

Text as Op Art

Abstract art appeals to the viewer primarily via color and line, and the "story" or "metaphor" of the art work is basically in the mind of the beholder. Thus a given image may produce 100 different stories in the minds of 100 viewers as it taps into the vast number of experiences and sensations stored in their brains. Critics and art historians provide glib explanations of the intent of a given work, but do their pronouncements really penetrate the essence? Human minds are distinct "island universes" of thought, and while we can know something of what another thinks through speech and shared vision, much of the impact of a given image on a particular viewer will forever remain elusive.

The use of text can help to focus the viewer's thoughts on the intent of the work. The use of text as art has a long history in its own right. Calligraphy has long been viewed as an art and in some senses the work presented here can be thought of as a branch of calligraphy.

Op art relies upon certain illusions inherent in the eye-brain vision system. The Hungarian artist Vasarely has produced many images which distort circles and other simple shapes in such a way that the viewer perceives them to be placed on a curved surface. Figure 1 shows how this is done in the present Johnre. The original text was a simple block font, but it has been distorted by a wave which alters both the x and y positions of every point in each letter.



Figure 1. The word VASARELY is made to appear as if it were placed on a wavy surface through the use of a wave distortion of the letter shapes.

This technique requires a special distortable font and I have constructed one with simple upper-case shapes. It is easily readable in its undistorted form. The waves used for the distortion must be described mathematically and I have created them using smooth "noise" waveforms. This doesn't work for all kinds of images, but waves are part of nature and are inherently interesting.

The human mind loves mystery. An image such as Fig. 1 will be readily recognized by most viewers as text, even at a distance, but it will usually take a second look to see what the text actually says. "I'll go over there and see what is written." This can increase the impact of the image as it obliges the viewer to focus. Calligraphers have long understood this.

Such an art form sharply limits the kinds of shapes which can be represented, but it opens up exploration of an entirely new (for me) world of words.

What can be more wavy than the ocean? This thought leads to the wavy image shown in Fig. 2 where the word becomes part of the waves. With the addition of a pale blue sky we have an ocean scene. I'm not sure this is "fine art", but it should do nicely for its intended purpose -- a mug design. The colors are chosen to reflect a seascape, and the successive lines of text are placed on wavy "banners" which provide nice contrast boundaries for the eye and contribute to the "wavy" impression. The aim is to capture the mystical essence of "ocean".



Figure 2. The word OCEAN is woven into the waves of this watery scene. The curvature of the vertical lines of letters helps the "wavy" impression, especially those with vertical strokes.

The font can be stretched either vertically or horizontally. Figure 3 shows a large vertical stretch. In this case the viewer will need to take a close look to see what is written in a sort of "secret code" which is readily decoded but requires close focus to do so.

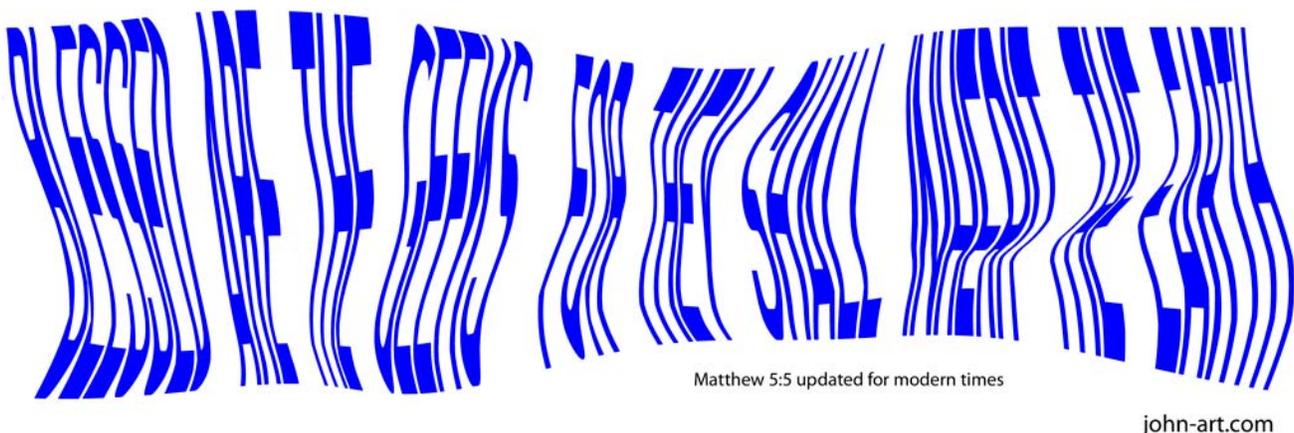


Figure 3. A well-known quotation as vertically stretched "wavy" text.

