

Dscript

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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.

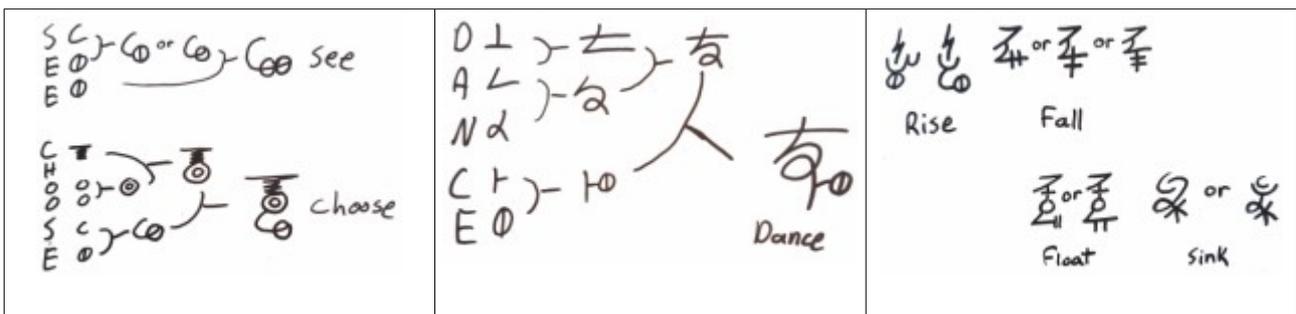
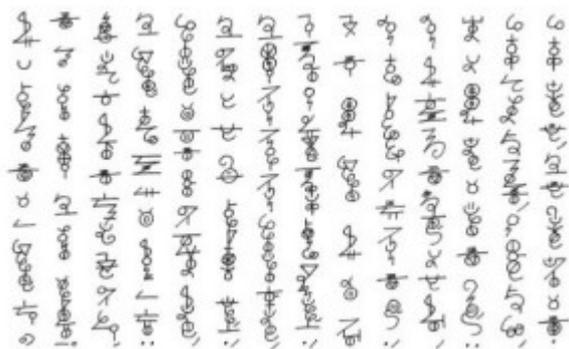
I originally mapped out all 676 combinations ($26 \times 26 = 676$) in a document called the Dscript Manual. I have revised Dscript a bit since then so the “manual” is somewhat outdated. This document explains the new system. The old Manual is still a good resource though.

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.

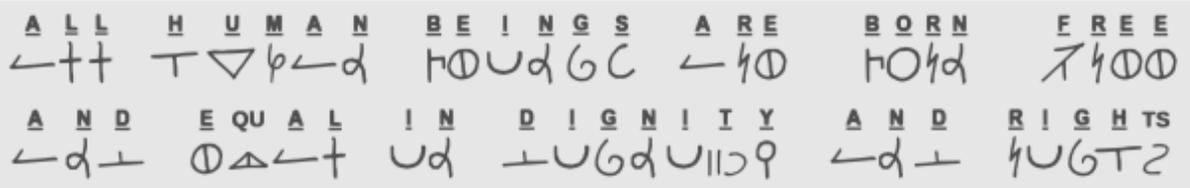
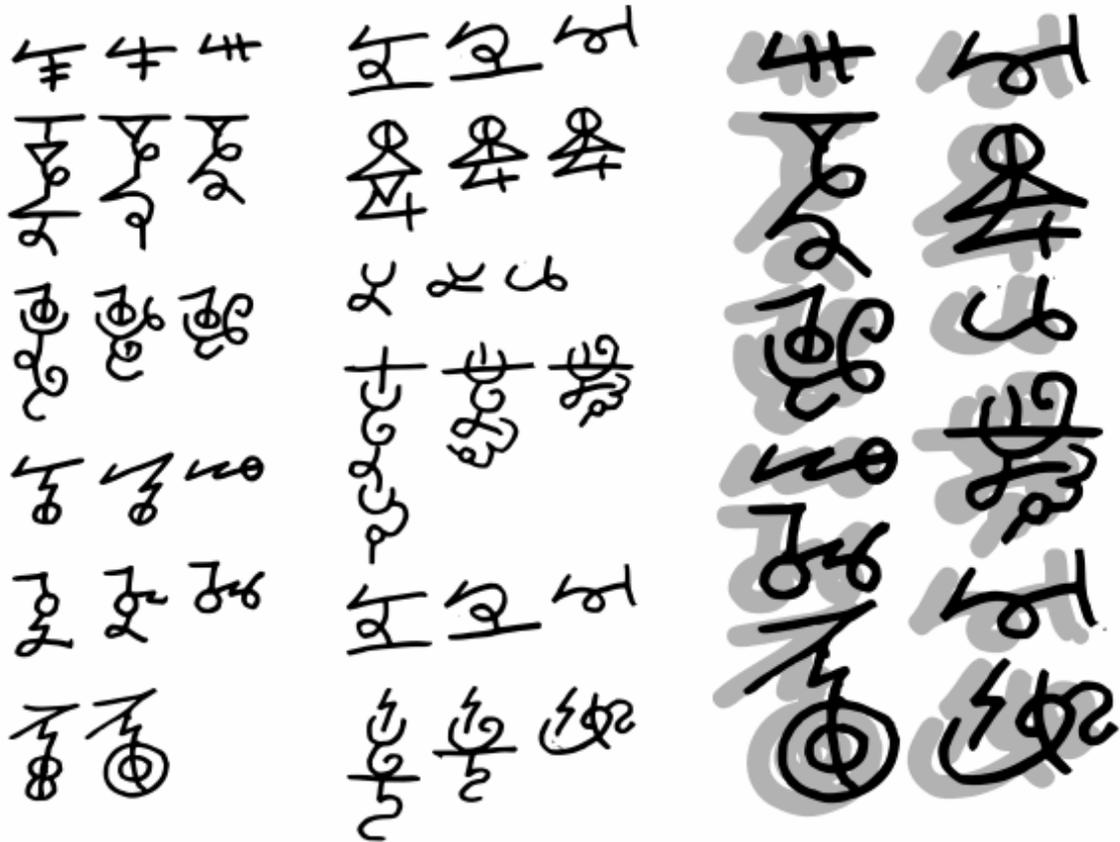


