

# Crypto-Metaprogramming: alternative to Model-View-Controller Architecture

## Abstract:

We continue from the previous presentation to establish Crypto-Metaprogramming as an alternative to the conventional Model-View-Controller architecture. In conventional MVC, front end to back end communications employ public key cryptography but the key pair is not available at the disposal of the user or programmer. We change this scheme, with many benefits, starting with simplifying designs of a large range of applications.

[omnixtar.github.io/svfig](https://omnixtar.github.io/svfig)

<https://www.youtube.com/@mi4metaprogramminginforth666>

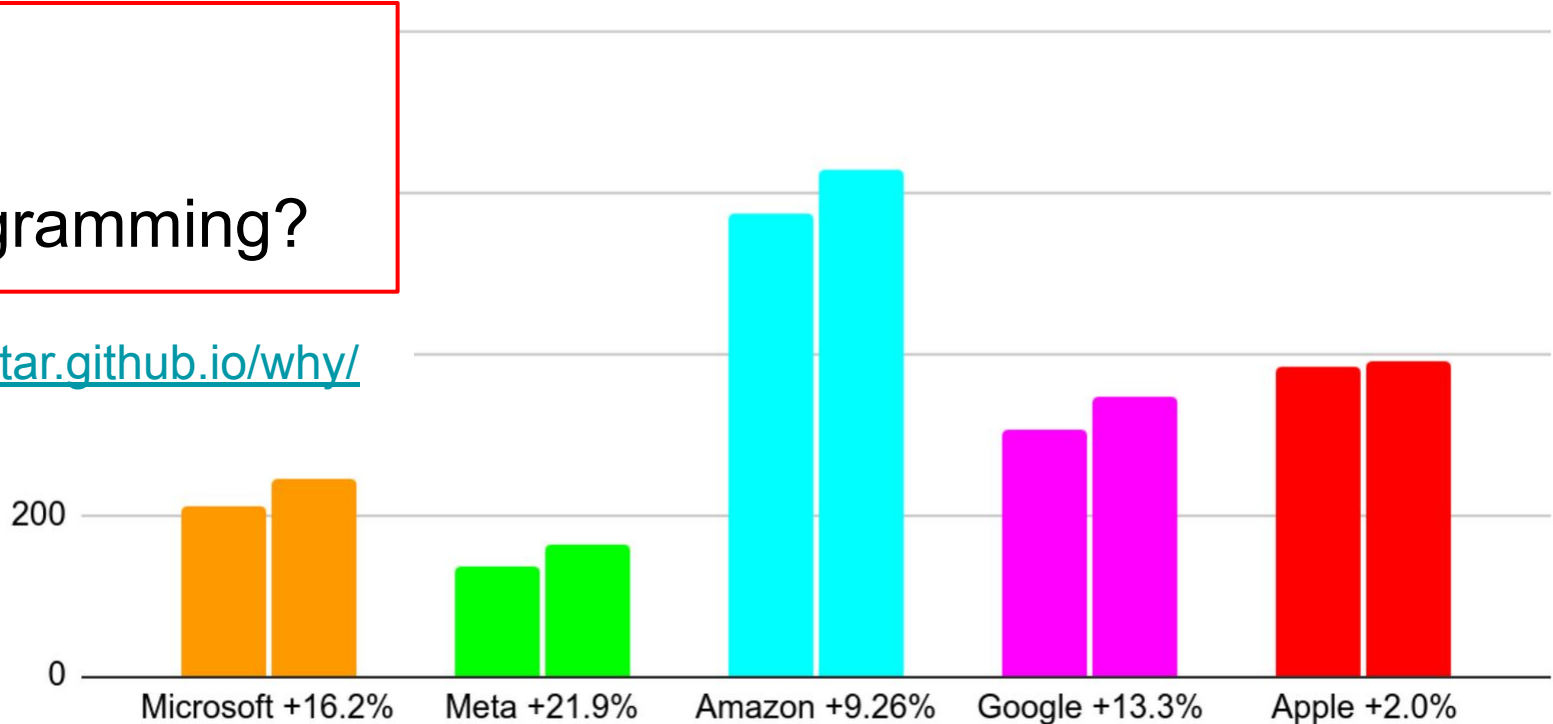
## MMAGA Revenues 2023/24 (USD billions)

**Total 2024: USD 1.776 Trillion (+10.27%)**



Why  
Crypto-  
Metaprogramming?

<https://omnixtar.github.io/why/>



This presentation is slightly different from conventional technical presentations in that, we attempt to demonstrate how technical innovations may lead to social changes like French Revolution, which may be deemed politically incorrect by mainstream American audience.

