Dscript

http://dscript.ca

All Human Beings Are Born Free

What is Dscript?

Dscript is a "Dimensional Script". The D was originally meant to represent "Directional" because the first version was designed as a cursive writing system that could be drawn both vertically and horizontally.

There is no particular language associated with Dscript, but there is an alphabet optimized for English. There are plenty of materials also teaching how to adapt it to other alphabets and languages.

On the left here you see the v1.3 Dscript English alphabet.

These "letters" are very basic pen strokes and shapes that are very flexible and efficient in 2D.

They can be combined in many very intuitive ways, allowing great flexibility.

I originally mapped out all 676 combinations (26*26=676) in a document called the Dscript Manual. I have revised Dscript a bit since then so the "manual" is somewhat outdated. This document explains the new system. The old Manual is still a good resource though.

Using these letters, an English word can be turned into a "string" and curled up into a glyph.

On the right you see Shakespeare's Sonnet 18 ("Shall I compare thee to a summer's day...)

As you can see the vertical version creates "tall strings", this is the simple form of Dscript.

Letters are then combined in various ways and the strings curled up, bent etc.. to produce more compressed character like forms. As in the examples below.
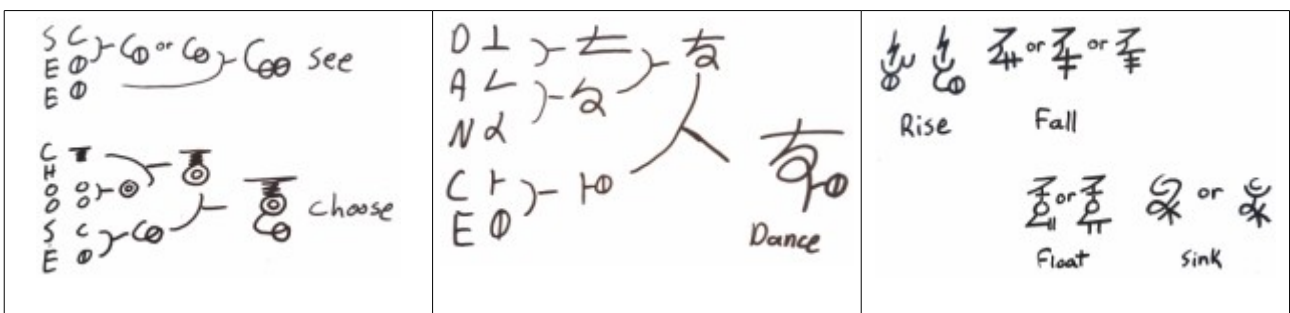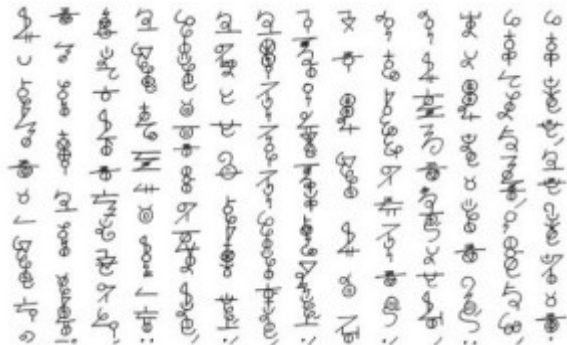
After developing the directional script, I found the both horizontal and vertical forms when used together allowed the original "letter string" to be curled up and fit into tight and odd shaped spaces.

By allowing the letters to connect in multiple ways, even placing letters inside of other letters, and letting the string fork/branch, words, or even phrases, can be "rolled up" into glyphs and sigils, yet still be legible in both letters and sequence.

This is an example attempting to visually describe the Dscript concept using the first bit of the Universal Declaration of Human Rights. Words in dscript have many forms, these are just some.

A L L   H U M A N   BE I N G S   A RE   B O R N   F R E E

A N D   E QU A L   I N   D I G N I T Y   A N D   R I G H TS
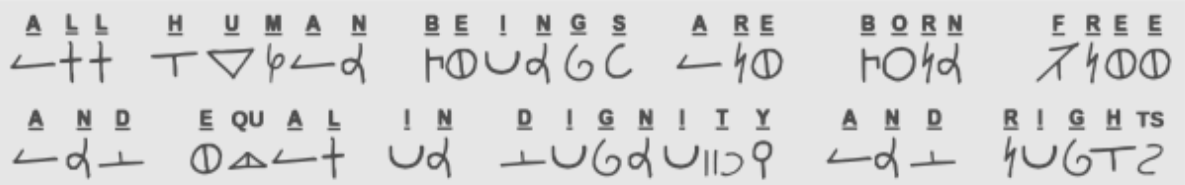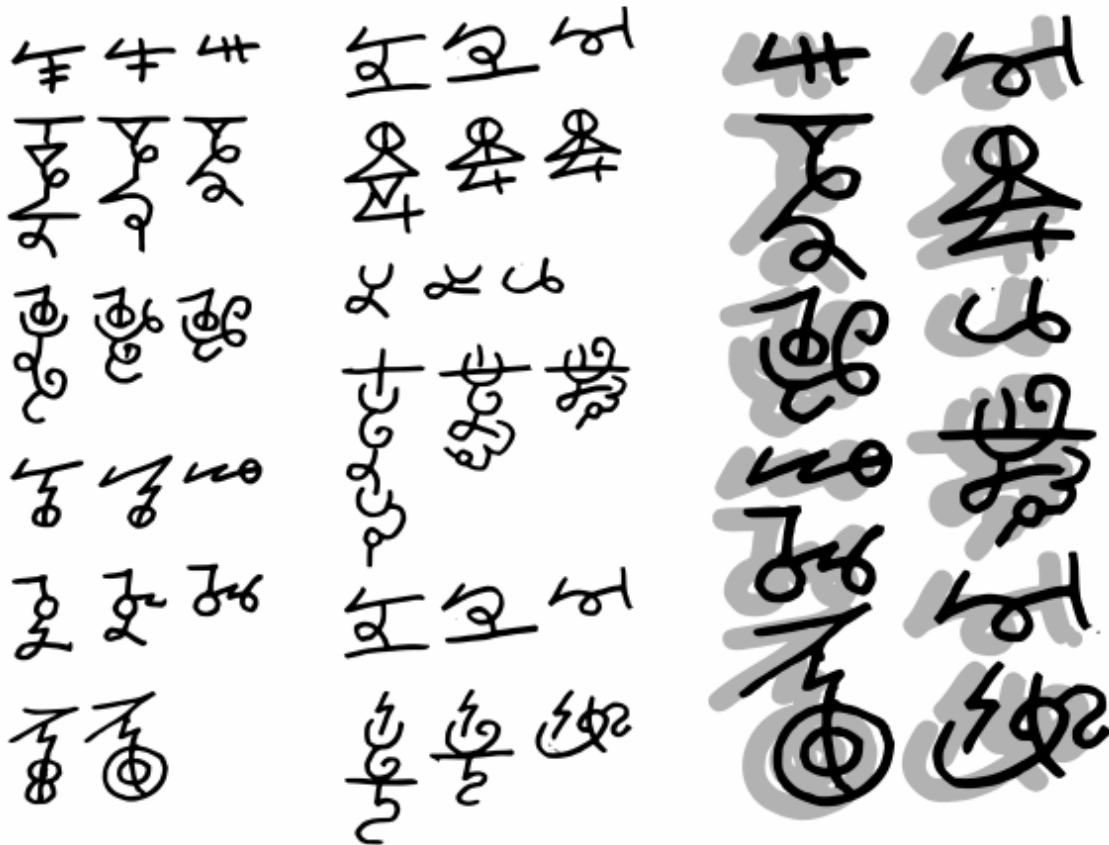
Life is what happens to you