The details of the wave are determined (as is usual in my work) by random numbers, so that each time the program runs it produces a somewhat different result. The differences are large enough that one run usually appears to be better than another. In practice one

proceeds by making a substantial number of images and sorting through them for the one that looks best. This adds a key human element to what might seem a mechanical process. Sometimes random chance produces results that you wouldn't have come up with consciously, with merits that are only apparent when seen.

Such sorting is not unlike what a nature photographer does as he hikes in the mountains. He sees many different scenes produced by the random processes of nature. Only a few of them will be identified by his visual sense as special and a "photo-opportunity".

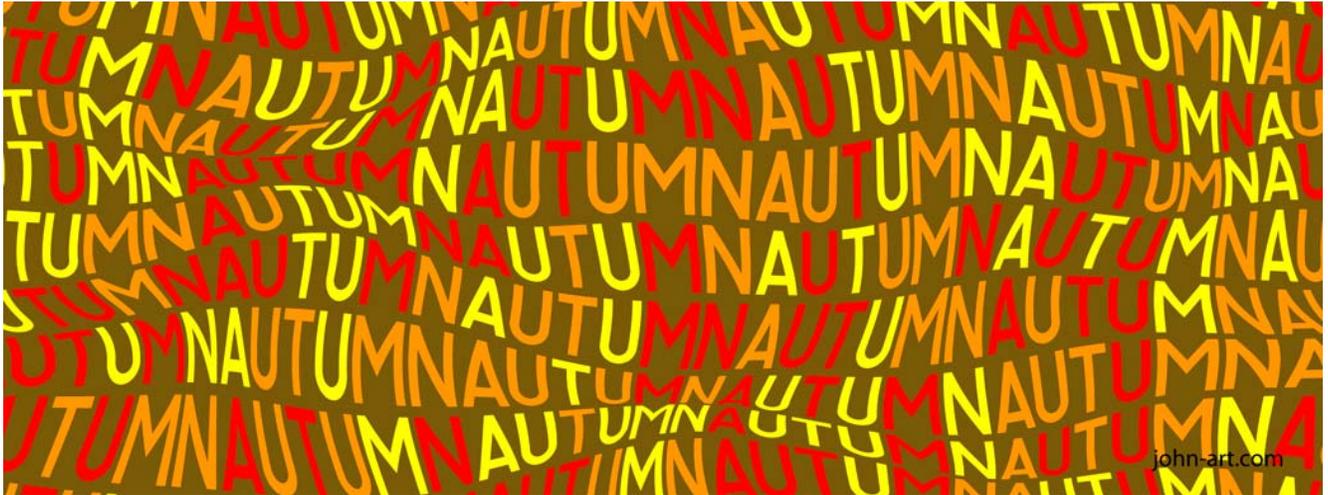


Figure 4. The word AUTUMN is written in random fall-leaf colors to convey the impression of this season with its bright colors. The waves can be thought of as autumn winds.

Figure 4 is an effort to catch the mystical essence of autumn, with text to guide the viewer on the intent of these colors. In my view it is the best of a set of four "seasons" images. Figure 5 shows winter.



Figure 5. The word WINTER is intended to capture bare branch colors against winter snow. The vertical strokes in WIN make nice wavy vertical lines.

Since a traditional role of calligraphy is to make words more interesting one can use this technique for a wide variety of texts. If we consider mug texts they might be statements that convey the owner's attitude. Cat lovers, for example, tend to like objects with cat pictures as

décor. The following image could project a "personal statement" for a ~~gee~~ senior citizen whose hearing isn't what it used to be.



Figure 6. The question WHAT? conveys a mug owner's assertion and viewpoint. A few other basic questions like WHY? and WHO? may also be interesting. The color is varied from one instance to another, substantially improving ease of reading.

Can this kind of calligraphy capture your feelings? Figure 7 shows an exploration of this. One version of the text has it in sharp black and white, while this one features a more subtle yellow and cyan. Because these two colors don't provide high contrast, from a distance the mug will simply look like splashes of color. Only at a closer view does the text begin to register.



Figure 7. This image contains a large number of words commonly used to describe our feelings. These words are ones which might be used to answer a friend's question "How are you feeling today?" Overall it captures many of the ups and downs of human life and events.