As such, we employ analogies from Isaac Asimov's Foundation fiction universe, to illustrate how programmers may form one or more organisations and use Crypto-Metaprogramming to change the world, just like how Psychohistorians form one or more Foundations, and take actions to direct the course of Empire.

And we wish to invoke the Monty Python Disclaimer, to defend ourselves from political correctness accusations, where we urge all audience to consider unpopular and ridiculous ideas as future Monty Python plots.

# ISAAC ASIMOV FOUNDATION



Psychohistory

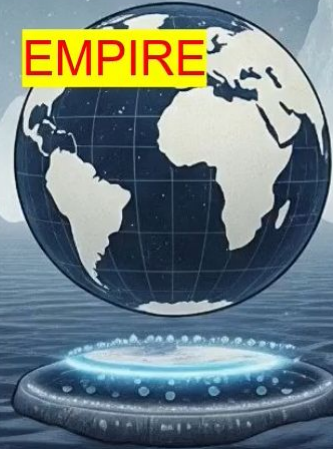
CRYPTO METAROGAMMING

Foundation

Omni\*Web

METANARCHY

EMPIRE





1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)

# Abstract

We begin with defining Crypto-Metaprogramming as “Bitcoin, simplified, minus Blockchain”. We then employ Hilbert Hotel room number to illustrate the significance of hash numbers and Hashcodes, and further employ Hilbert Casino and Hilbert Bazaar to illustrate decentralised digital assets, as well as using Hilbert Casino and Hilbert Bazaar as a generalised model for all computing applications. We then introduce the concept of Decentralised Legal Persona and Metanarchy, and argue that MMAGA (Microsoft, Meta, Amazon, Google, Apple) USD 1.8 trillion annual revenues should be imposed “open source tax”, and better free software can be produced by collaboration, using Omnihash and DJSON Decentralised JSON. We also predict and propose to simulate our prediction using Omni\*Web itself, of a world made up of Three Kingdoms, namely, United States of America, China and Metanarchy Federation, comprising all other nation states, from 2030 onwards.

Crypto-Metaprogramming

=

Bitcoin, simplified,  
minus blockchains.



BITCOIN

## Bitcoin: Technical Concepts

Bech32  
Blockchain Diagram  
Bitcoin Encryption  
Creating forks  
Bitcoin mining  
Blockchain  
Bitcoin Improvement Proposals  
Pay-to-Script Hash  
Proof of Keys  
UTXO  
User Activated Soft Fork  
OmniBOLT  
Blockchain (database)  
Segregated Witness  
Lightning Network  
Hashed Timelock Contracts  
NSequence  
Bitcoin Emission  
Block timestamp

**Pay-to-PubKey-Hash (Pay-to-Public-Key-Hash, P2PKH)** is the basic form of making a [transaction](#) and is the most common form of transaction on the [Bitcoin network](#). Transactions that pay to a [Bitcoin address](#) contain P2PKH scripts that are resolved by sending the public key and a digital signature created by the corresponding [private key](#).

The ScriptPubKey and ScriptSig for a transaction is shown below:

### Table of Contents



#### 1. Pay-to-Pubkey Hash

- 1.1. Pay-to-PubKey-Hash Review
- 1.2. Pay-to-PublicKey Hash Example
- 1.3. See also
- 1.4. References

[https://bitcoinwiki.org/wiki/  
pay-to-pubkey-hash](https://bitcoinwiki.org/wiki/pay-to-pubkey-hash)

## Pay-to-PubKey-Hash Review

Two types of payment are referred as P2PK (pay to public key) and P2PKH (pay to public key hash).

[Satoshi](#) later decided to use P2PKH instead of P2PK for two reasons:

Elliptic Curve [Cryptography](#) (the cryptography used by your public key and [private key](#)) is vulnerable to a modified Shor's [algorithm](#) for solving the discrete logarithm problem on elliptic curves. In plain English, it means that in the future a quantum computer might be able to retrieve a private key from a public key. By publishing the public key only when the coins are spent (and assuming that addresses are not reused), such attack is rendered ineffective.

With the hash being smaller (20 bytes) it is easier to print and easier to embed into small storage mediums like



works  
Softfork  
Scalability  
Adaptive difficulty  
CVE-2012-4684-new  
CVE-2013-2293  
Nanopayments  
Block weight  
BIP UNOFFICIAL DRAFT 0  
Ideal Properties of Digital  
Commodities  
Address reuse  
Hashlock  
Contingency plans  
Offline transactions  
Off-Chain Transactions  
Funding network security  
Bitcoin scalability problem  
Segwit support  
CVE-2012-3789  
Proof of Ownership  
Dump format  
Test Cases  
Hot wallet  
Dominant Assurance Contracts  
Bitcoin Binary Data Protocol  
Coin analogy  
CVE-2012-4683  
BIP Draft – Instant Partial

A [Bitcoin address](#) is only a hash, so the sender can't provide a full public key in scriptPubKey. When redeeming coins that have been sent to a [Bitcoin](#) address, the recipient provides both the signature and the public key. The [script](#) verifies that the provided public key does [hash](#) to the hash in scriptPubKey, and then it also checks the signature against the public key.