While you're making other plans
—John Lennon

Using this one can produce a wide variety of looks and feels from supplied text. It can be used to fill almost any setting requiring "foreign" or "alien" text. And the best part is that one can choose to invent a new language or use an existing one. By using English or another existing language, the players/viewers would have a chance to decipher the text and learn to produce their own symbols for any word. Greatly adding to player/viewer engagement.
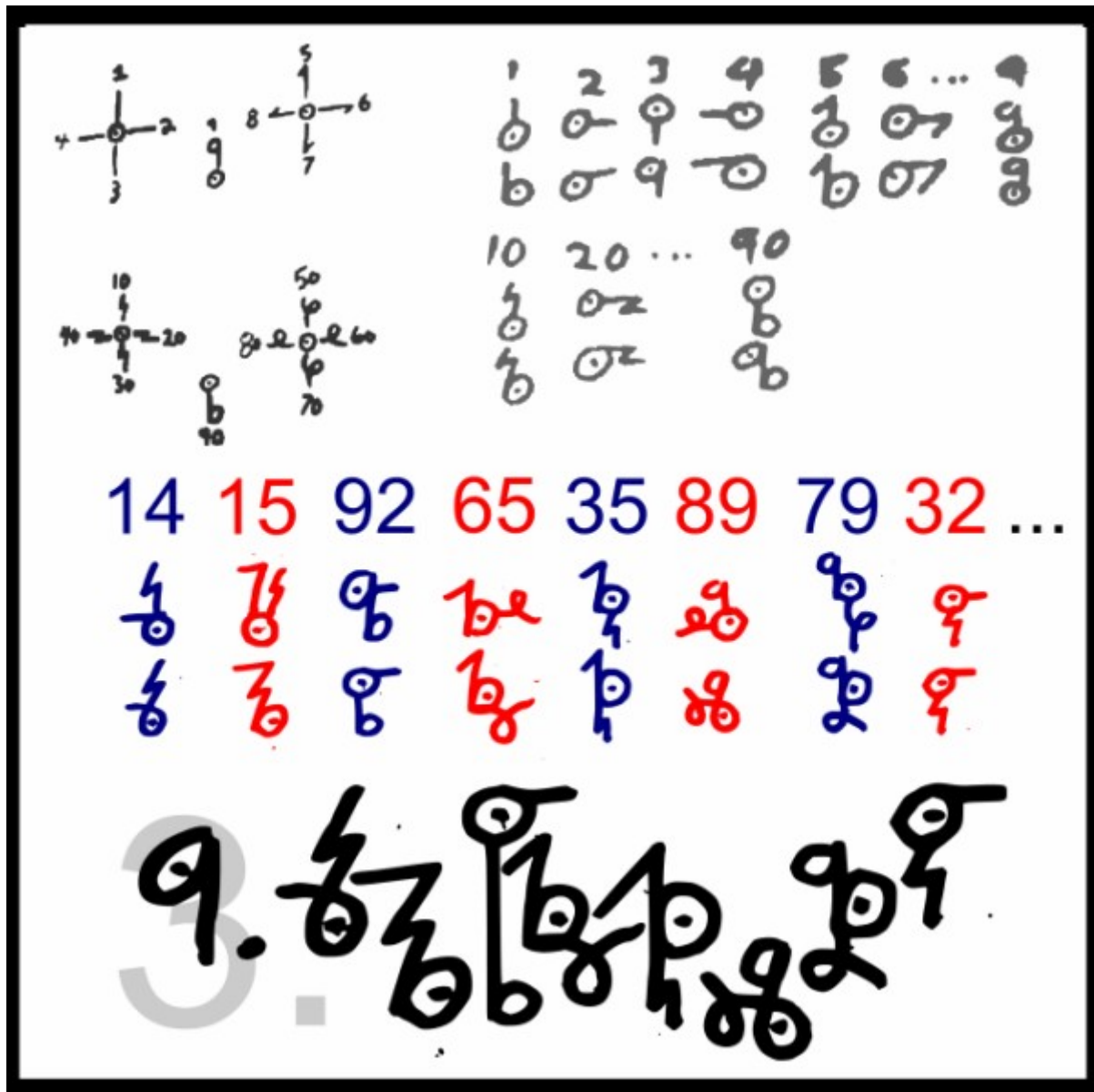
Numbers

There are also number systems for Dscript. There are base 10/16, base 12, base 32, and the most effective and practical, base 100.

Dscript base 100 numbers are basically a way to compress 2 decimal digits into a single glyph. The system is quite simple, there are 18 possible additions to the "core cirlce" 9 for 1's and 9 for 10's.

Dscript base 100 numbers are quick and easy, do not require a lot of practice, and allow creative and efficient use of writing space

Loops, curls and bends are reversible, allowing multiple forms and various writing options.
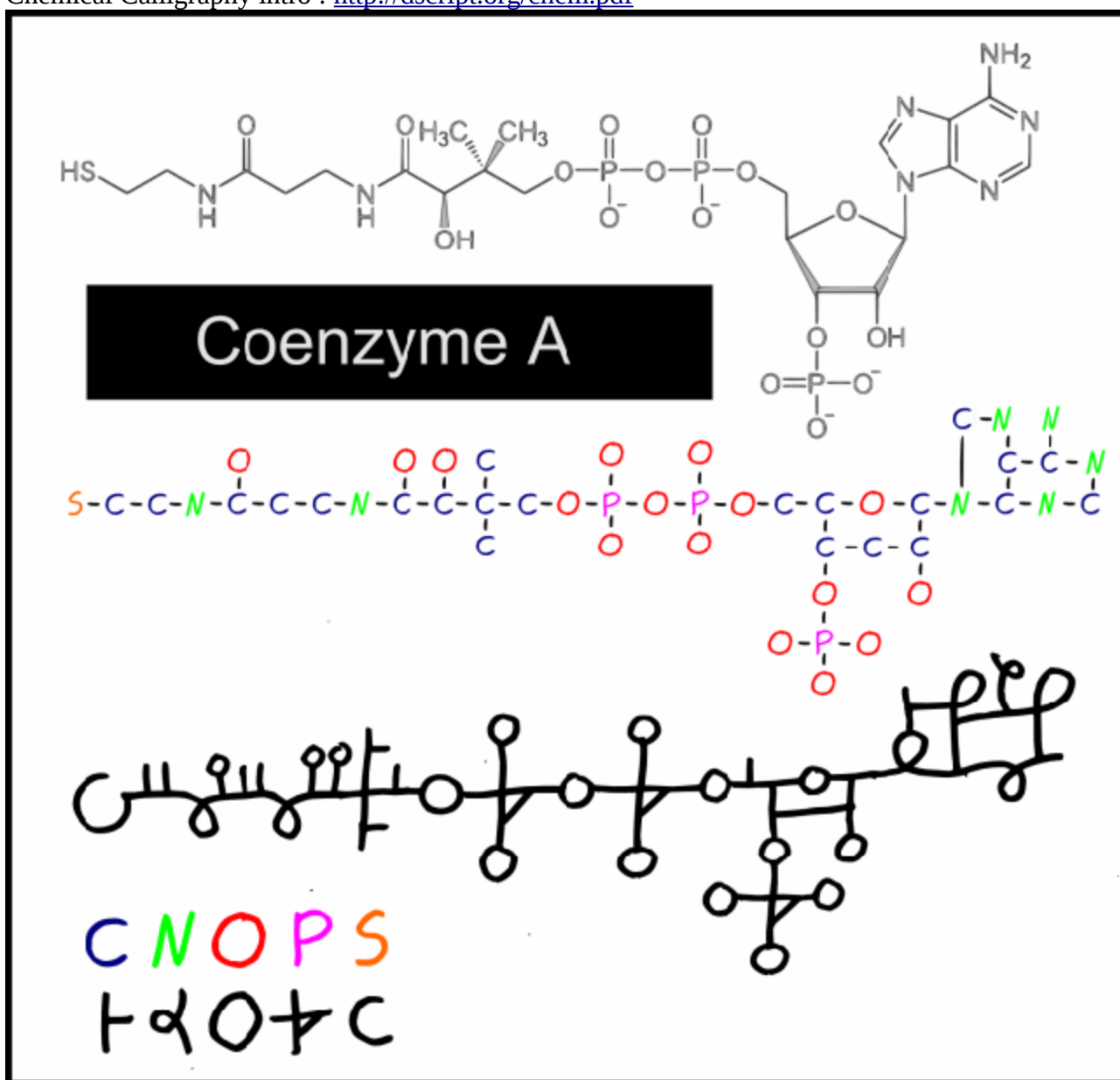
Chemistry

