Introductory Education in Typography

Daniel Friedman

Design schools which deal with typography are plagued with inviable conventions, the phase out of typography as a handcraft, and an inaccessibility to the potentials of the newer, complexer, typesetting systems. Typographic form is being taught in terms of outdated mechanics and popular fashions ; no teaching methodology exists which will transcend the technical and stylistic and deal only with the generically perceptual or visual. The author shows examples of a simple typography exercise and from this exercise, makes general observations regarding simplicity and complexity, rhythmic structure, coherency, convention, unpredictability, legibility and readability.

Education in typography for designers is going through a major transition. It is in a period of frustration and renewal. Again and again, existing teaching methods seem to perpetuate the same typographic conventions. Perhaps the reason is that these methods have relied heavily upon an education in technical competence, historical preservation, and commercial simulation. They do not, however, rely upon the exploration of an open-ended, creative, new vision.

I do not mean to suggest here that an understanding of the technical complexities of typography, a knowledge of an historical context, and an awareness of the prevailing fashions are irrelevant to creative design. But such an understanding has been the substitute rather than the support for an imaginative visual education in typography, and it has clouded the path for students who wish to promote a fundamentally creative disposition.

What we realize is that any really new typography will be derived from a truly artistic energy and not automatically from the technician, historian, or practitioner—no matter how "competent" he may be. For this reason, a few schools in graphic design and typography are now trying to take advantage of the very unique position which higher education has in our society—a position which they perhaps failed to recognize in the past. It is a position which provides the opportunity to know existing standards but also to search freely for alternatives ; to experiment with typographic syntax liberated from the practical limitations of client or deadline ; and, to prepare students so they can be depended upon in the future for significantly fresh thought and action.

The advancements in the technology of typesetting and the (perhaps premature) death of letterpress have further complicated typographic education. Few schools can still afford to maintain a shop for metal typesetting, and even fewer can afford to convert to the newer, more sophisticated phototypesetting devices. Many schools must now depend upon typesetting machines such as the Phototypositor and the IBM Selectric Composer, and on Zerox or Diazo machines for printing. Trying to make do with the limitations of these rather primitive processes has the advantage of putting education on a survival basis which in some ways makes this a period of retrogression rather than of positive transition toward a new, highly sophisticated technology. Schools are searching for a way out of the problems created by the gap between a typesetting technology of the past which is disappearing too fast and the prospects of the future which are not yet fully accessable.

The typographic principles applied to the newer typesetting methods still pivot (perhaps anachronistically) out of all that has evolved in the craft of handset composition ; against this the possibilities of the newer photographic methods imply and facilitate an emancipation from the characteristic restrictions of letterpress. A student who has no access to handset composition, cannot easily recognize the basis for the existing typographic measuring system. The fineness, order, and good proportion almost inherent to type when it is thoughtfully composed from metal becomes a lost experience. Without a knowledge of the conventional rules which stem from good letterpress typography, the student can neither work with or against those rules nor is he usually in a position to explore the new freedoms implicit in newer typesetting systems. Where students are lucky enough to have access to such systems, inclusive of computerized editing capabilities, the production methods have tended to be too sophisticated compared to the student's own flexibilities in designing a modest visually coherent, typographic composition. This has indicated a need for a much stronger introductory education in typography, based more on the generically perceptual or purely syntactic characteristics of arranging type on the page than on the technical characteristics of typesetting methods which are in many ways antiquated once they are learned.

A new method for teaching basic criteria for typographic order, harmony, and proportion is being investigated. It is a method more aligned with drawing, painting, and creative writing than with the technicalities, terminologies, and styles of the typography of the past and present. Shown on the following pages are some results of an exercise done in my classes for introductory typography. The students were graduate students in graphic design at Yale University and undergraduates at Yale and the Philadelphia College of Art.

These students were given a randomly selected weather report set initially in 30-point Univers in both a normal and bold weight. This particular message and typeface were chosen for their non-persuasive and rather ordinary content and as a vehicle for syntactic (and semantic) exploration. The examples on the following pages are not meant to be results, ready to be applied to television or press, but an expression of a program for perceptual learning. While the permutations are on a relatively basic level to facilitate comprehension, the same theories would apply to more complex situations.