Artists have long known that color conveys emotions and associations, although these are often specific to one particular culture or language. Figure 8 shows an attempt to illustrate the abstract concepts good and evil. Blue and white are chosen for "good" -- "pure as the driven snow" and "true blue" are common expressions. Red and black are chosen for

One answer to this question is shown in Fig. 10. Here we use explicit words which not only label the regions corresponding to order and chaos but are shown changing from orderly to chaotic in shape, pattern, and color. The text not only writes the message but is part of the abstraction. "Order" and "chaos" appear randomly, but with a probability that varies from left to right. The word ORDER is highly probable on the left, and CHAOS dominates at the right. In some ways chaos, with its variety and "zing", is more charming and appealing than predictable but boring order.



Figure 10. "Order and chaos" expressed through shape and color and text. Viewers who don't usually think in these terms are led along to the intent by the words.

Vasarely's op art is still in art books and there is a fine museum in his home town in Hungary, but his work has had few follow-ons or followers (unlike the legions of neo-impressionists happily stroking away on their canvases). Perhaps the kind of image shown here is an opening for a new beginning.

Most of these images are available as mug designs or prints through zazzle.com. Search for "johnart22".

Spiral Text

One can also wrap text around in a spiral. There are a couple of ways to do this. In one approach the height of the text is kept constant which gives good readability but restricts length. Another method is to use an Archimedean spiral in which the text height diminishes as the words spiral inward. In line with the idea that a certain mystery will urge the reader into closer study of the text and make a larger impression I have chosen to use the Archimedean spiral, as shown in Fig. 11.

Because the first few words are easier to read than the others it is desirable to use a text which has the climax at the beginning. The opening lines of Genesis are such a text (after you've said "In the beginning God created the heaven and the Earth" anything that follows has to be anticlimax.)



Figure 11. A spiral text with some distortion.

Lest anybody think that this is too pious, it is pointed out that this is a modernized version of Genesis, and that the last line in Fig. 11 is "And at that point things began to spiral out of His control ...".

Another property of Archimedean spirals is periodicity. With proper choice of parameters the message can be made to repeat with each cycle. Figure 12 shows an example of this using a common adage of the 70s. In general this method should work well with any words which are viewed as a "mantra" to be chanted repeatedly.