The Dscript principle can be extended beyond alphabetical language. It can also be used as a 2D notation system. By using the letters to represent elements for example, a chemistry notation system can be devised.

The first attempt at such is Dchem, a chemistry notation system geared toward bio-chemistry and bio-molecule notation.

Dchem sacrifices stereo-chemistry, bond strength, and hydrogen's. It uses a base of only 5 letters, CNOPS, which allows each letter a greater degree of flexibility. These 5 elements (Carbon, Nitrogen, Oxygen, Phosphorus, and Sulphur) are the key elements of most bio-chemistry.
Chemical Calligraphy intro : http://dscript.org/chem.pdf
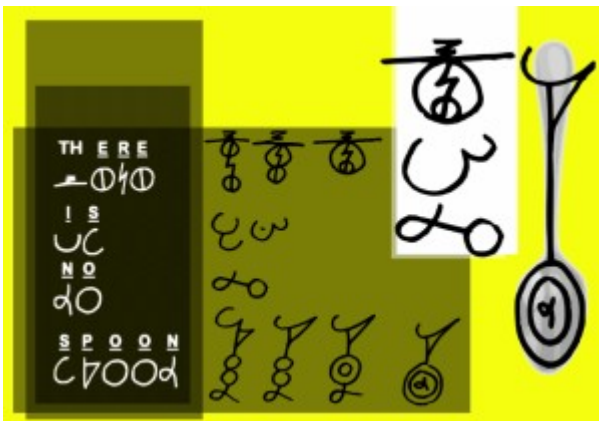

Dchem allows the key structure to be drawn without as much "noise" from other aspects like stereo-chemistry, aiding in memorizing large amounts of chemical structure or large molecules.

Learning

Dscript learning materials alone can be quite stunning. Here are a few example used to teach Dscript and show off its capabilities.
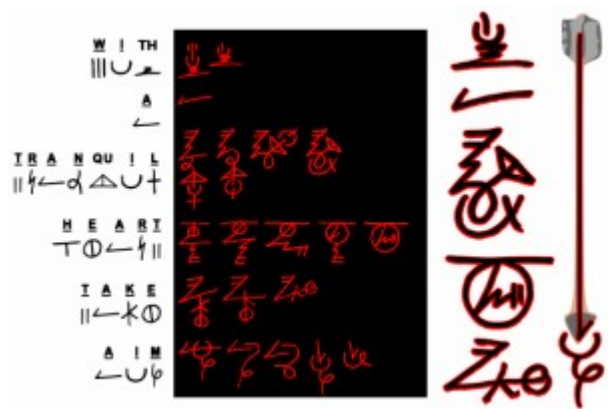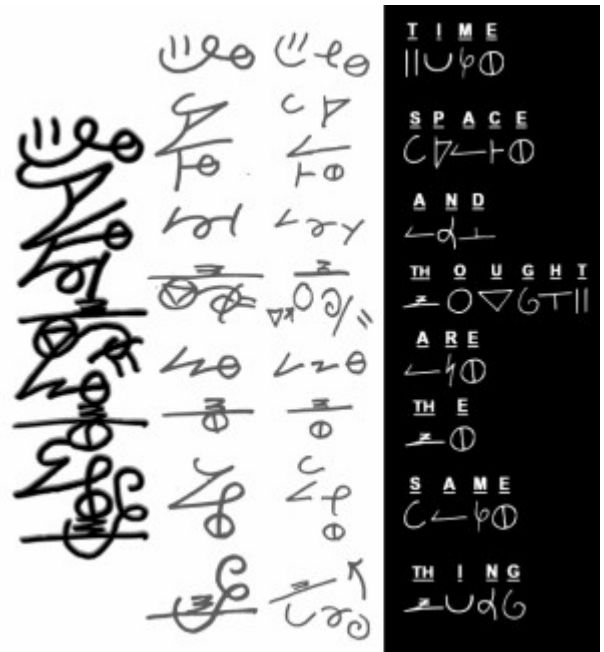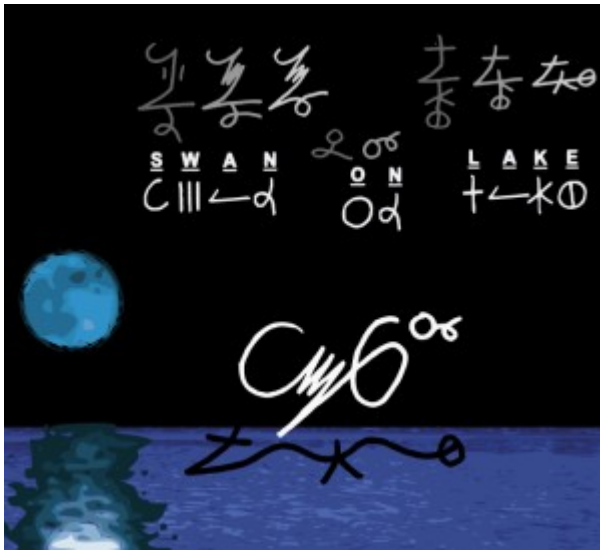
Quotes

Dscript
2D writing system, turn words into legible glyphs
www.dscript.org

When I am
working on a
problem I never
think about
beauty.

I only think
about how to
solve the
problem.