Weather:
Sunny, hot, humid
today and tomorrow.
Fair and warm tonight.
Temperature range:
Today 96-75
Tuesday 94-72

| Weather: | Sunny, hot, humid |
	today and tomorrow.
	Fair and warm tonight.
	Temperature range:
	Today 96-75
	Tuesday 94-72

The problem was to play out a number of different design operations upon the given message, within a composition of square (neutral) proportions. Variations were programmatically developed in sets ranging from simple to complex. The main concern was to observe the effects of message variation, accomplished solely through perceptible, visual changes in :

position
type weight
type size
slant (italic)
line spacing
word spacing
letter spacing
clustering
symbolic gesture
pictorial
confrontation

Weather:
Sunny, hot, humid
today and tomorrow.
Fair and warm tonight.
Temperature range:
Today 96-75
Tuesday 94-72

Weather:
Sunny, hot, humid
today and tomorrow.
Fair and warm tonight.

Temperature range:
Today 96-75
Tuesday 94-72

Weather:
Sunny, hot, humid
today and tomorrow.
Fair and warm tonight.

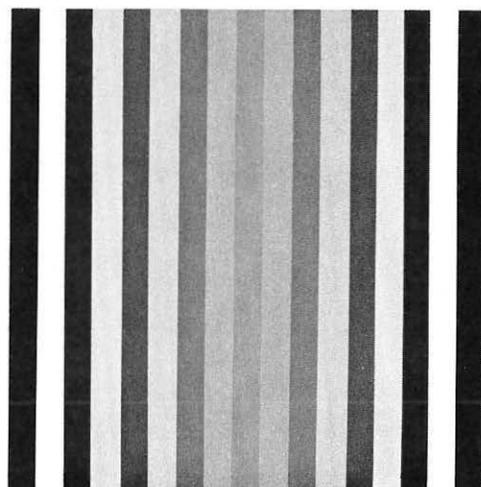
Temperature range:

Today 96-75

Tuesday 94-72
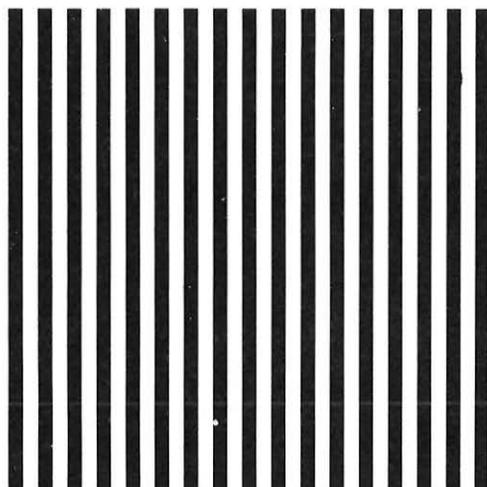
Repetitious intervals

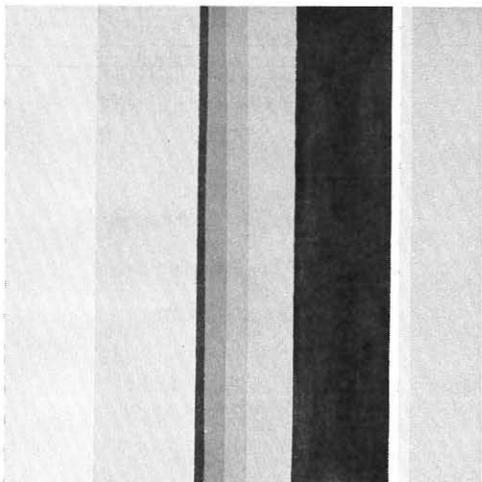**Repetitious values**

Repetitious intervals

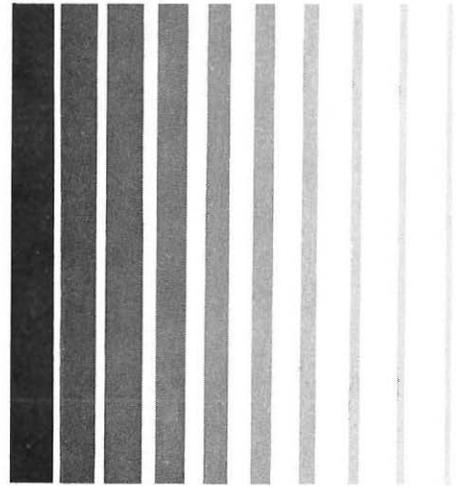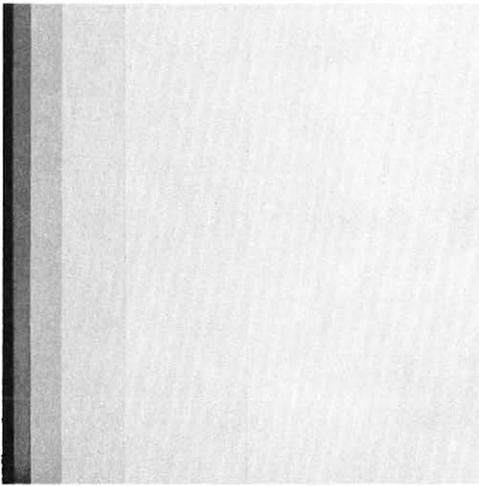**Progressive values**