Checking process:

Stack	Script	Description
Empty.	<sig> <pubKey> OP_DUP OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	scriptSig and scriptPubKey are combined.
<sig> <pubKey>	OP_DUP OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	Constants are added to the stack.
<sig> <pubKey> <pubKey>	OP_HASH160 <pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	Top stack item is duplicated.
<sig> <pubKey> <pubHashA>	<pubKeyHash> OP_EQUALVERIFY OP_CHECKSIG	Top stack item is hashed.
<sig> <pubKey> <pubHashA> <pubKeyHash>	OP_EQUALVERIFY OP_CHECKSIG	Constant added.
<sig> <pubKey>	OP_CHECKSIG	Equality is checked between the top two stack items.
true	Empty.	Signature is checked for top two stack items.

1. Discovered by accident, PBK login video, show again.
2. DJSON video. Login. [https://youtu.be/\\_w-E4Z4Ju5s?t=250](https://youtu.be/_w-E4Z4Ju5s?t=250) Hash of public key.



session id:adam-fer4f9qk69m9nj562u7kj5

Copy the following code and execute it in

```
f(': B F ' + JSON.stringify({w:'like', t:'recipe'}
```

1602 Phos 1611 S 1621 B F start omni:

```
fgl_s 340 < 2 > array ( 0 => array ( 0 => '{
'lcdw:', 5 => 'B_AUTH', ), 1 => array ( 'SP'
'LS0tLS1CRUdJTiBQVUJMSUMgS0VZLS
'NN' => 'adam', ), )
```

```
fgl_s 340 < 4 > array ( 0 => array ( 0 => '{
["SESSION:", "AUTH", "i:", "PBK", "i:", "o_ha
1 => 'jd:', 2 => 'cdw:', 3 => 'am:', 4 => 'lcd
array ( 'a_cmd' => array ( 0 => 's:', 1 => ':
```

```
'Graph/dmeta/CXAGcRkevA==', ) [{"a_cn": "Graph\\dmeta\\CXAGcRkevA=", "t": "fgl_s 340 < 2 > array ( 0 => array ( 0 => {'lcdw': 5 => 'B AUTH'. ), 1 => NULL. )
```

```
fg| s 340 < 2 > array ( 0 => array ( 0 => '{'
```

gmfg7pfvvp2e4kcuhjtfq7wfltt63igwcukhbmugm6lu3a3a.b32.i2p

```
post ajax:
```

```
fgl_s 340 < 2 > array (0 => array (0 => '["B_AUTH":  
["SESSION": "AUTH", "i": "s": ""]', 1 => 'jd:', 2 => 'cdw:', 3 => 'am:', 4 =>  
['cdwr:', 5 => 'B_AUTH', 'j'], 1 => array ('SP' => '93b164de', 'PASS' =>  
'20250211_220742', 'PBK' =>  
'L50tLS1CRUUDJTiBQVJMSUMg50VZLS0tL50KtUfUQ0lQUR5UC5CZ2xaxa  
pRz13MEJB3UQWQFQPQ0FNOEFSNUdQ2dLQ0FNuRUFYUj1TWJCL3NS  
c2dXmNnSeGhOUDLWknVrkJKDER5XV1b3oz5C9QT05NvUQlQWEXG  
NHVvWZFNUTHUOQXhWnUtKUnFBTWlMRz1Z2TZkajBqczEzS3MvQlVnd  
03p3V1Jd1EymTtF0S2FzDscDcweE5VXVnQ4Ud2OVNGOTRCSCpmV  
EZMD0VYVtYaa1Fem5S9RWHRSKtYnQyZ7JqYqJdMfYELB3OGl0d1122R  
vNHB5anBLVzNuS095S1AwZ2NrcktdWJCSG1HSJlQOW5YeXZraSszUU  
V4b5t3Z0JRWfHOR28yaHl2UFR3akhT5SVUdvlhwbz3KYYkpiVm8vTlZrU  
vjk2tSLt5ZW1manpyTYFENzdyTDMrZjVmeER46QGrTaG2K3dyRlBkn  
WZLc2Q0ElpK0p2MkltWm4j1hxa3V5eGlrT1ENUJpBNbNnTnB1S0Js  
ZXJBYU5pY2pRTGHuZVE1Vlk0d2pUczNMZVMxaytLRHBZQVNRROStZ  
ElsvWpJbJ5JNVNdhTmBodGt1M0V4WHAya0Jtzm1Z2mXPRXRrdkZa  
m1OQZV5JYUjXNYZ3pWl05qZ5kSkadZ2Wp0VUL0YkZ6WfRdK2NZRO  
3o4UGxpbUZZeWtJZll0eVBMNzQ5MW9tVmZjeUlfUzBWB1hqt1Vnbl  
NsdvGMF3BkXrK5OoddyTWpvczJYTYgt4HpmQmhl1UFJlN2pwVxd1Y0  
pnbX1GUX1YUfhD1NjNw1WNW11ZUZvMtlJV3Uw1VhU5pZRhEkdM  
R3lCci9YXkuNVo1NktuZdYvZBMVDVRLJXNWE1VlG9NZNdb19ua1  
dYUkp6UlHRCGfWuQtMVCNPeKFDUEVTak9GyNZEQWNkbGMrWvPbK  
0U1bXVBYmVtNnNpcQwN3pzNkt0Qk9rbWRNVjJMXVvOENBd0VB  
QVE9PQotL50tLUVORCBQUJMSUMg50VZLS0tL50=', 'NN' => 'adam',  
,),
```