But when I
have finished,

if the solution is

not beautiful,
I know it

is wrong.
-Buckminster
Fuller

Dscript
www.dscript.org

2D writing System
Turn words into Glyphs
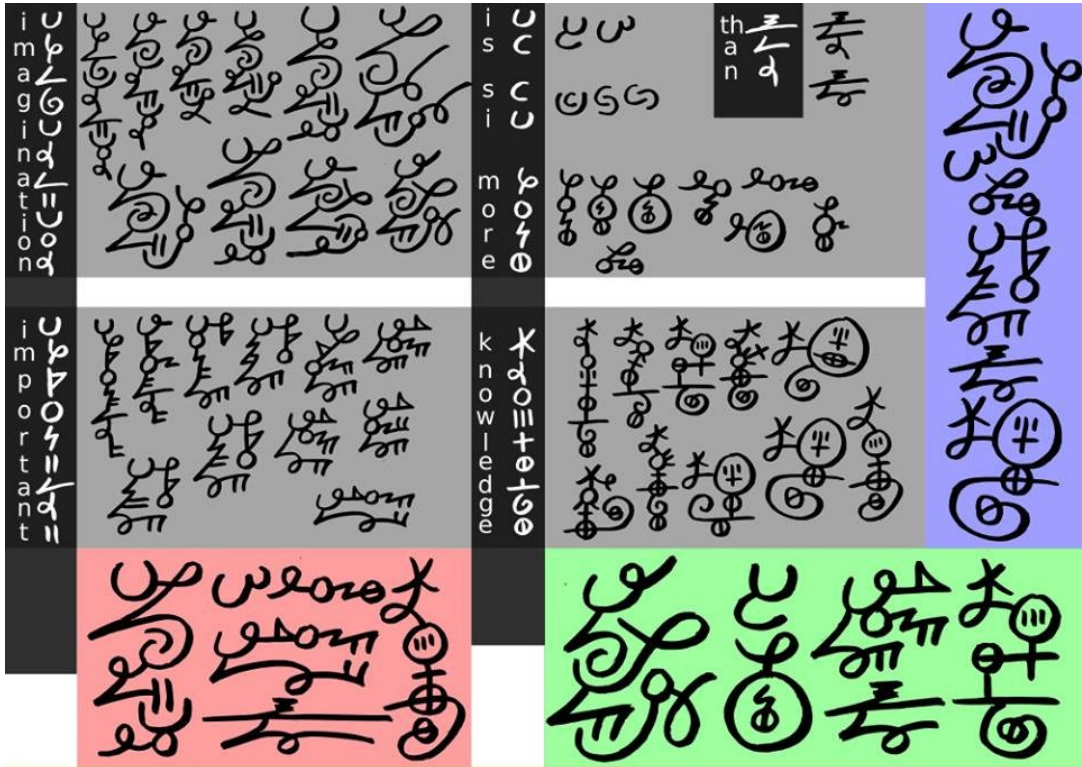
Imagination is more important than knowledge -Einstein

Dscript
2D alphabetical writing system
Turn words into legible glyphs and symbols
www.dscript.org

When you are describing,
A shape, or sound, or tint;
Don't state the matter plainly,
But put it in a hint;
And learn to look at all things,
With a sort of mental squint.
~Lewis Carroll

Dscript   2D writing System   www.dscript.org

you
don't
make
art
find
it

you don't make art, you find it -Picasso

Dscript 2D Writing System
www.dscript.org
Turn Alphabetical Words into Glyphs

I Don't buy Halloween costumes.. I Just say.....

I'm yet another resource consuming kid in an overpopulated planet,

raised to an alarming extent by Madison Avenue and Hollywood,

poised with my cynical and alienated peers to take over the world

when you're old and weak!

...Boy, am I scary or what?
-Calvin & Hobbes

Dscript (Dimensional Script)
Turn Words into solid legible glyphs
2D writing system
www.dscript.org

Calligraphy
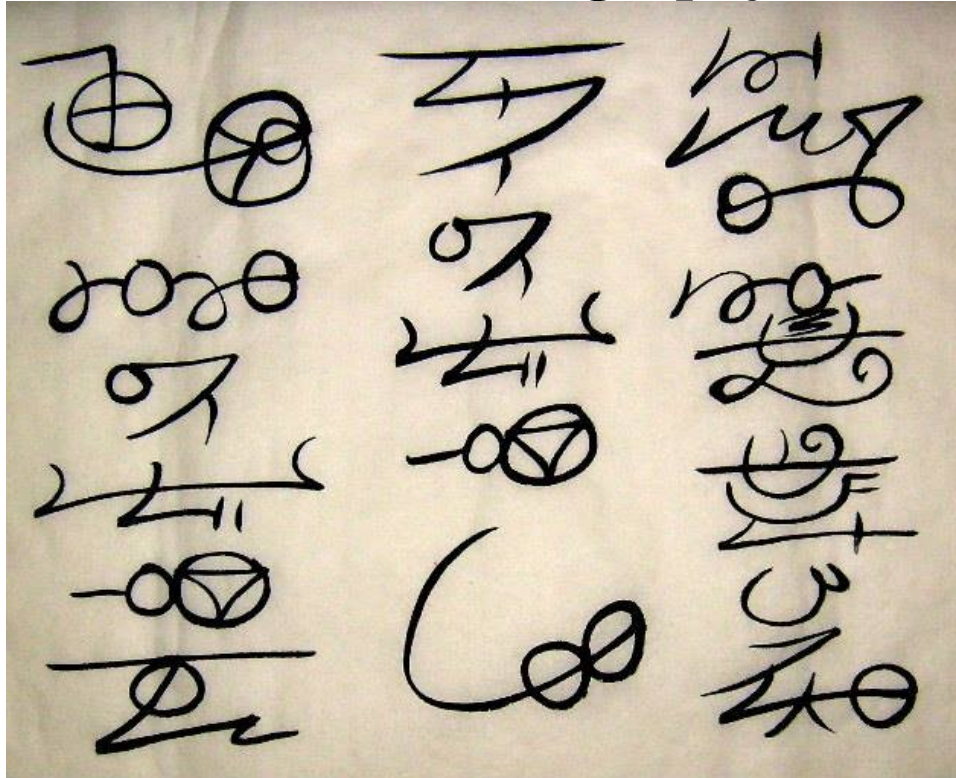
Believe none of what you hear

Half of what you see

and assume anything digital is fake

Dscript - Turn Alphabetical language into glyphs
www.dscript.org
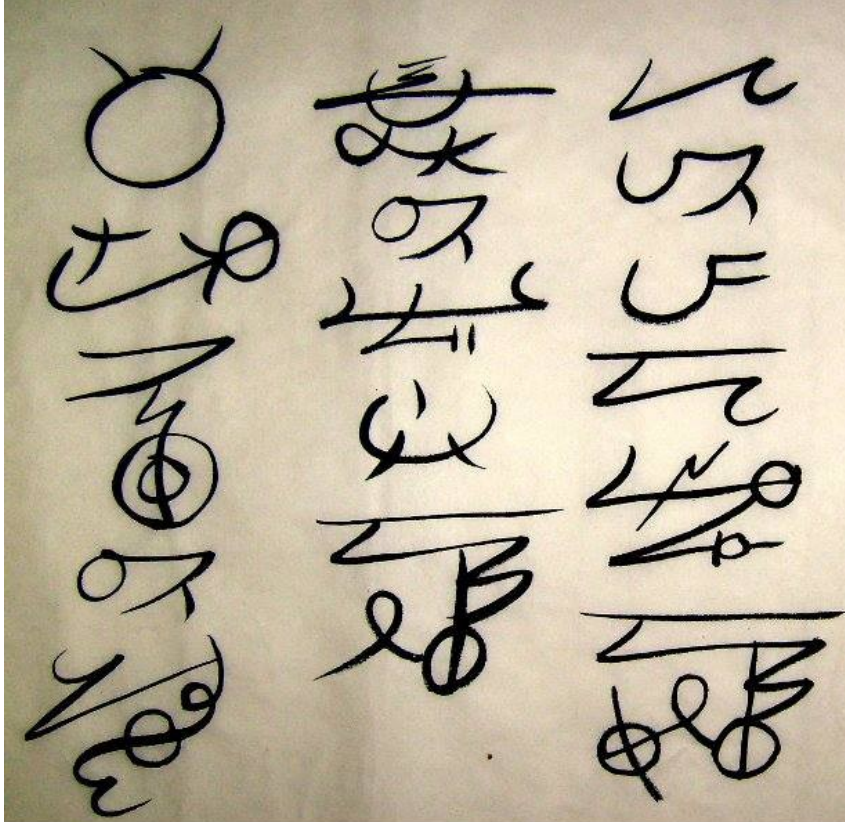
To live free of sadness