After developing the directional script, I found the both horizontal and vertical forms when used

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.



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.

ALLEN ALLEN ALLEN ALLEN
 ㄥ+U⊕d ㄥ+U⊕d ㄥ+U⊕d ㄥ+U⊕d



SYMBOLS SYMBOLS SYMBOLS SYMBOLS
 C9P10+C C9P10+C C9P10+C C9P10+C

**When I let go of what I am,
 I become what I might be**
 ~Lao Tzu



Dscript 2D alphabetical Writing system
 Turn words into legible symbols www.dscript.org

If one always looks to the Skies



One will end up with wings
 -Gustave Flaubert
<http://dscript.ca>



<http://dscript.ca>

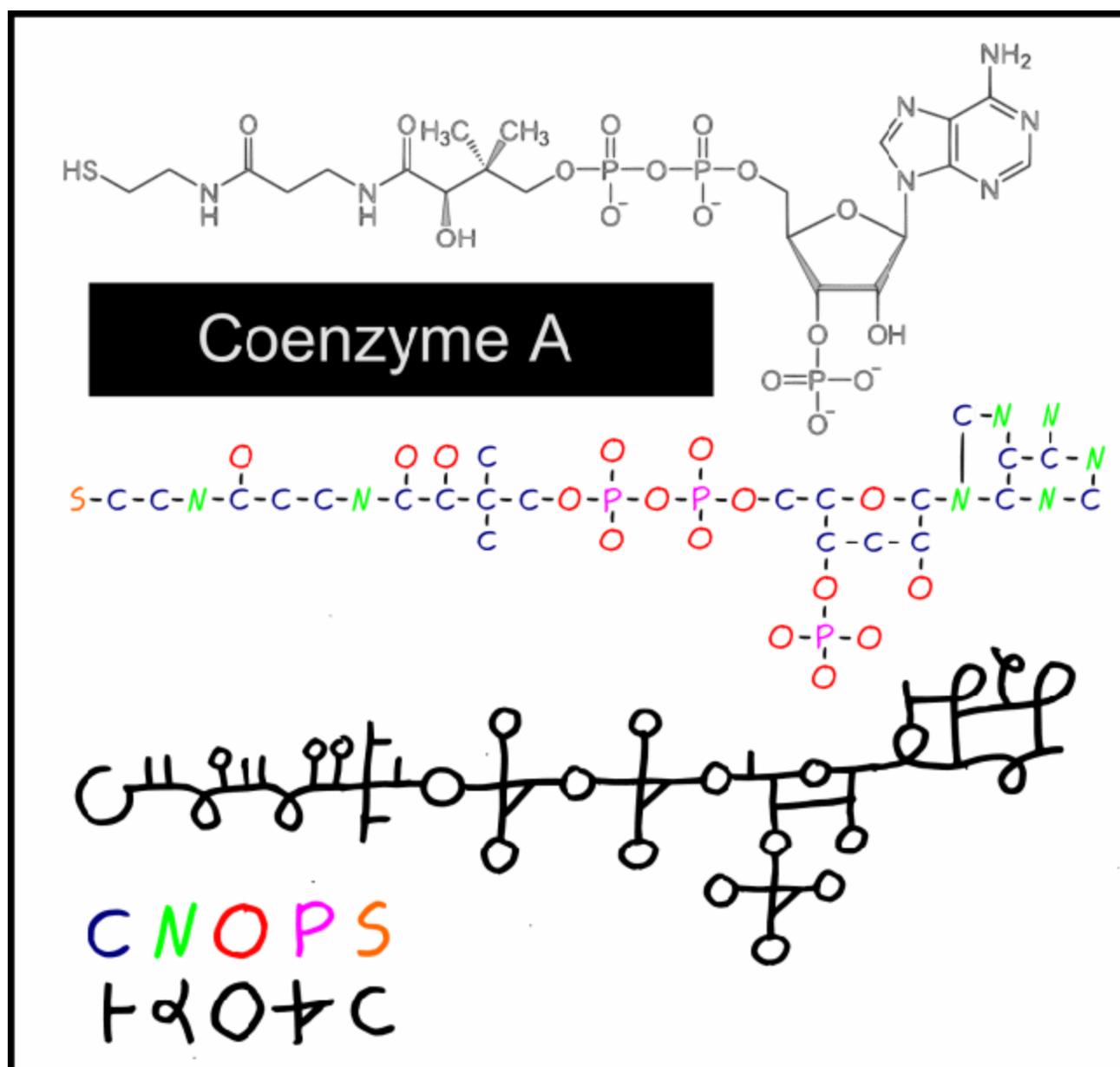


Chemistry

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.