Don't allow

☐ yo6sgmfq7pfvvp2e4kcuhtfg7wfltt63igwcukhbmum6lu3a3a.b32.i2p  
to prompt you again

OK

SEND

GET



adam session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31  
 session\_id:adam-fer4f9qk69m9nj562u7kj5n2u9\_31

## Omni\*Search Demo

Copy the following code and execute it in the browser console:

```
f(': B_F ' + JSON.stringify({w:'like', t:'recipient_hash', f:'sender_hash'}) + ' jd: rghe: g_
```

1602 Phos 1611 S 1621 B\_F start omni:

```
fgl_s 340 < 2 > array ( 0 => array ( 0 => '{"B_AUTH":["SESSION:","AUTH","i:","s:","  

    'lcdw:', 5 => 'B_AUTH', ), 1 => array ( 'SP' => '9fa64665', 'PASS' => '20250210_00:  

    'LS0tLS1CRUdJTlBQVUJMSUMgS0VZLS0tLS0KTUIJQ0lqQlU5C72tvaGtnRzI3ME  

    'NN' => 'adam', ), )
```

```
fgl_s 340 < 4 > array ( 0 => array ( 0 => '{"B_AUTH1":  

    ["SESSION:","AUTH","i:","PBK","i:","o_hash.json","l_cdwjs","t  

    1 => 'jd:', 2 => 'cdw:', 3 => 'am:', 4 => 'lcdw:', 5 => 'B_AUTH1'  

    array ( 'a_cmd' => array ( 0 => 's:', 1 => ';', ), 't_f0' => '2025-0:  

    'Graph/dmeta/CXAGcRkevA==', ) [{"a_cmd":["s:",";"], "t_f0":"2  

    {"r":"Graph/dmeta/CXAGcRkevA==", "t":"2025-02-10T00:38:  

    fgl_s 340 < 2 > array ( 0 => array ( 0 => '{"B_AUTH":["SESSI  

    'lcdw:', 5 => 'B_AUTH', ), 1 => NULL, )
```

```
fgl_s 340 < 2 > array ( 0 => array ( 0 => '{"B_AUTH":["SESSI  

    'lcdw:', 5 => 'B AUTH' ) 1 => array ( 'SP' => 'e3235b7f' 'PASS' => '20250210_042724' 'PBK' =>
```

DSC

cmd

123

Encrypted\_Message

Any\_other\_remarks

Misc

adam

s: x:

AUTH GenKeys SEND GET

ActivitiesText EditorJum 22 Ogos, 15:36gui\_dsc.js/var/www/dmeta/oxm/PhosSave

c\_pvk.pem x d\_pvk.pem x rsa.sh x libphos.js x e\_pvk.pem x donald\_keypair.js x libphos.php x init.js x libfgl.php x libuui.php x alias.php x gui\_dsc.js x

```
61// 2023-02-05 GenKeys
62S.push(document.createElement('button'));
63S.push(document.createTextNode('GenKeys'));
64n = S.length - 2;
65d_form.append(S[n]);
66S[n].append(S[n + 1]);
67S[n].className = 'form-container btn';
68S[n].onclick = function () {
69    alert('GenKeys');
70    S0 = M.S[0];
71
72    // 20230602
73    // After GenKeys button is clicked, check dialogue box for text – must have filename for pem
74    // file, and optional password, or Phoscript expression, else execute default generate keys.
75    // if S0.K is already loaded, just run AUTH_CSV: no need savekp:
76    if (typeof S0.K !== 'object') {
77        M.F(': save_auth savekp: ' + get_param.nn + ' AUTH_CSV: ; awt: rsa_oaep: save_auth ');
78        console.log('after rsa_oaep:', M.S);
79    } else {
80        M.S.push(S0.K.s_pbk); // 20230616 need s_pbk somehow!! for back end!!
81        M.S.push(S0.K.pair);
82        M.F(get_param.nn + ' AUTH_CSV:');
83    }
```

JavaScript Tab Width: 2 Ln 75, Col 69 INS

Front End

Back End

PBK (Public Key)

PBK (Public Key)

+

Secret Phrase (SP)

Ciphertext

Ciphertext

+

PVK (Private Key)

Secret Phrase (SP)

Secret Phrase (SP)

Root CA Certificate  
Contains the Root CA's Public Key

/s/ Self-signed by Root CA's Private Key

Intermediate CA Certificate  
Contains the Intermediate CA's Public Key

/s/ Also signed by the Root CA's Private Key

TLS Server Certificate  
Server's Domain Name(s) and also its Public Key

/s/ Signed by the Intermediate CA's Private Key

<https://support.mozilla.org/en-US/kb/secure-website-certificate>



ActivitiesText EditorJum 22 Ogos, 15:58libphos.js/var/www/dmeta/oxm/Phos

Openlibphos.js

Save

c\_pvk.pem x d\_pvk.pem x rsa.sh x libphos.js x e\_pvk.pem x donald\_keypair.js x libphos.php x init.js x libfgl.php x libuui.php x alias.php x gui\_dsc.js x

460\$.F(arguments[0], 'je: xsend:');  
461}  
462function f\_B() {  
463 var bex = '3 4 + Graph rn: s:';  
464 var F = M.F;  
465 var S0 = window.M.S[0];  
466 console.log(' in f\_B S0.CDW', JSON.stringify(S0.CDW));  
467 var \$a;  
468 var BEA;  
469 // if (typeof M.S[0].dlb.PHOS !== 'undefined')  
470 if (typeof window.S[0].dlb.PHOS !== 'undefined') // PHOS in pushed to window.S !!  
471 \$a = window.S[0].dlb.PHOS[1].value;  
472 if (S0.CDW.length > 1) {  
473 var n\_a = S0.CDW[S0.CDW.length - 1][0];  
474 \$a = S[0].\$CDW[n\_a];  
475 } else if (Object.keys(S[0].\$CDW).indexOf(\$a) >= 0) {  
476 console.log(Object.keys(S[0].\$CDW).indexOf(\$a));  
477 \$a = S[0].\$CDW[\$a];  
478 } else {  
479 var s0 = preg\_replace('/s+/', ' ', \$a);  
480 \$a = explode(' ', trim(s0));  
481 }  
482 BEA = \$a[\$a.indexOf('B:') + 1];  
483 var BEA\_a = S[0].\$CDW[BEA];  
484 ...