Think of what will happen

As if it has already happened

-Epictetus

Dscript - 2D Alphabet - Turn Words into Glyphs
www.dscript.org
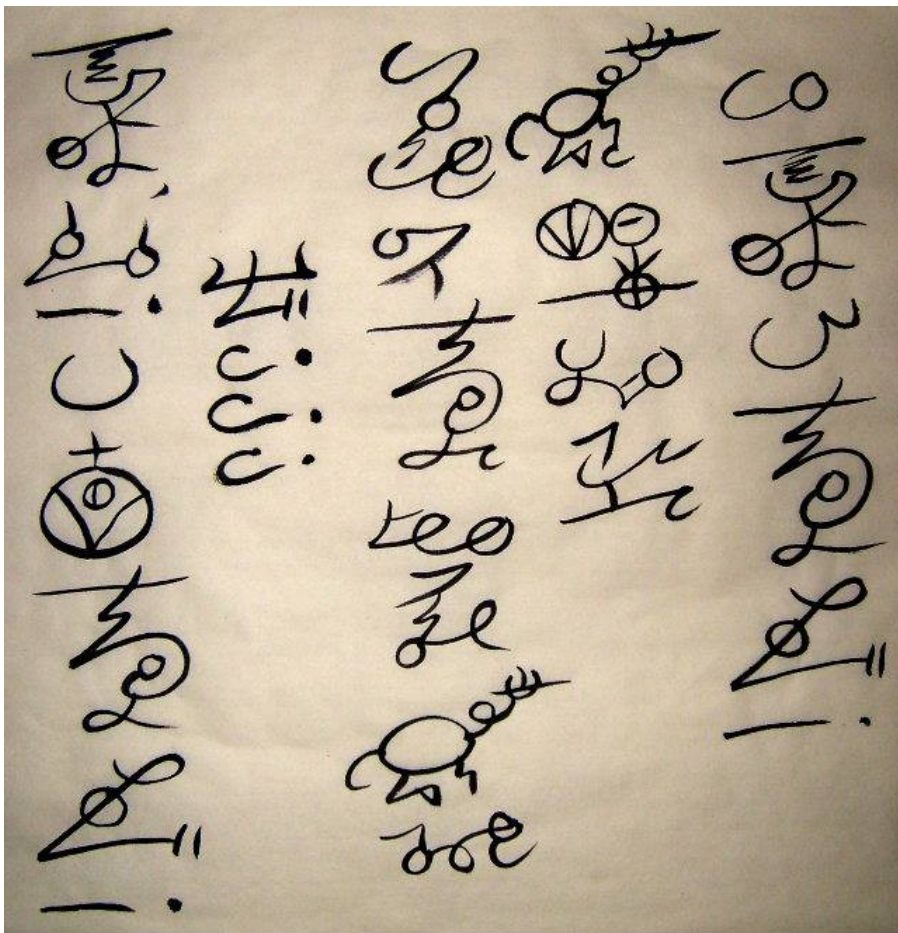
Chicken, Yay!
I love dragon
meat!

What???

Stories of
dragons came
from dinosaur
bones

Dinosaurs
evolved into
birds

So chicken is
dragon meat.

Dscript - Turn Alphabetical words into glyphs
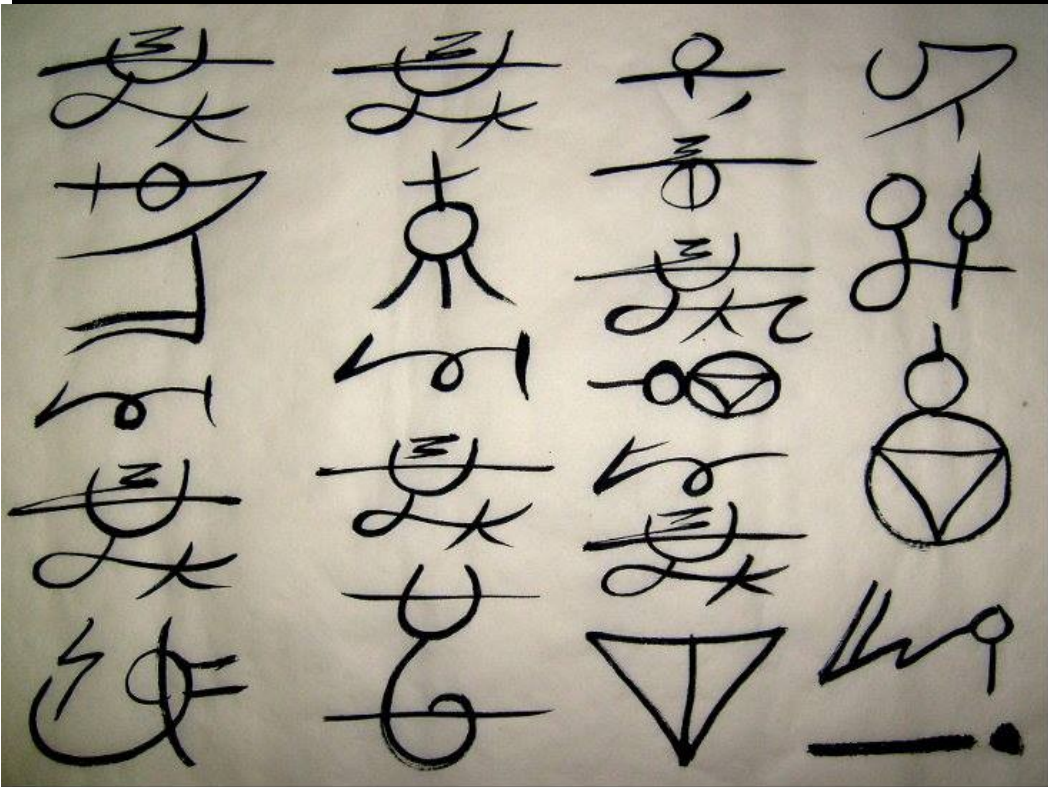
Think left
and think
right

Think low
and think
high

Oh, the
thinks you
can think
up

If only you
try!
-Dr. Seuss

Dscript - 2D Alphabet - Turning Words into Legible Glyphs
www.dscript.org

Full Text
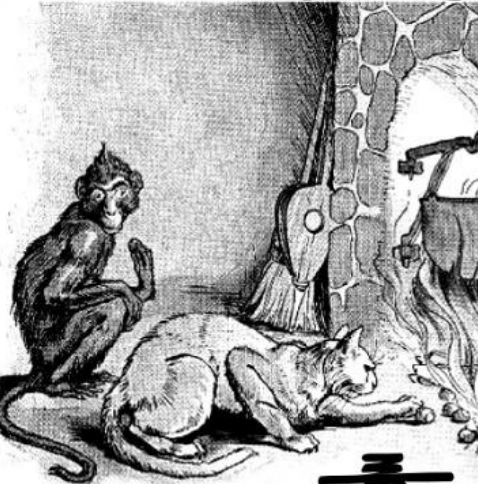
THE MONKEY AND THE CAT

Once upon a time a Cat and a Monkey lived as pets in the same house. They were great friends and were constantly in all sorts of mischief together. What they seemed to think of more than anything else was to get something to eat, and it did not matter much to them how they got it.

One day they were sitting by the fire, watching some chestnuts roasting on the hearth. How to get them was the question.