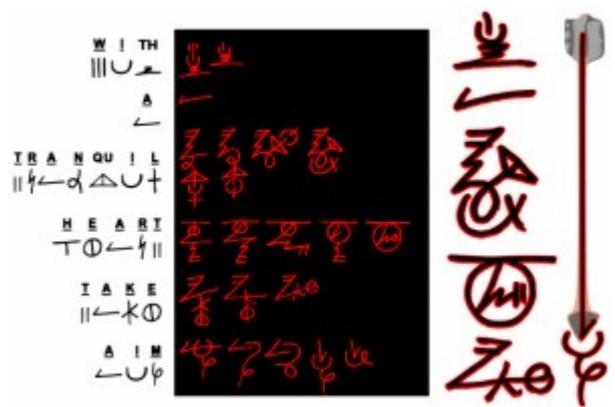
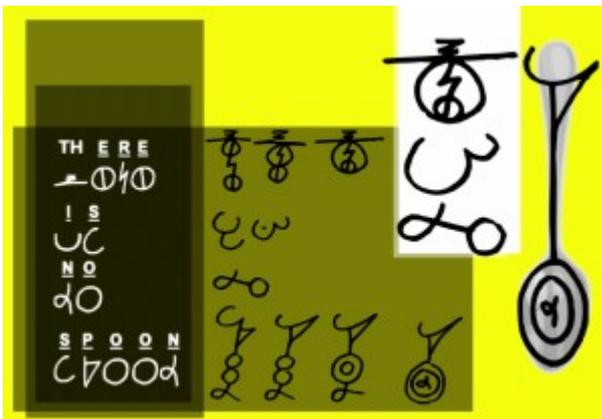
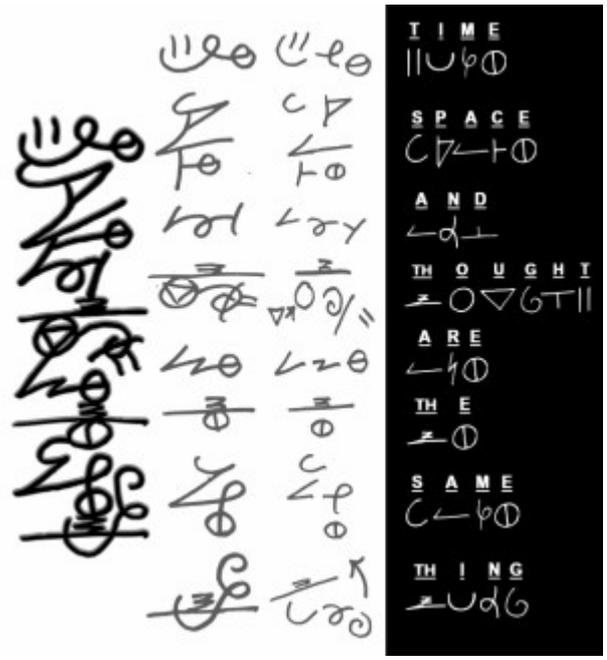
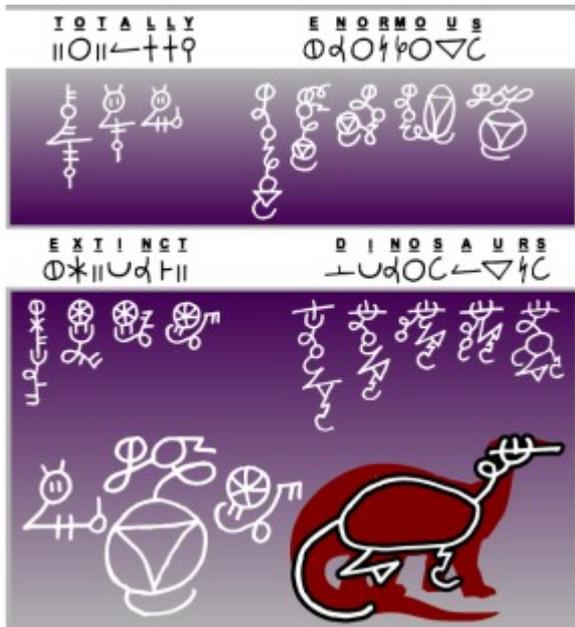
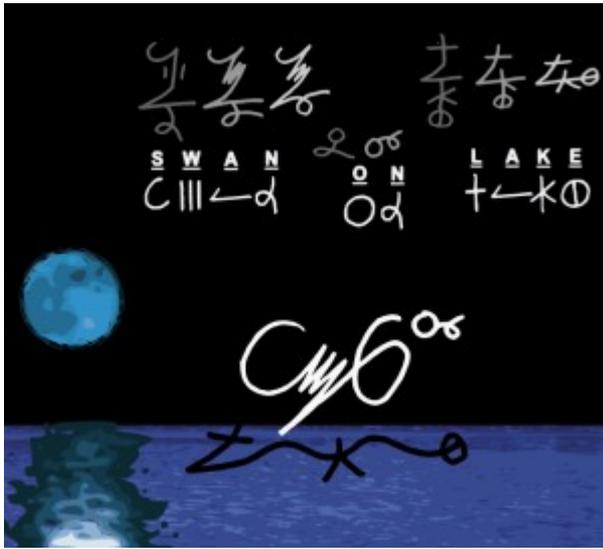
Dchem sacrifices stereo-chemistry, bond strength, and hydrogen's. It uses a base of only 5 letters, CNOPS, which allows each letter a greater degree of flexibility. These 5 elements (Carbon, Nitrogen, Oxygen, Phosphorus, and Sulphur) are the key elements of most bio-chemistry.

