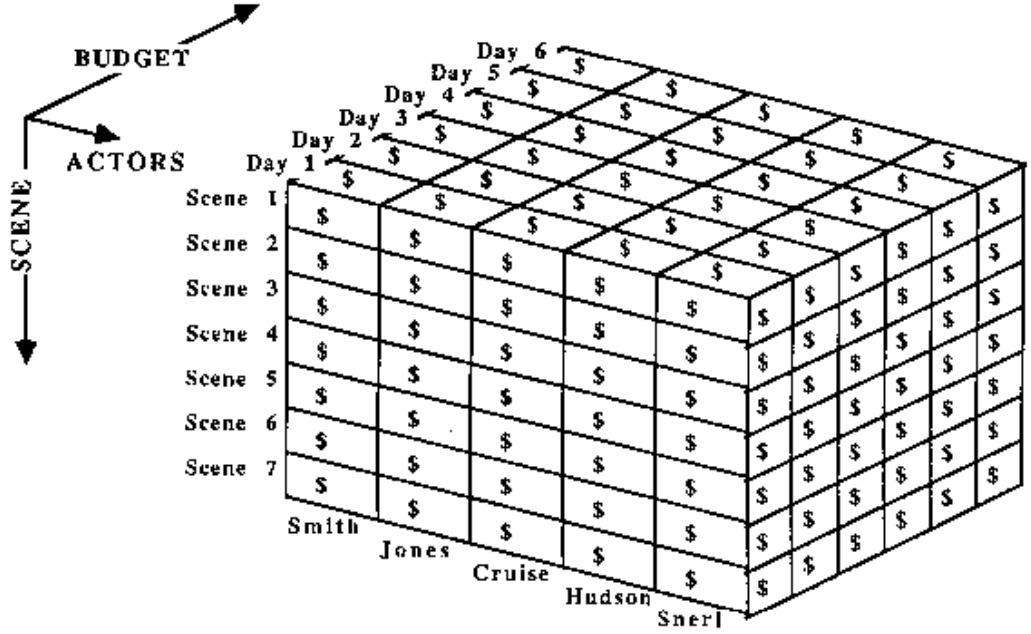

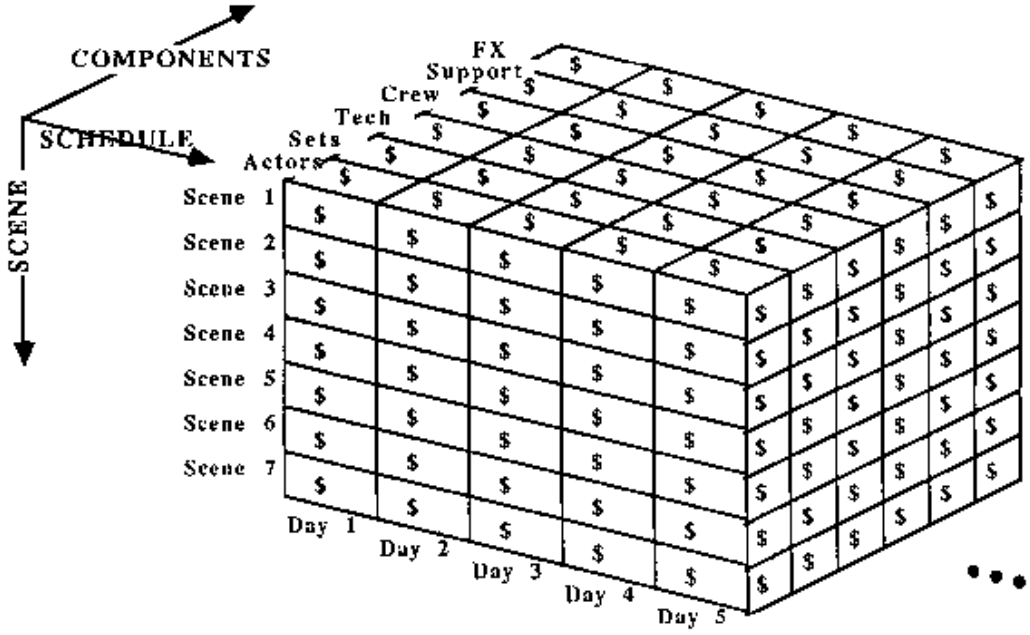

REVISION TECHNIQUES using Multidimensional Views

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