"I would gladly get them," said the cunning Monkey, "but you are much more skillful at such things than I am. Pull them out and I'll divide them between us."

Pussy stretched out her paw very carefully, pushed aside some of the cinders, and drew back her paw very quickly. Then she tried it again, this time pulling a chestnut half out of the fire. A third time and she drew out the chestnut. This performance she went through several times, each time singeing her paw severely. As fast as she pulled the chestnuts out of the fire, the Monkey ate them up.

Now the master came in, and away scampered the rascals, Mistress Cat with a burnt paw and no chestnuts. From that time on, they say, she contented herself with mice and rats and had little to do with Sir Monkey.

The flatterer seeks some benefit at your expense.

The Fox and the Stork - In Dscript

The Fox one day thought of a plan to amuse himself at the expense of the Stork, at whose odd appearance he was always laughing.

"You must come and dine with me today," he said to the Stork, smiling to himself at the trick he was going to play. The Stork gladly accepted the invitation and arrived in good time and with a very good appetite.

For dinner the Fox served soup. But it was set out in a very shallow dish, and all the Stork could do was to wet the very tip of his bill. Not a drop of soup could he get. But the Fox lapped it up easily, and, to increase the disappointment of the Stork, made a great show of enjoyment.

The hungry Stork was much displeased at the trick, but he was a calm, even-tempered fellow and saw no good in flying into a rage. Instead, not long afterward, he invited the Fox to dine with him in turn. The Fox arrived promptly at the time that had been set, and the Stork served a fish dinner that had a very appetizing smell. But it was served in a tall jar with a very narrow neck. The Stork could easily get at the food with his long bill, but all the Fox could do was to lick the outside of the jar, and sniff at the delicious odor. And when the Fox lost his temper, the Stork said calmly:

Do not play tricks on your neighbors unless you can stand the same treatment yourself.

Reflected Text

Dscript text tends to produce some very nice results when reflected in various ways. The large size and high complexity of each glyph means when reflected and mergeed can produce some amazingly complex results. Recently I have enjoyed making kaleidoscope like effects.
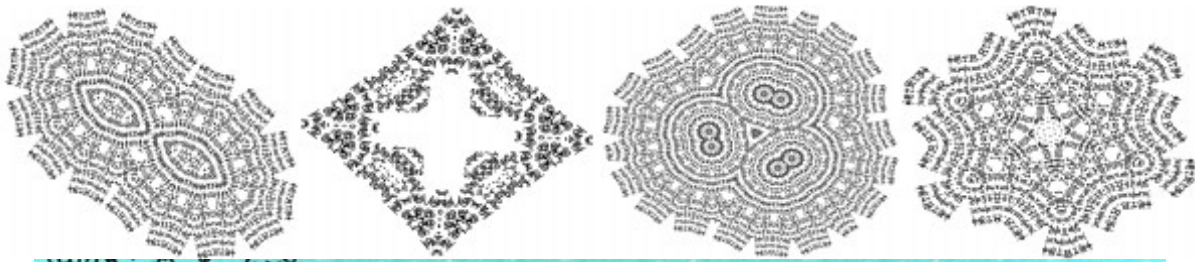
Application

For those interested in mapping Dscript to new alphabets, languages, and applications, there is the Dscript for other languages guide. This outlines the principles of Dscript and how to design letters capable of dimensional writing.

Dscript can accommodate almost any alphabet, but the system does works best for smaller alphabets. The efficiency of Dscript breaks down at alphabets of over 40 or so letters.

First there are the "bends" or "simple corners"

with word line

Curves simple and easy, can be split by side

"zig zags" are a class to themself because they can be repeated

although you must settle on a way of making sure a double zig-zag is not ambiguos with 2 zigzags best to bundle them up tight like shown here

Triangles are the second easiest "enclosed space" letter they can be drawn pointing "into the word line"

...hanging of the side of the word line(either side)

or pointing "up into" the word line" when not hanging off the word line these can also be "divided" with a final up/downward stroke added

The "o" is great because you can write inside of it

after drawing a circle, you can zip back and "divide it" with a line this is easy to write and makes a great separate letter

almost anything further would require lifting the pen so best to consider anything further a next letter except for compund letters (see below)

More open space shapes can be added but best not to go too far

Curls are great, you can differentiated between sides or not

You can also try "pulling" through the curl without lifting the pen, but you need to make sure you "come around" enough, or it will look like a loop

A dash crossing a line can be put almost anywhere and also provides lots of connection points

multiple dashes can be piled up for even more conection points

best not to take it too far, but at the same time, a letter like this

If it started a word could probably just have the following letters attached, each to an end, and read like a clock

The simple dash through the line can be extended by adding joins to the dash but this then restricts the dashes options for combination

Loops are great, easy, and can be split by either side of line or " rotation" (clockwise/counter clockwise, my preferred method)

Loops can be done with joins but these again easily become ambiguos

Joints or curves that "return to the word line" are possible, but the easily become ambiguos with loops

double dashes make great connectors like "pipes" when they only connect to one letter they can also be angled

Triple dashes work like double dashes

Dashes work great, and you can either allow them to hang off either side, or make either side a separate letter

They can be doubled-up, tripled up, etc...

but to allow for this as well as singles without ambiguity, best to allow the single to hang off either side and make the rule "two singles must alternate"

Hooks are easy and provide an easy "fork" in the string

special starts can be designed for the hooks when the start a letter

The "cup" letter catches previous letters inside it, you can also use the two "rims" of the cup as connection points

More letters can be added by simply adding joints to the cup, but these will restrict the cups flexibility in connection

Long bars are good, and with a dash on top or bottom it can become 2 letters the best part about this system is that you can "default" to the most common letter. Also, when the word starts with a "bottom dash" or ends with a "top dash", the dash can be omited

"sin waves" can be added, of varying repetions, starting on either side

and extra stuff can be added but not without inventing con to avoid ambiguity

A separate line can make a pass back and cross twice this can make enclosed spaces on only one side of the word line It could be as easy as drawing a curve

An extra dash on only one side can make odd numbered interesctions

or joints and loops can be added

Solid shapes, and even dots, can be added to the word line but dots can easily be made by accidents in pen/brush strokes what is just a thick line and what is a dot can be hard to determine but if used, perhaps best as punctuation, accents, or other markings solid shaps of larger size are more feasible but are a pain to write(filling in the space takes alot of time(realtively) and the solid shape concept could even only partially filled

finally there are "compund letter where multiple letters are comb what would normally be a multi combo represents instead a dis

or by drawing shapes so close t

not actualy "crossing the word line" and hang on one side is possible but this will remove many combinations from other letters and when the word line curves and bends it may be hard to distinguish it from shapes that are in the middle of the word line

Tips & Tricks

First off it is always better to start by learning the vertical form and slowly working into a fully 2D writing style. But if you want to dive right in, then here are a few tips and tricks to speed things up.

Most importantly always remember the string can have forks, so if you are having trouble fitting it into a certain enclosed space, step back and be creative. Try to think of new ways of forking the string, eg. If you find yourself getting stuck when you go right-down-left, try going down- right-up, or down the middle and fork both left and right, etc... Most words have many possible forms, longer words can have countless possible forms, I am now using a rather standardized width for my characters, and have not yet gotten stuck without a solution even though I have done many stories and countless long words.

One the next page you will find a graphic with some visual descriptions of some tips on how to deal with the more complex elements. These slightly "tricky" parts are a result of the trade off for efficiency and economy of pen strokes. An alternate Dscript system can easily be designed to not have these tricky elements, but they seem a very small price to pay for the added efficiency, extra flexibility and saved pen strokes.