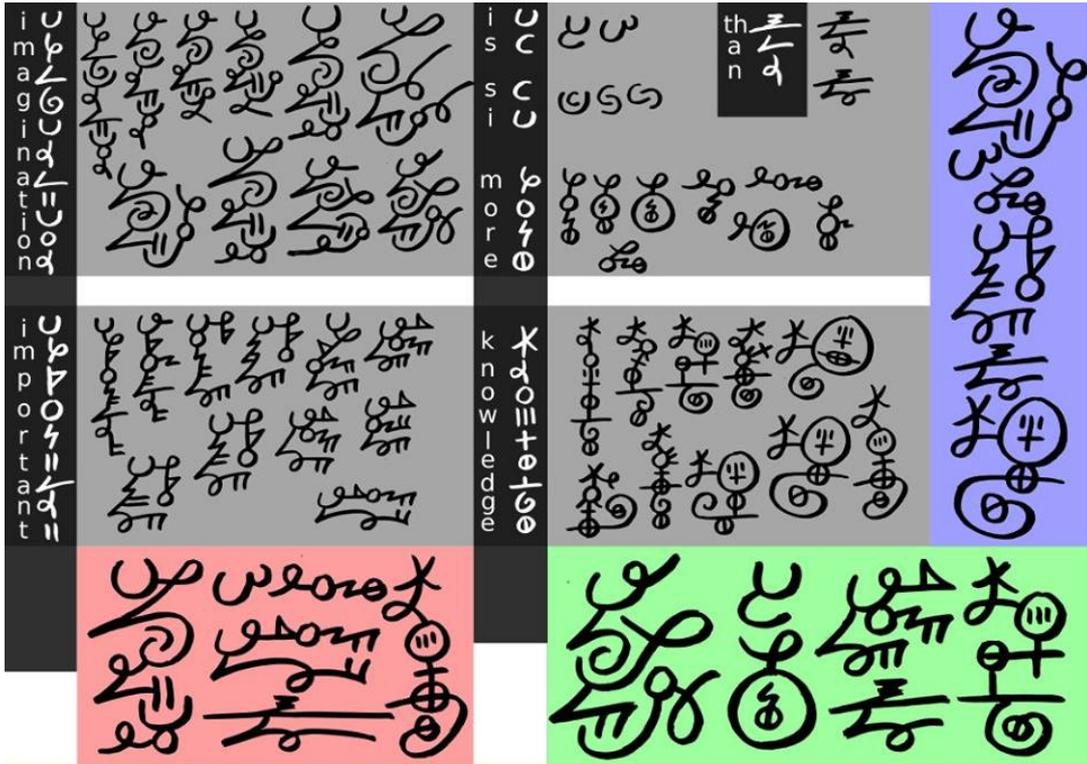


Dchem allows the key structure to be drawn without as much “noise” from other aspects like stereo-chemistry, aiding in memorizing large amounts of chemical structure or large molecules.

Learning

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





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

y o u	o o o	o o o	a r t	o o o
d o n t	o o o	o o o	f i n d	o o o
m a k e	o o o	o o o	i t	o o o

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

Dscript 2D Writing System
www.dscript.org

Turn Alphabetical Words into Glyphs

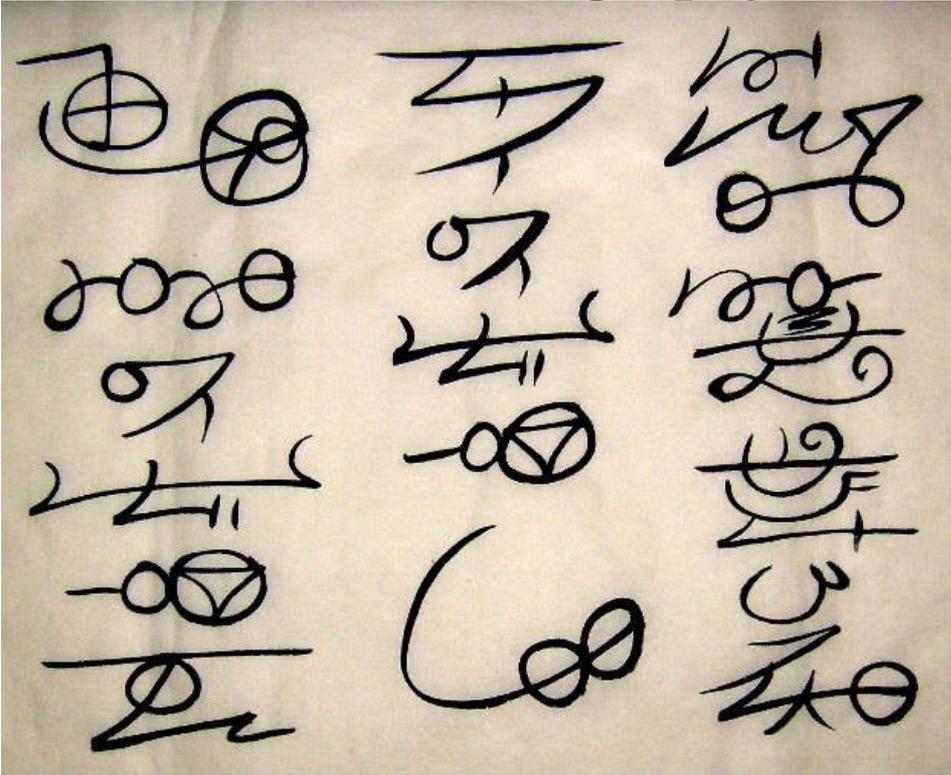
I Don't buy Halloween costumes.. I Just say.....