Hybrid values

Hybrid intervals

Rhythmics and structural notation

Designing with type must be preceded by a basic
knowledge of proportion, harmony, and rhythm.
Shown here are rhythm exercises using vertically
delineated intervals and values ranging from black
to white. They are based on three rhythm structures :
a repetition (static)
b arithmetic and geometric progression (dynamic)
c hybrid (dynamic repetition/progression mix)
Designing with these rhythms in mind provides for
methodically creating structural order without loss
of flexibility in choice. The rhythms are easily applied
to the arrangement of type and can be made explicit
and more versatile through notational translation.

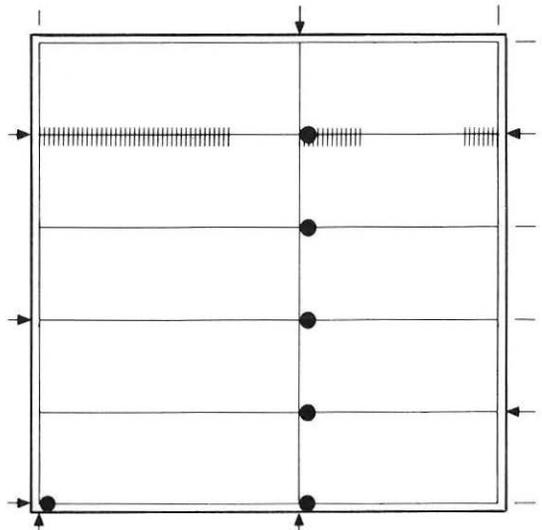Progressive intervals

Progressive values

Progressive intervals

Hybrid values

A structural translation
of a typographic
composition

	Weather:	
Sunny, hot, humid	Today	and
	Tomorrow.	
Fair and warm	Tonight.	
	Temperature range:	
Today 96-75	Tuesday 94-72	

Weather:

Sunny hot humid

today and
tomorrow.
Fair and warm
tonight.
Temperature range:
Today 96-75
Tuesday 94-72

---

sunny

Weather:

hot humid

today and
tomorrow.
Fair and warm
tonight.
Temperature
range:

Today 96-75
Tuesday 94-72

Weather:

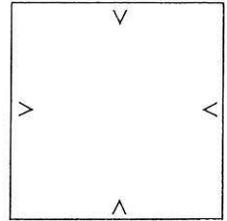Sunny

hot

humid

today
and tomorrow

Fair and warm tonight

Temperature range:

Today 96-75

Tuesday 94-72

Studies involved the
optimal clarity and ac-
tivity of each individual
typographic composition

and the fitness of one
composition to others in
a group or sequence.

W e a t h e r :

S u n n y

h *o* *t*

h u m i d
and

t o d a y

tomorrow.

and
Fair   warm t o n i g h t.
range:
Temperature
Today 96-75

T u e s d a y   94 - 72

Making coherent groups
of compositions evolves
naturally into a discus-
sion about typographic
grid structures.

Weather:
Sunny, hot, humid
today and tomorrow.
Fair and warm tonight.
Temperature range:
Today 94-72
Tuesday 96-75

Weather:
Sunny, hot, humid
today and tomorrow.
Fair and warm tonight.
Temperature range:
Today 94-72
Tuesday 96-75

Weather:
Sunny
most
of the
day
but
turning
cloudy
with
scattered
showers.
High
temperature:
52.
Colder
tonite
with
a probability
of snow
flurries.
Low
tonite: 29.

Weather:
Sunny
most   of   the
day   but   turning
cloudy
with   scattered   showers.
High   temperature: 52.
Colder   tonite   with   a
probability   of
snow   Low   tonite: 29.
flurries.

W e a t h e r:
Sunny   hot   humid
today and tomorrow.
Fair and warm tonight.
Temperature   range:
Today   96-75
Tuesday   94-72

W   e   a   t   h   e   r
S   u   n   n   y
most of the day but
turning cloudy with
scattered showers.
H   i   g   h
temperature: 5   2 .
C   o   l   d   e   r
tonite with a probability
of snow flurries.
L   o   w
tonite: 2   9 .