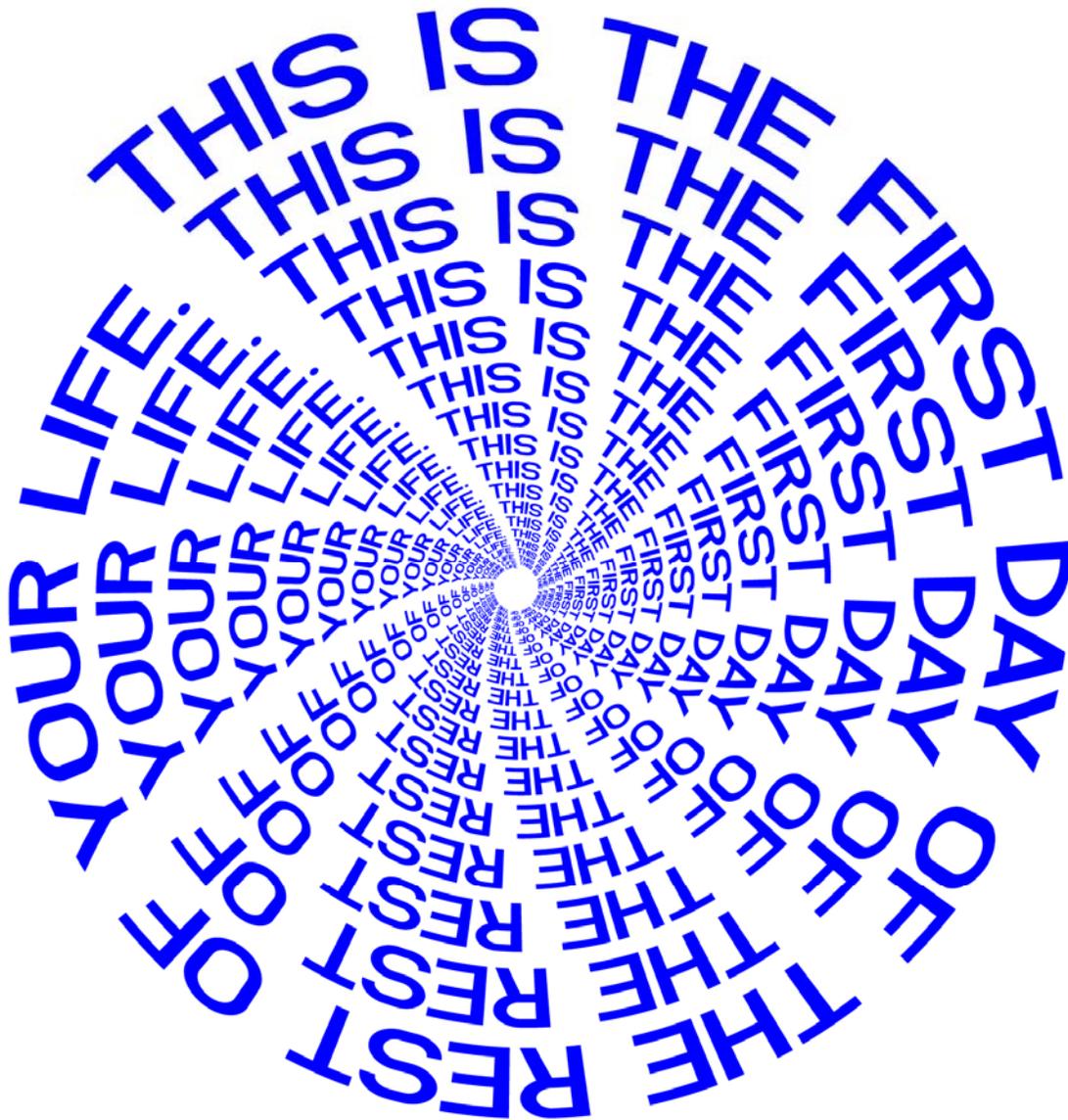


Figure 12. A message repeated periodically. Both the message itself and the inter-word gaps form spirals.

The properties of such a spiral imply that there is room for an infinite number of ever-smaller copies at the center, which illustrates the fractal self-similarity property of the Archimedean spiral. When gazing at this it is easy to imagine a mantra repeated an infinite number of times.

Another use of periodicity is shown in Fig. 13. There are many human activities that repeat at intervals. This is a somewhat satirical view of the average office worker's day. Note that the last line is not repetitive. The colors have been chosen to represent in some sense the *impression* of the various activities given. Gray background.



The Worker Bee's Day

Figure 13. An office worker's day shown in spiral form. "In a Rut", "The Daily Grind", "The Rat Race" and "Modern Times" are alternative titles.

One of the gains with repeating messages is that they are much more readable. The eye immediately picks up the repetition and one knows that only the outer wheel needs to be read to get the message.

Wrap-around text of this sort isn't good for just any text. It would be a bad idea to use it for a recipe or an instruction manual. For art there is something to be said for adapting content to form, as shown in Fig. 14.

A steeper spiral is used here to go along with the shorter text, and because real snail shells have tighter spirals. Here the text is

THE SNAIL

IT CURLS ITS SHELL ROUND AS IT GROWS,
AND SLIMES ITS PATHWAY AS IT GOES.
AND WHEN SNAIL ROMANCE IS TO BE,
IT HAS A ROLE BOTH HE AND SHE.
AT RISK OF SEEMING INTELLECTUAL,
SOME MIGHT CALL IT OMNISEXUAL.

I have verified the half-remembered story of snail reproduction by checking the internet and it is as stated here. Each snail is both he and she. Since the shell of a snail is a quite precise spiral, no waviness is used. Most land snails have shells with a brown color, presumably to make them less visible to predators.

Figure 16 takes a similar view of breaking waves, a phenomenon much loved by seascape artists and surfers. The text reads

THE BREAKING WAVE

IT RISES UP AS IT COMES ASHORE,
ITS VERTEX TUMBLING WITH A ROAR.
THE SHAPELY PEAK THATS SEEN TO RISE
DISSOLVES IN CHAOS OF EVERY SIZE,
WHILE TUNNEL TUBE WILL BRIEFLY HIDE
THE SURFER ON HIS THRILLING RIDE

The author apologizes in advance to any true poets who may read this. He has violated the rules taught by professors of English Lit and actually made rhyming lines for which he is abjectly rueful -- but he is poetically challenged. His lame excuse is that "Ogden Nash would have loved it."

The blue-green colors are intended to resemble those seen in real surf.