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

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

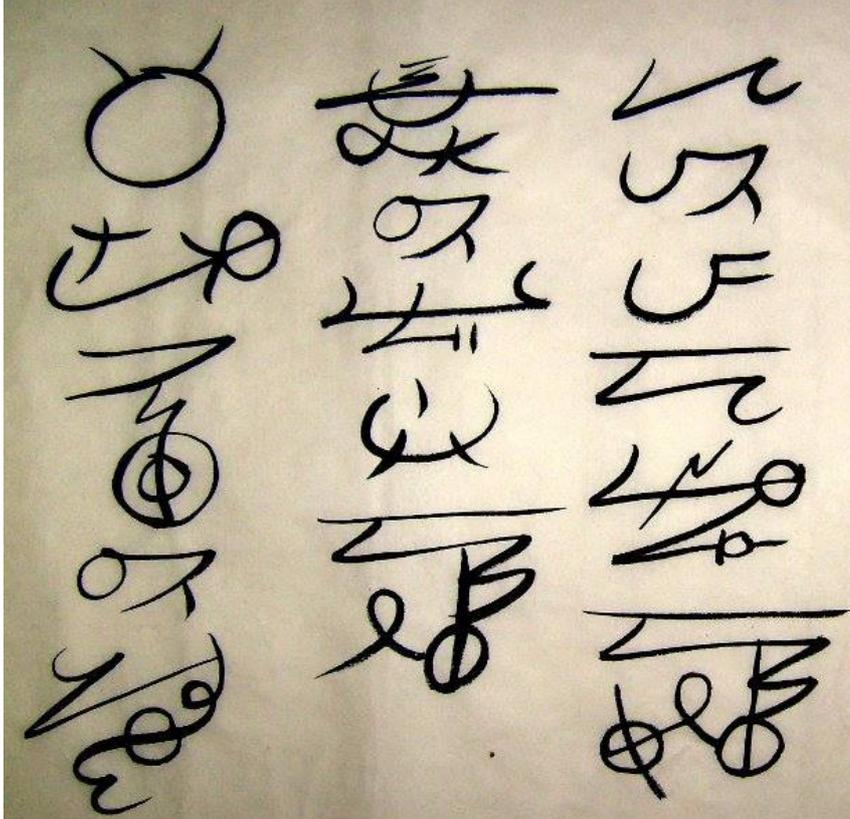


Believe
none of
what you
hear

Half of
what you
see

and
assume
anything
digital is
fake

Dscript - Turn Alphabetical language into glyphs
www.dscript.org



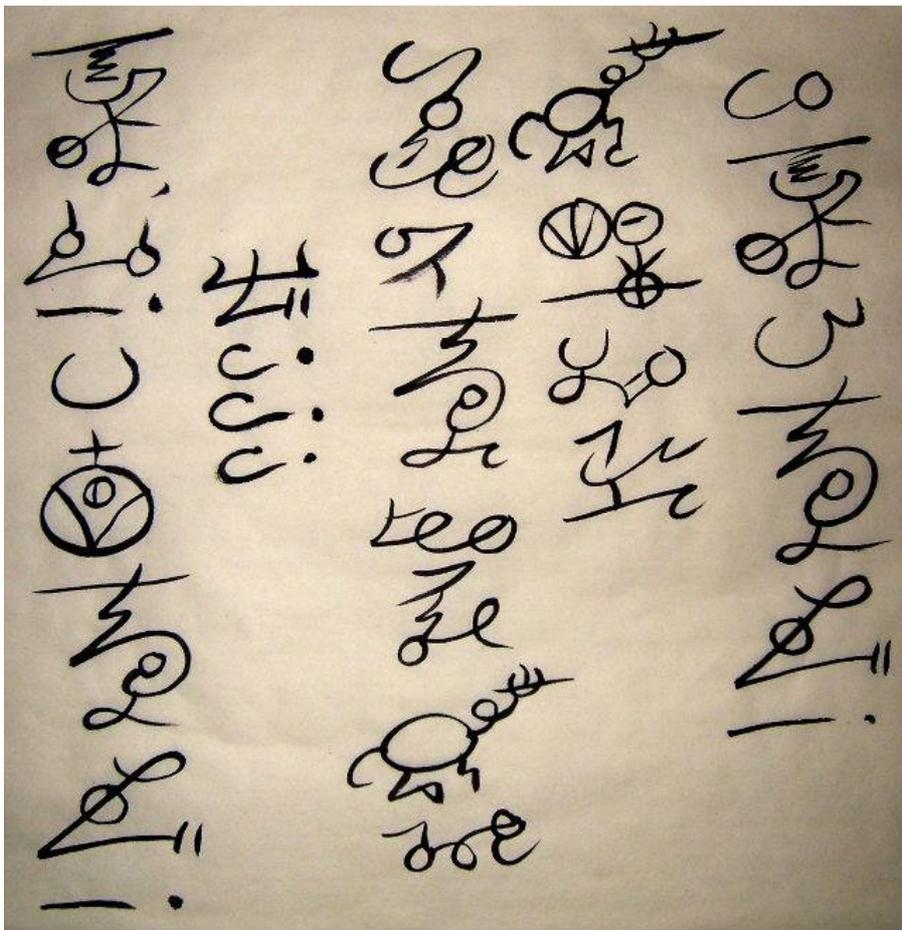
To live
free of
sadness

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!

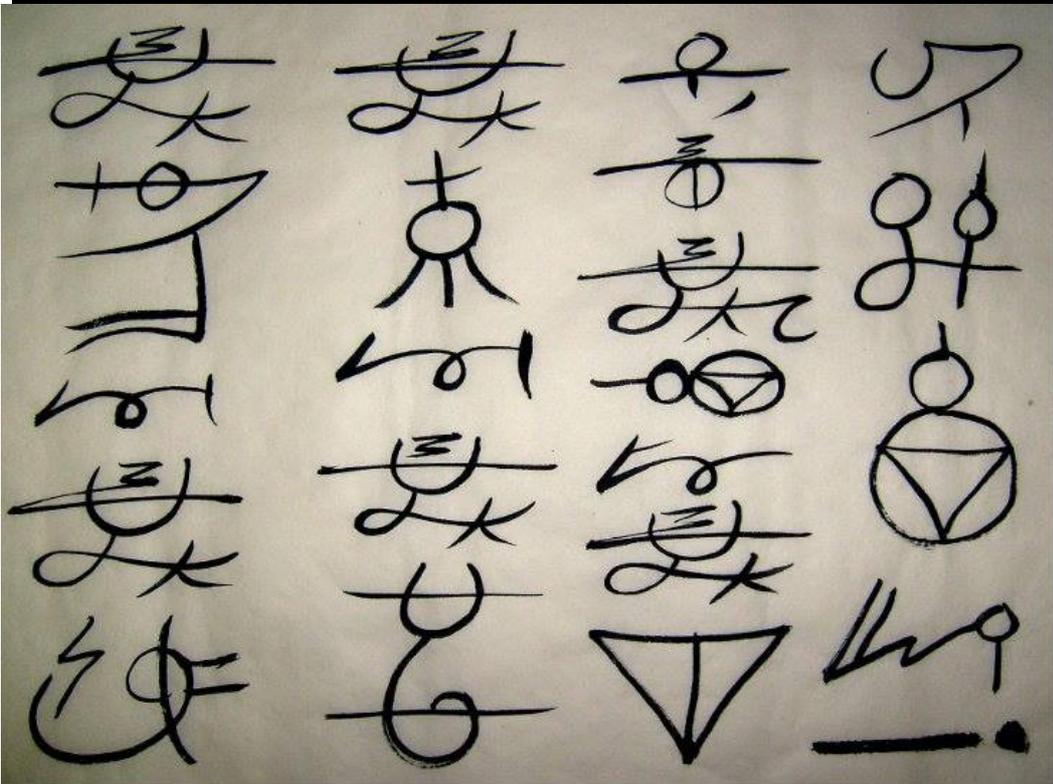
What???

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