Weather:

S u n n y

mosto f t h e day

but t u r n i u 6 **cloudy**

with **scattered showers.**

C o l d e r t o n i t e

with a p o s s i b i l i t y of

S f u l n r i e o w r s.

H i g h temperature:**52.**

Low **t o n i t e : 29.**

ART =
The unpredictable state
of messages

Using the same message, experi-
ments were made which show
states of simplicity and com-
plexity, the normal and the dis-
torted, the static and the dynamic,
and their subsequent effects on
legibility and on originality.
**Is legibility based on conven-
tion, and is convention based
on legibility ?**

Weather:
Sunny,
hot,
humid today
and tomorrow.
Fair and warm tonight.
Temperature range:
Today
96-75
Tuesday
94-72

W eather:
humid
tonight.
Sun ny   hot
today and tomorrow.   warm
Fair and
range:
75
Temperature   96   -
Today
Tues day   94 - 72

Weather:

Sunny most of
the
day
but turning
cloudy
with
scattered
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Colder
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Low tonite:29
High temperature: 52.

Weather:
Sunny,
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96-75
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94-72

Weather:
Sunny
hot
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Fair and warm tonight.
96-75 **Temperature range**
Tuesday
94-72

Weather:
Today and
tomorrow
Sunny
hot
humid
Temperature
range: Today
96-75 Tuesday
94-72
Tonight **Fair** and warm

138

Fair
range:
Today **96-75**
Sunny
humid
hot,hot
hot,hot
96-75
today
S un
Sunny, *hot,* humid
and tomorrow.
Weather:
todaYand warm
Weat **Fair** **air** **her:**