JavaScript Tab Width: 2 Ln 462, Col 21 INS

```
647 async function f_AUTH_CSV() {
648     var NN = S.pop();
649     var K = S.pop(); // key pair, K.privateKey decrypt secret phrase ciphertext after ajax
650     console.log(arguments);
651     var pbk = S[S.length - 1]; // s_pbk sent to server to encrypt secret phrase
652     console.log(pbk);
653     $.F('nxhr: auth/phos.php xo: xsrqh:');
654     var t = S.length - 1;
655     var ajax = S[t];
656     S[t].onreadystatechange = async function () {
657         if (ajax.readyState == 4 && ajax.status == 200) {
658             console.log(ajax.responseText);
659             var E1 = ajax.responseText;
660             var D1 = await window.crypto.subtle.decrypt({ name: 'RSA-OAEP' }, K.privateKey,
str2ab(atob(E1)));
661             console.log(ab2str(D1));
662             var a_csv = ': auth_csv dts: PASS ka: AUTH uss: ' + btoa(pbk) + ' PBK ka: AUTH
uss: ' + NN + ' NN ka: AUTH uss: ';
663             B(a_csv + ab2str(D1) + ' AUTH gsv: SP i: cmp: 0 ifeq: auth_csv b chromy ' + btoa
(pbk) + ' ON ECHO bv: ec: ec:');
664         }
665     };
666     $.F(btoa(pbk) + ' req_auth_sc', 'je: xsend:');
667 }
```

```
"req_auth_sc":["b64d:","4","orpb:","hex:","dup2:","rsa:","2","pick:","lkey:","swap:","r  
ecr:","b64e:","ON","ECHO","bv:","ec:","2","pick:","SP","ka:","AUTH","uss:",";"]
```

```
i:","dts:","over:","over:","jsp:","rot:","rot:","swap:","_","jsd:","=chat","dc0:","_","jsd:","rot:","  
"rot:","jsp:","jnl:","swap:","log","\/","jsd:","wa:",";"],"nick":["NN","ka:","AUTH","uss:",";"],"req  
auth_sc":["b64d:","4","orpb:","hex:","dup2:","rsa:","2","pick:","lkey:","swap:","recr:","b64e:","ON  
","ECHO","bv:","ec:","2","pick:","SP","ka:","AUTH","uss:",";"],"b_cdw":["=\/Backup\/o_cdw.json\/","  
dw.json","3","mssx:","o_cdw.json","s:","copy:",";"]
```

```
553 function fgl_lkey()  
554 {  
555     global $S;  
556     $keystr = array_pop($S);  
557     $key = end($S);  
558     $key->loadKey($keystr);  
559 }
```

```
344 function fgl_rsa()  
345 {  
346     global $S;  
347     $key = new RSA();  
348     $S[] = $key;  
349 }
```

```
560 function fgl_recr()  
561 {  
562     global $S;  
563     $str = array_pop($S);  
564     $key = end($S);  
565     $key->setHash('sha256');  
566     $key->setMGFHash('sha256');  
567     $S[] = $key->encrypt($str);  
568 }
```



```
libfogl.php
/var/www/dmeta/o/auth

c_pvk.pem x d_pvk.pem x rsa.sh x libphos.js x e_pvk.pem x donald_keypair.js x libphos.php x init.js x libfogl.php x libuui.php x alias.php x gui_dsc.js x

1268 }
1269 }
1270 }
1271 }
1272
1273 function FGL($a)
1274 {
1275     global $argv, $S, $SS, $xk, $xs, $SC, $SL, $CDW, $BV;
1276     $a = preg_replace('/\\s+/', ' ', $a);
1277     $a = explode(' ', trim($a));
1278     $SS[] = array(0, $a);
1279     if (isset($D)) {
1280         echo "\n\n" . __FUNCTION__ . " " . __LINE__ . " " . var_src($SS);
1281     }
1282     $xc = count($SS);
1283     $xk =& $SS[$xc - 1][0];
1284     $xs =& $SS[$xc - 1][1];
1285     $xl = count($SS[$xc - 1][1]);
1286     $vk = $xk;
1287     $Z = $xl;
1288     if (isset($D)) {
1289         echo "\n" . __FUNCTION__ . " start " . __LINE__ . " vk " . $vk . " Z " . $Z . " SS " .
var_src($SS) . "\n";
1290         $S[] = $vk;
```

```
var_src($SS) . "\n";
1290     $S[] = $vk;
1291     $t = array_pop($S);
1292     $CC = $t[0];
1293 }
1294 do {
1295
1296     // 20230609 Exception handling / errors etc.
1297     if (gettype(end($S))=="string") {
1298         if (substr(end($S),0,9)=="__ERROR__") { // exit; // break;
1299             echo "\n\n FGL :post ".array_search(":post", $S[0])." ".var_src($BV)." ".var_src(
$SS)." \n";
1300             // exit; // break;
1301             // array_pop($SS);
1302             /*
1303             $xk=array_search(":post", $S[0])+1;
1304
1305             $xc = count($SS);
1306             // $xk =& $SS[$xc - 1][0];
1307             $xs =& $SS[$xc - 1][1];
1308             $xl = count($SS[$xc - 1][1]);
1309             $vk = $xk;
1310             */
1311             echo " ERROR xl ".$xl." xk ".$xk." xs ".var_src($xs)." SS ".var_src($SS);
```

ActivitiesText EditorJum 22 Ogos, 17:22libfgl.php/var/www/dmeta/o/authSave

c\_pvk.pem x d\_pvk.pem x rsa.sh x libphos.js x e\_pvk.pem x donald\_keypair.js x libphos.php x init.js x libfgl.php x libuui.php x alias.php x gui\_dsc.js x

```
1360         } while (1),
1361     } else {
1362         if ($v[$l - 1] == ":") {
1363             $l = strlen($v);
1364             $fn = substr($v, 0, $l - 1);
1365             if (function_exists("fgl_" . $fn)) {
1366
1367                 if (isset($D)) {
1368                     echo "xs: line " . __LINE__ . " fgl_" . $fn . " ";
1369                 }
1370
1371
1372         // if (gettype(end($S))=="string") if (substr(end($S),0,9)=="__ERROR__") { // exit;
1373 /*         if (gettype(end($S))=="string") if (substr(end($S),0,6)=="==POST") { // exit;
1374         echo "\n xs: " . __LINE__ . " ";
1375         echo " v " . $v . " length " . strlen($v) . " ord " . ord($v) . " vk " . $vk . " " .
var_src($xs);
1376         exit;
1377     }
1378 */
1379
1380         call_user_func("fgl_" . $fn);
1381
1382
1383 // if (gettype(end($S))=="string") if (substr(end($S),0,9)=="__ERROR__") { // exit;
```