There are also plenty of combination methods I have "resisted" employing. Sometimes it is because I fear it will be too visually similar to something else, sometimes because it is difficult to write(mechanical limits of hand), and sometimes just because I don't like the way it looks. This version of Dscript for English is more of a starting point, or framework. Be creative :) just be sure to avoid ambiguity, and if encountered, always ensure there is some method for distinguishing the value.

You may be tempted to at times think "Meh! There are no wards with the letter combo 'JGLWQA', why do I need to to be able to write that? I can have a system that has some ambiguity if the ambiguity is for combos that are never used", and you would be correct.. to a point. Dscript, however, already drops capitalization, this might not seem very important at first, especially considering some languages don't even use capitalization. But science DOES, the periodic table of elements for example. So if you want to leave the door open for advanced usage, technical vocabulary, scientific notation, or cyphers (you could cypher the text before writing it in Dscript) I recommend at the bare minimum you should be able to write any and all strings of letters.

ION A loop connected at the inersection, but found it too easy to confuse with "VO"
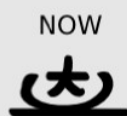
"question" Using Old Form

NOW

A downward split was used for an "F" at the end of a words and, if the second letter is an i, used as a "K" at the start of a word

Stopped using this because it was too easy to confuse with the letter C

OLD

NOW

kid

half

SH stopped using it because the S needs easy connection from bottom without ambiguity

"sheep" OLD

"sheep" now

The H can NOT be used sideways (left to right) because it can't be distinguished from a C

I + S + T
"LIST"
The first curve is the I
Then add the S and T

U + P
Special Combo,
Points into the next letter

W + I
When a word begins with "wi" a dash in the "I cup" works because there is no previous letter

w

wi

i

wi only valid at start of word

CK
A simple combination of the C and K

Quick

Back

J

B

The J and B Cand Be drawn with special versions when they start a word

Jar

Be

EY

A Special "EY",
Only valid at end of word can only point straight down I try not to use much but very efficient

They

"SC" and "F"

"scary" "fall" A "c" can normally be connetted off either point but after an "s" it can only be connect off the bottom this prevents it from looking like an "f"

S vs I (only tricky at start of word)

because at the beginning of a word there is no previous letters the s and i are almost identical in 2D, how it connects to the next letter will give it away. At the start of a word the S can only connect without a pen lift, using a sharp angle

smell

slowly

Or straight into an open space vowel

so

see

Or like this for "si" vs "is"

si

is

The i uses a pen lift and to connect off of the "rim" or has no sharp curve and connects straight into the next letter

isn't

inside

it

its

in

intent

Finally
"sf" vs "if"

if

sf

Or, even simpler, just put a dot inside every i when it starts a word

The Letter A

The letter A is a "check mark", a sharp corner on the left side
You may notice I lamost never use it horizontally, this is to just
to simplify the "standard form" I am building.
It CAN be used horizontally, as long as you remeber that the A
REQUIRES a 90 degree(more or less) change in word line direction
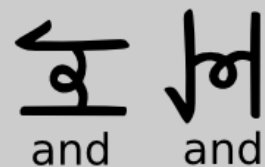
Examples

Start vertical (top to botom)
after A going horizontal (left to right)

Start horizontal (left to right)
after A going vertical (bottom to top)

and   narrow   fall   make

and   eat   arrived

If you want to return to the original direction
You must connect off of the base (like the F)
Or use the next letter to change direction
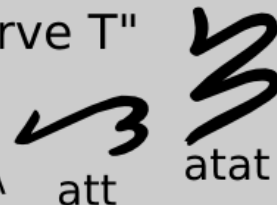
and   and

aha   blah

The H can be added after an A by giving
the A and Extra dash hanging off the base

Trickiest is using the A with the "Curve T"

T   A

There must be a distinct long
line between curves for the ATA

att   atat

I recomend just dont use this combo, use the other T form instead

AND.. when you insist on horizontal H's, Vertical C's etc..
I always assume viertical when "entering" a word...

cold   cent   ce

... and use notation to indicate proper "entry angle"
I like a "Dot-Line"

hold   hent   he

Or invent your own notation.. or, less favorably,
allow the ambiguity and let the reader figure it out
based on context, yuck!

Default is top-left to bottom-right.
Start by searching for the closest entry point to the top left corner
unless there is entry point notation indicating otherwise

U vs. P ▷ ▽ U   △ ₽ ▼ P

The U and P differ mostly in that the U is an "independant triangle" and the P is a a Triangle "haging off the word line". If you can see one of the sides of the triangle extend on both ends, or 2 ends extend, then it is a P, otherwise a U.

prey

until

prevent

under
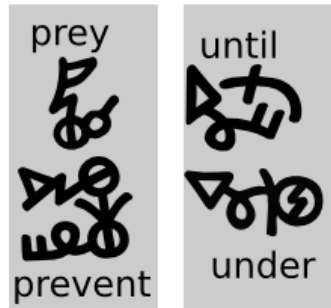
To save strokes, at the begining of a word, the U can connect out of its corner fluidly, but this is a bit visually simmilar to a

unless P so use it carefully

The P can connect letters off of its exposed sides easily. Letters can also be placed inside, even though I rarely do use the inner space of P's

prompt   place   plans   pretend

UP Special

upon   pull   push   upstream
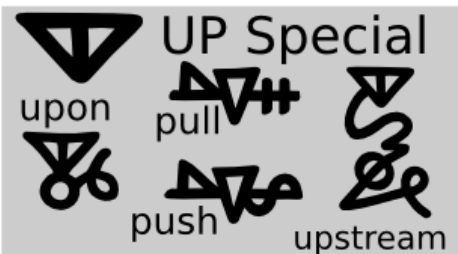
The "UP" combo has a special version The 2 triangles are visible, but it is a "special combo" because it is not actually clear which letters and sequence it means "PU" must be drawn normally.

The "UP" is distinguished from the special "QU" easily, the UP trianlge "points into the next letter" and connects from one of the sides that does not touch the "center line". The QU "points into the previous letter"(the same way a Q differs from a U) and connects from the side that the center line touches.

question

quickly
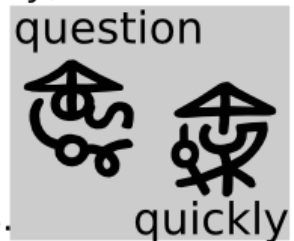
The U can be attached to to a horizontal bar of the D or H, this might look like a P hanging off of the word line at a quick glance, but how the next letters connects makes it clearly a U

hunting

during
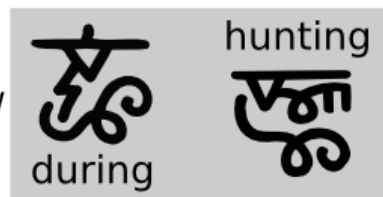
individual

This is easy to identify when one is reading. However if the word line has already rotated 90 degrees it is possible a quick glance might mistake it for a P if you did not notice the change in word line direction as in the word "individual". It simmilar to a P, but once you notice the word line is right to left, it becomes obvious it is a U

D vs. H

The D and H are vertically mirrored. The Dash should be considered as "extra" and not count the word line.
But this is almost never needed with some simple rules.

how

ed

1) At the beginning of a string, the H needs NO Dash
2) At the end of a string the D need NO dash
3) If it is put through a G, no dash means H(GH combo)
4) Anywhere else assume D if there is no dash

seized

done   hold   sold   head   dare   host

I Combos

The simple method of connecting from an I is to connect to the "i cup" the same way as connecting to the edge of an O cirlcle. Letters can also connect off of the "rims" on the top. I usually try to use the right side, but if both are used, then I read left side first, right side second. You can just "flow into" the next letter, or attach to the rim.