h

o

t
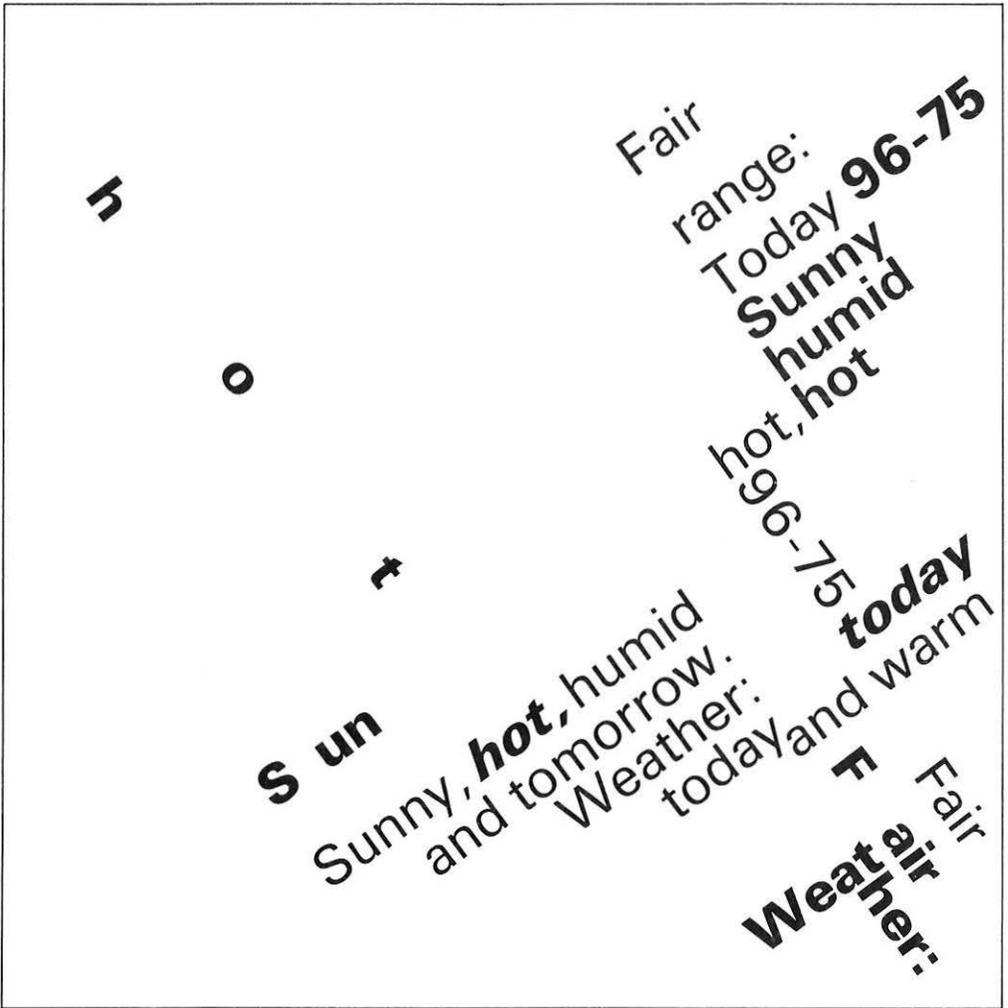
Legibility vs. Readability

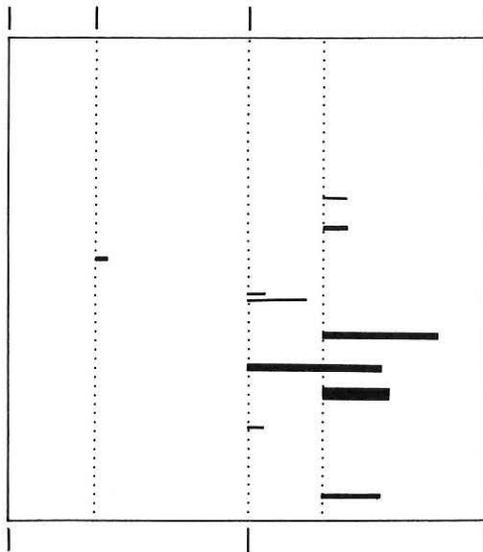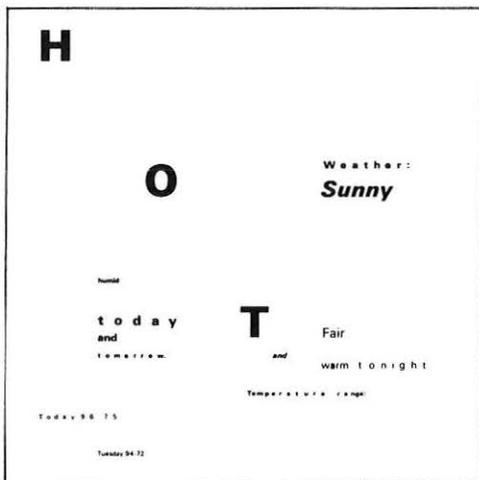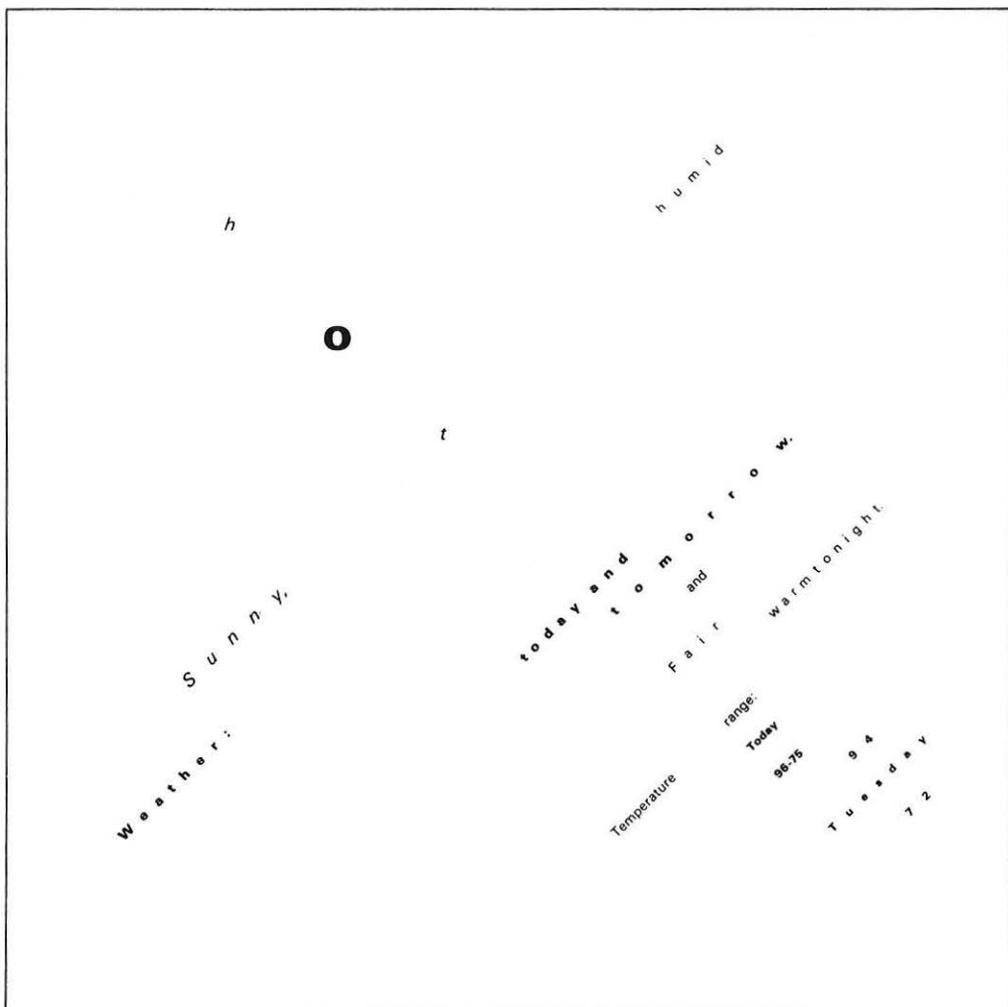| functional	unconventional	
		We contend that legibility (a quality of efficient, clear, and simple reading) is often in conflict with readability (a quality which promotes interest, pleasure, and challenge in reading). To what degree can a typographic statement be **both** functional **and,** at the same time, aesthetically unconventional
orderly	disorderly	
simple	complex	
legible	unpredictable	
static	dynamic	
banal	original	