things you
can think
up

If only you
try!

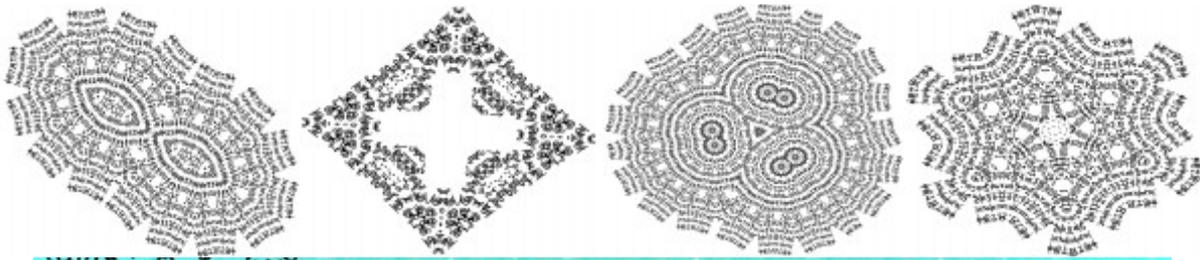
-Dr. Seuss

Dscript - 2D Alphabet - Turning Words into Legible Glyphs

www.dscript.org

Reflected Text

Discript 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 merged 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.

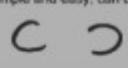
Dscript can accommodate almost any alphabet, but the system does work best for smaller alphabets. The efficiency of Dscript breaks down at alphabets of over 40 or so letters.