little   delicious   like

voice   night

possible   nibbling
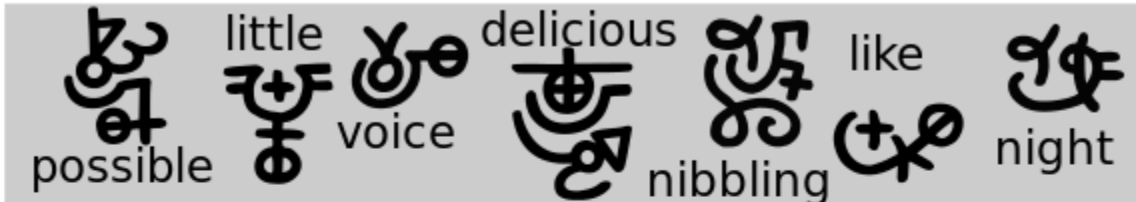
When attaching to the rim the C can be tricky if followed by some lettters like ICR or ICB. These combos rarely occur but just to clarify.

"i cup" with one line alone is C

Unless it is an R or a B

A K can be added to the C

lair   thick

their   time

If you cannot add directly to the C without ambiguity, then just make at a second attachment to the I cup

Remeber the key about the letter "i" is that it is a break in the line/symbol, unattached, and that it catches the preceding letter, "invading" the space of previous letters so it is clear it's an "i" not a "space"

Dscript Notation

Dscript Alphabetical built a foundation for strings of letters to exist more dynamically in 2D space. Dscript Notation will attempt to build a second layer for language and meaning to begin entering 2D

This version of Dscript Notation is based on English.
Many elements are derived from words and abbreviations
A whole different version could easily arise by using Dscript in a different language

My choice to use English was more or less arbitrary(my native tongue). It is entirely possible that based on lexicon and alphabetical spellings, other languages may provide different or more or less efficiencies or have different or more or less advantages.

[Dscript Notation Introduction : http://dscript.org/note.pdf](http://dscript.org/note.pdf)
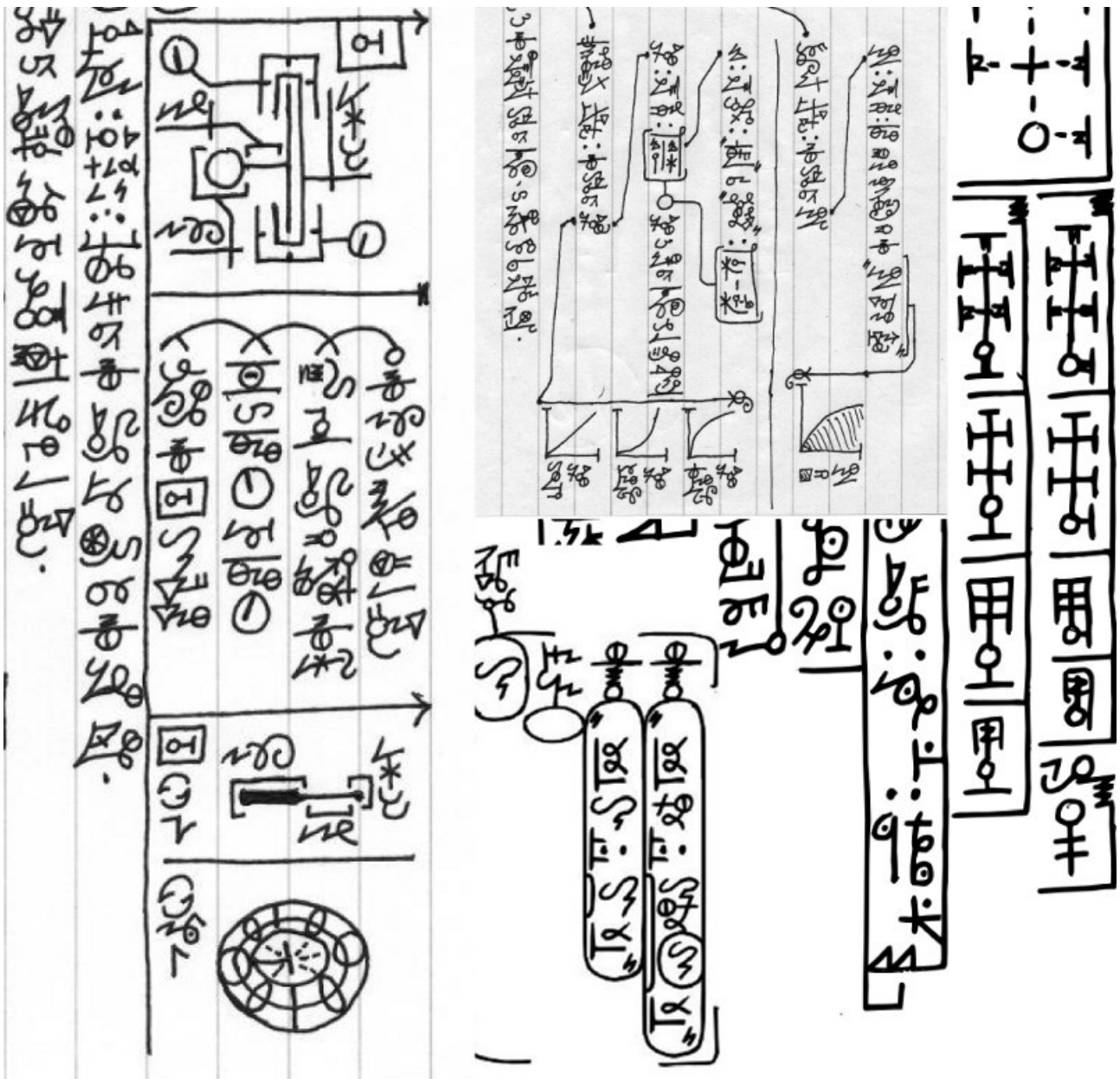
Resources

There are plenty of learning materials and examples of Dscript online

There are 2 main official websites for those interested in Dscript

Dscript.org
This site contains recent updates, examples, and materials, it is always the most current information. Dscript materials are all under the "Dscript" menu option on the site's main menu.
Key dscript.org resources
- *Full Sized Full text art*
- *Full Size transparent Reflected text art*
- *Word Art Examples*

Dscript.org is loaded with graphics content.. all is free to copy edit and sell, no royalty, fee, etc. so please feel free to do with as you please :)

Dscript.ca
This site documents the origins and development of Dscript. Some parts are a bit outdated though.
Key dscript.ca resources
- *Dscript v1.0 Manual*
- *Dscript Video Lessons*
- *Dscript Tools*
- *Dscript Generator*
- *Dscript for other languages*

Some content is also collected on DeviantArt and Facebook. DeviantArt in particular allows storage and public access to some many high quality files so it is worth a look. (I store plenty of the reflected text art on DA)
http://www.facebook.com/dscripting
http://dscript.deviantart.com/

Cscript** is the Computer friendly Sister-Script of **Dscript
http://dscript.ca/cscript.pdf

****If you like Dscript, you will probably also like **WireScript**, a 2D/3D writing system that can be written by bending wires. Works great for art, sculptures and jewelry.*
http://dscript.org/wirescript.pdf

****I have also Developed some fun "Mad Science"/"Technology Art" inventions and experiments. Great DIY fun.*
http://dscript.org/inventions.pdf