Weather:

Sunny

hot

humid
today and tomorrow.

Fair and warm tonight.

Temperature range:

Today

96-75

Tuesday 94-72
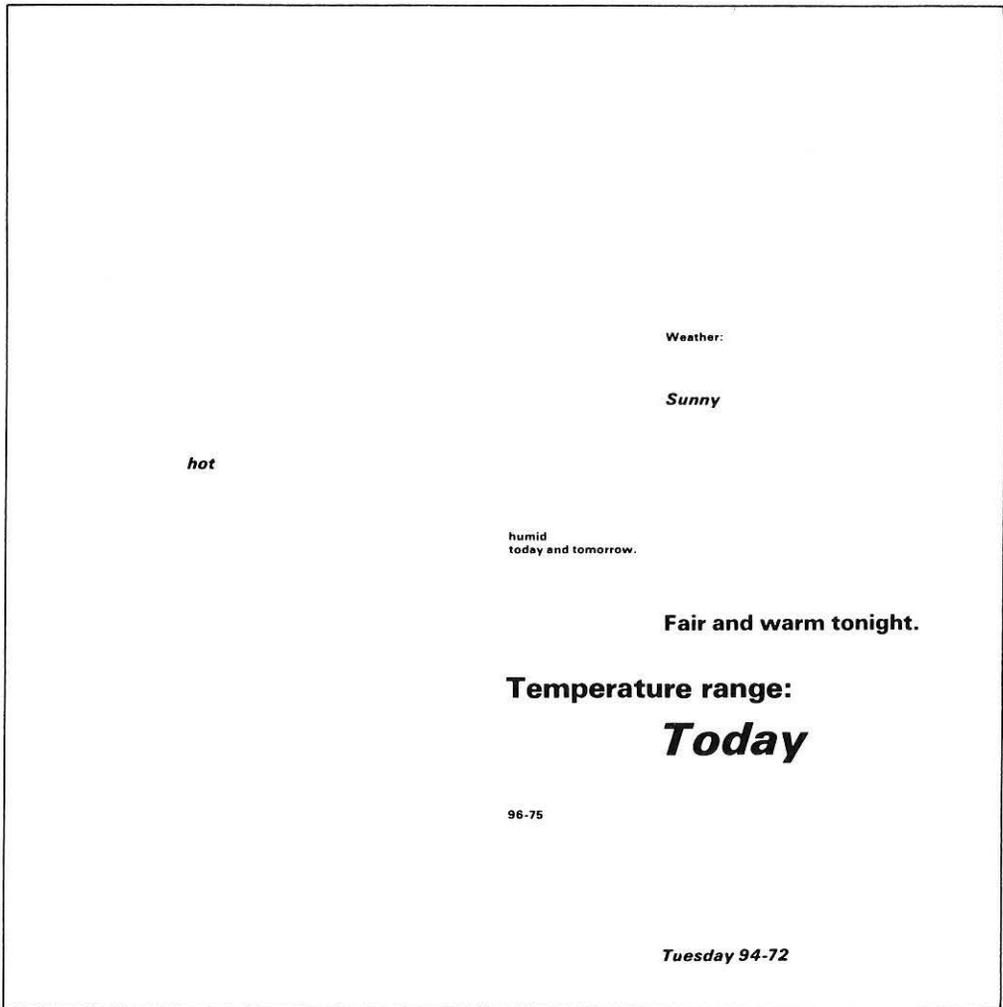
Making structure visible

The composition is
organized by a hybrid of
repetitious and progres-
sive vertical rhythms.
The line intervals along
each vertical axis are
also based on repetition
and progression.

Type sizes and weights
are based on progressive
values.

Line lengths are based on
progressive size intervals.

h

humid

O

t

S u n n y,

t o d a y a n d   **t o m o r r o w,**   and

F a i r   w a r m t o n i g h t

W e a t h e r :

range:

Temperature   **Today**   **96-75**   9 4

T u e s d a y   7 2

H

O

W e a t h e r :
Sunny

humid

t o d a y
and
t o m o r r o w.

T *and*   Fair

warm t o n i g h t

T e m p e r a t u r e   r a n g e :

Today 96-75

Tuesday 94-72

Sunny

H **O** **T**

Weather:
humid

today   and
         t o m o r r o w
         F a i r

and

w a r m   tonight.

Temperature range:

Today 96-75
Tuesday 94-72

h humid

today tomorrow

Sunny

Weather

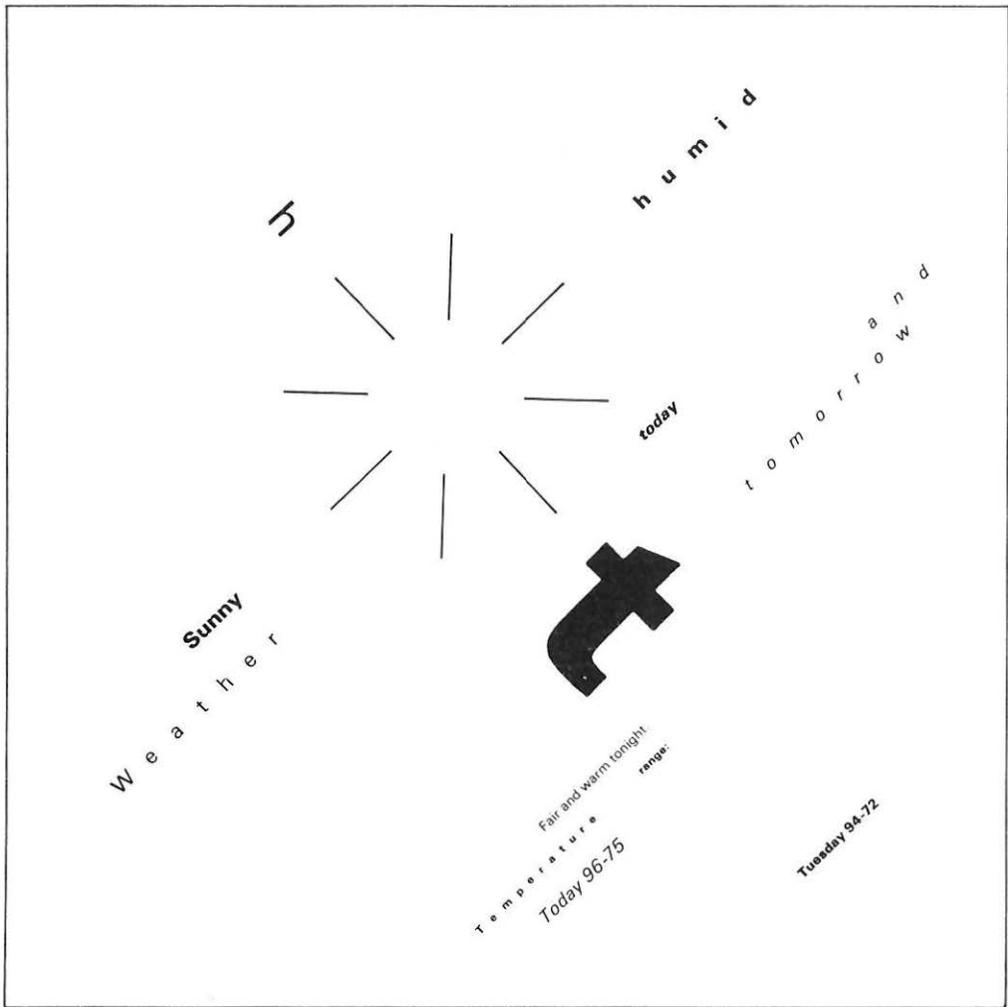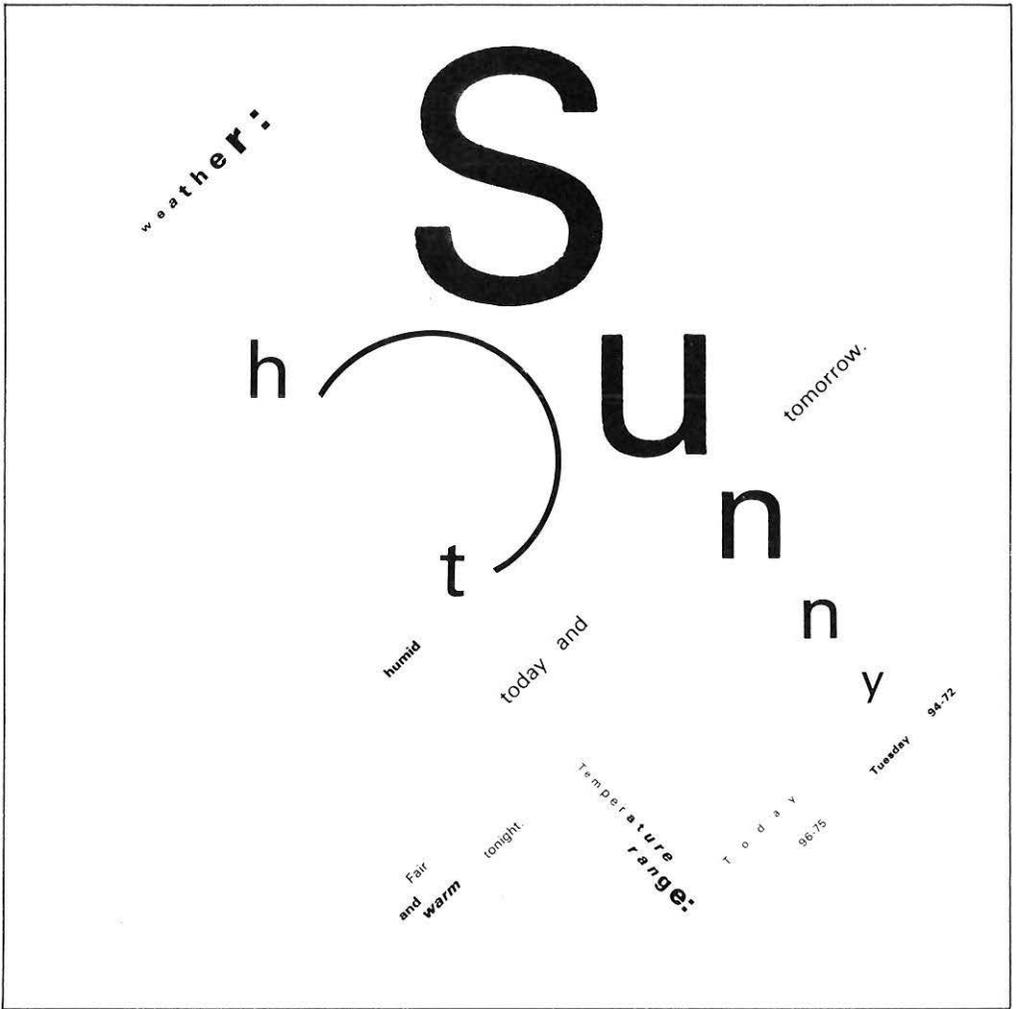Fair and warm tonight

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most of the day

but turning cloudy
with scattered showers.

High
temperature:
52

C o l d e r
tonite

with
a
probability
of
snow
flurries.

Low
tonite:
29

weather: S h o t u n n y

tomorrow.

humid today and

Fair tonight and warm Temperature range: Today 96-75 Tuesday 94-72

Student work by

Rosalie Hanson
Wayne Bokum
Richard Burgess
John Devine
Cathy Johnson
Peter Johnson
Azar Khosrovi
Andrea Mackler
Lisa Meyerson
Bernt Sanden
Stephanie Segal
Upendra Shah
Susan Thornton
Garretson Trudeau
Rick Villastrigo

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