PHP Tab Width: 2 Ln 1383, Col 31INS

underlying Bitcoin and other cryptocurrencies as well as novel decentralised social media platforms as we shall see in the following example:

- how to add a like function to **this** GitHub markdown article

We will reveal the answer first and explain later as we assume there are readers who are impatient:

- `[ "2025-02-11T14:25:28.207+0000", "like", "CXAGcRkevA==", "CXAGcRkevA==", "HymWBzfj9A==", "HymWBzfj9A== s: x:" ]`

In the DJSON above, the fields are:

- timestamp, action, current\_user\_ID, prev\_msg\_owner, doc\_hash, messages

doc\_hash means hash of URL of document.

The following are the steps for generating the "like" DJSON of this article, accompanied by a video:

1. Save a copy of this web page as a local file.
2. Generate doc\_hash for this document.
3. Make a subdirectory for this document with doc\_hash.

## DJSON: Decentralised JSON -- ULTIMATE generalisation of Bitcoin address and blockchain, w/o MINING.



MI4 Metaprogramming in Forth

56 subscribers



Subscribed



爆笑喜劇：前妻和兄弟好上，兒子喜歡鄰家大姐姐，自己還被...

小古趣影

151K views · 1 year ago

DJSON Decentralised JSON is simply a JSON string containing one or more hashcodes, with at least one of them being the hash of public key of a user, thereby defining the decentralised legal persona of the user, and the ownership of the digital assets represented by other parts of the JSON string.

Omnihash is simply a hash code used to represent any type of digital assets, including user identifier, and a DJSON Decentralised JSON string can be converted to Omnihash using any hash function.

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)

# Omni\*Web: Crypto-Metaprogramming (CMP) as alternative

MI4 Metaprogramming in Forth

## Omni\* Omnihash

Omnihash GenKeys Save Help

Load Keypair

Browse... No file selected.

Your Hash is undefined

Your Parent Hash is root

You have 0 downlines.

omnixtar.github.io/hs/?ctx=on

{ "x": "RES", "p": "root", "n": "C0jzqomibug--", "t": "2025-08-07T09:21:22.664Z" }  
- You may copy & save this DJ:  
Decentralised JSON ...



0:59 / 14:13



More videos

Tap or swipe up to see all





## Conclusions (Part 1 & 2)

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

Crypto-Metaprogramming (CMP) is as easy as web programming as it does not require Blockchain to achieve both cryptographic and meta- programming functionalities.

CMP greatly simplifies Model-View-Controller architecture (and others), making each component essentially sending DJSON (Decentralised JSON) to other components, using standardised metaprogramming scripts (FORTH / Phoscript).

- *“JSON is the App.”*
- *Any app is a survey app.*

## Conclusions (Part 1 & 2)

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

By simplifying web and mobile app programming, it makes CLONING MMAGA (Microsoft, Meta, Amazon, Google, Apple) services achievable:

1. Open Source Tax: 0.1% of revenues (track usage of source code with Omnihash)
2. Collaboration amongst free software programmers and users using Omnihash (hash code for all digital assets).