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

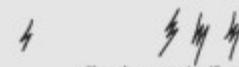


with word line

Curves simple and easy, can be split by side



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



although you must settle on a way of making sure a double zig-zag is not ambiguous 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

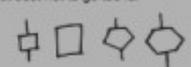


after drawing a circle, you can zip back and "divide it" with a line this is easy to write and makes a great separate letter



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

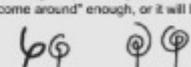
More open space shapes can be added but best not to go too far



Curves are great, you can differentiate 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 pieced up for even more connection points



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

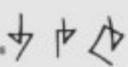


If it started a word could probably just have the following letters attached, each to an end, and read like a clock

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



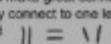
Loops can be done with joins but these again easily become ambiguous



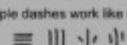
Joints or curves that "return to the word line" are possible, but the easily become ambiguous with loops



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



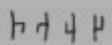
They can be doubled-up, tripled up, etc...



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

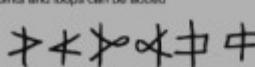


the best part about this system is that you can "default" to the most common letter. Also, when the word starts with a "bottom dash" or ends with a "top dash", the dash can be omitted

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



or joints and loops can be added

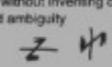


not actually "crossing the word line" and hang on one side is possible but this will remove many combinations from other letters and when the word line curves and bends it may be hard to distinguish it from shapes that are in the middle of the word line

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



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



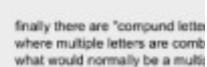
An extra dash on only one side can make odd numbered intersections



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 shapes of larger size are more feasible but are a pain to write (filling in the space takes a lot of time/realitvely) and the solid shape concept could even only partially filled



finally there are "compound letters" where multiple letters are combined what would normally be a multi-combo represents instead a disambiguation



or by drawing shapes so close together



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 words with the letter combo 'JGLWQA', why do I need 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.

Deprecated and Restrictions

ION A loop connected at the intersection, 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



half



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



SH

"sheep" OLD "sheep" now



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



Tips & Tricks + Helpful Combos

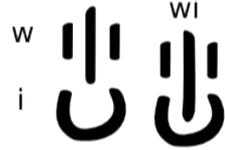
I + S + T "LIST"

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



only valid at start of word

wi

CK
A simple combination of the C and K



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



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 connected off either point but after an "s" it can only be connected 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 Or straight into an open space vowel see so 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

inside isn't its it 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 almost 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 remember that the A
 REQUIRES a 90 degree (more or less) change in word line direction

Examples

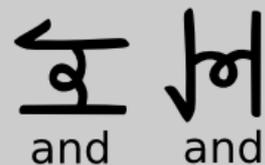
Start vertical (top to bottom)
 after A going horizontal (left to right)



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



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

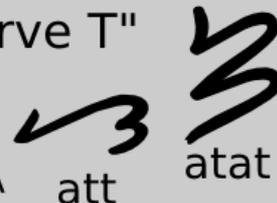


The H can be added after an A by giving
 the A and Extra dash hanging off the base

Trickiest is using the A with the "Curve T"



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



I recommend just don't use this combo, use the other T form instead

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



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

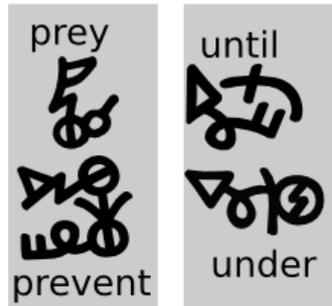


Or invent your own notation.. or, less favorably,
 allow the ambiguity and let the reader figure it out
 based on context, yuck!

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

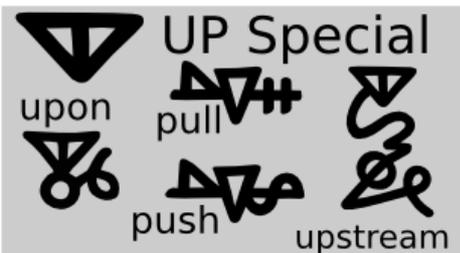
U vs. P  

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.



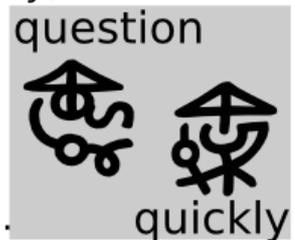
 To save strokes, at the begining of a word, the U can connect out of its corner fluidly, but this is a bit visually simmilar to a unless P so use it carefully

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



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.



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



 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 individual 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

individual

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.

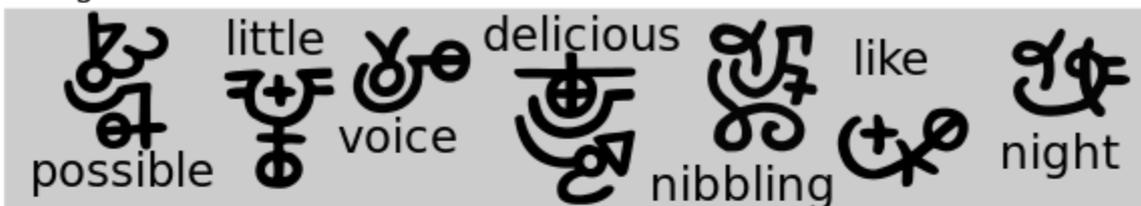


- 1) At the beginning of a string, the H needs NO Dash
- 2) At the end of a string the D need NO dash
- 3) If it is put through a G, no dash means H (GH combo)
- 4) Anywhere else assume D if there is no dash



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 circle. 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.



When attaching to the rim the C can be tricky if followed by some letters 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



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

Remember 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

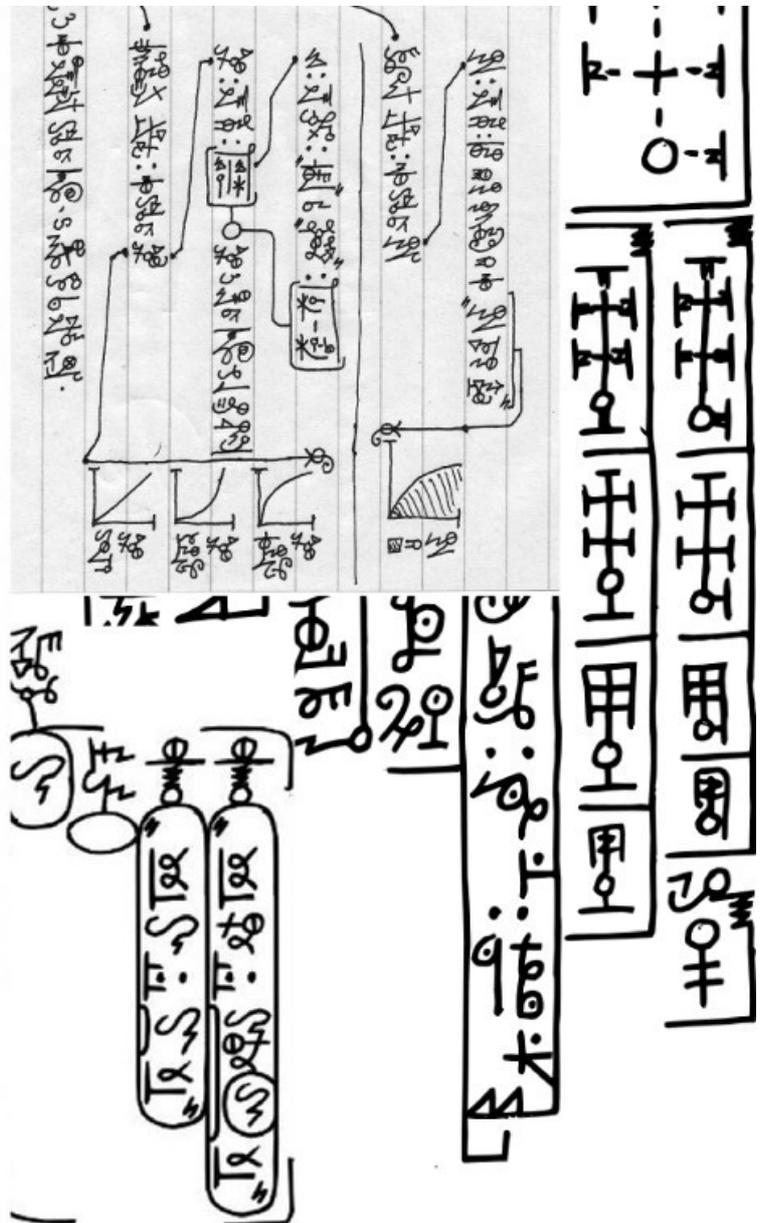
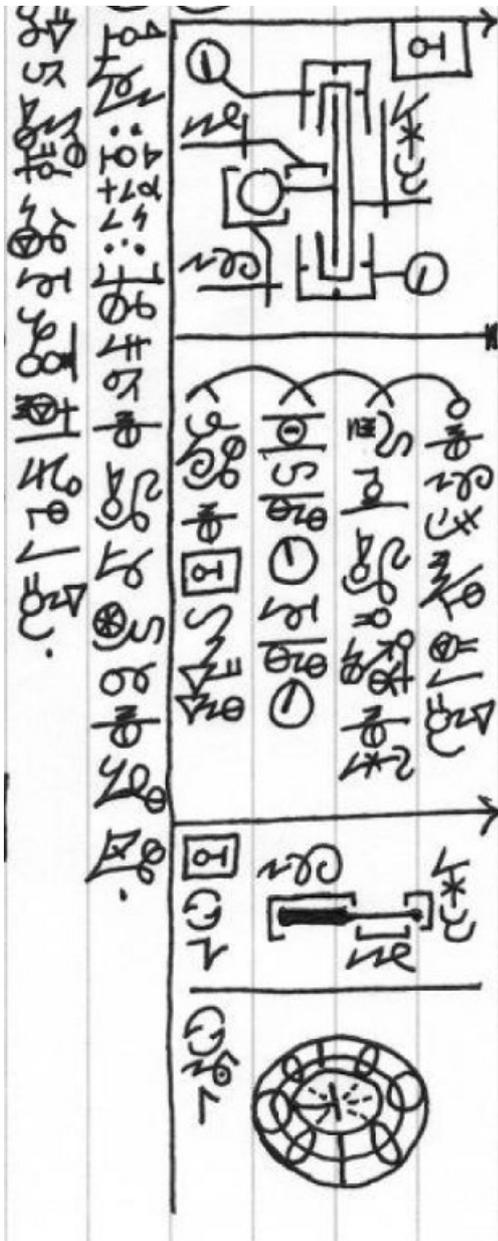
This version of Dscript Notation is based on English.

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.

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/>

****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>



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