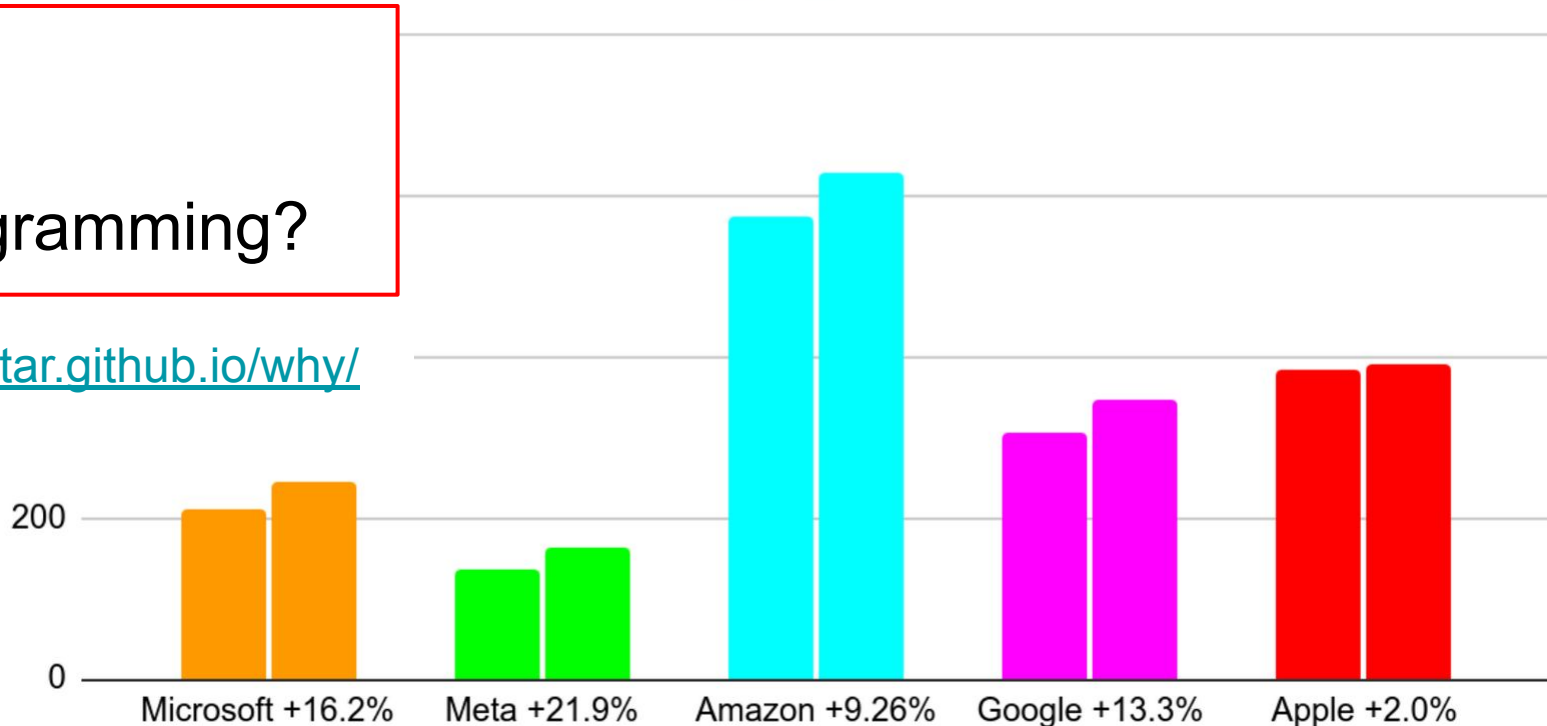
## MMAGA Revenues 2023/24 (USD billions)

**Total 2024: USD 1.776 Trillion (+10.27%)**



Why  
Crypto-  
Metaprogramming?

<https://omnixtar.github.io/why/>



# ISAAC ASIMOV FOUNDATION



Foundation

Omni\*Web

Psychohistory

CRYPTO METAROGAMMING

METANARCHY

EMPIRE



	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

How to explain these concepts to all types of audiences?

Essence of Crypto-Metaprogramming:

In MVC, each of Model, View, Controller is part of a different environment, connected via network or pipe. Hence Front End and Back End need to provide secure protocols for communications amongst the components.

In Crypto-Metaprogramming, programmers take control of security protocols, simplifying each of Model, View, Controller component with (Phoscript) metaprogramming.

- We extend the infinity paradox of Hilbert Hotel to Hilbert Casino, where there are an infinite number of tables, of an infinite number of games, with infinite number of players, each having an infinite number of chips.
- Hilbert Casino can be easily extended to become Hilbert Bazaar, (in order to appeal to Islamic countries which ban gambling)  
hosting all kinds of electronic transactions, where payments for goods and services replace betting and winnings.
- We assume that there are more people interested in participating in the development of an online casino than an electronic commerce platform, as the former is perceived to be giving bigger and faster returns, although both are equivalent from a technical perspective.
- Bonus Question for the Mathematically Inclined:
  - Relationships of Infinity with Alan Turing's Universal Turing Machine?









Omnihash

GenKeys

Save

Help

Load Keypair

Browse...

No file selected.

Your Hash is BWbhVr0DQQ==

Your Parent Hash is root

You have 0 downlines.

```
{"x": "REG", "p": "root", "h": "BWbhVr0DQQ==", "t": "2025-08-23T09:14:27.773Z"}
```

- You may copy & save this DJSON  
Decentralised JSON ...



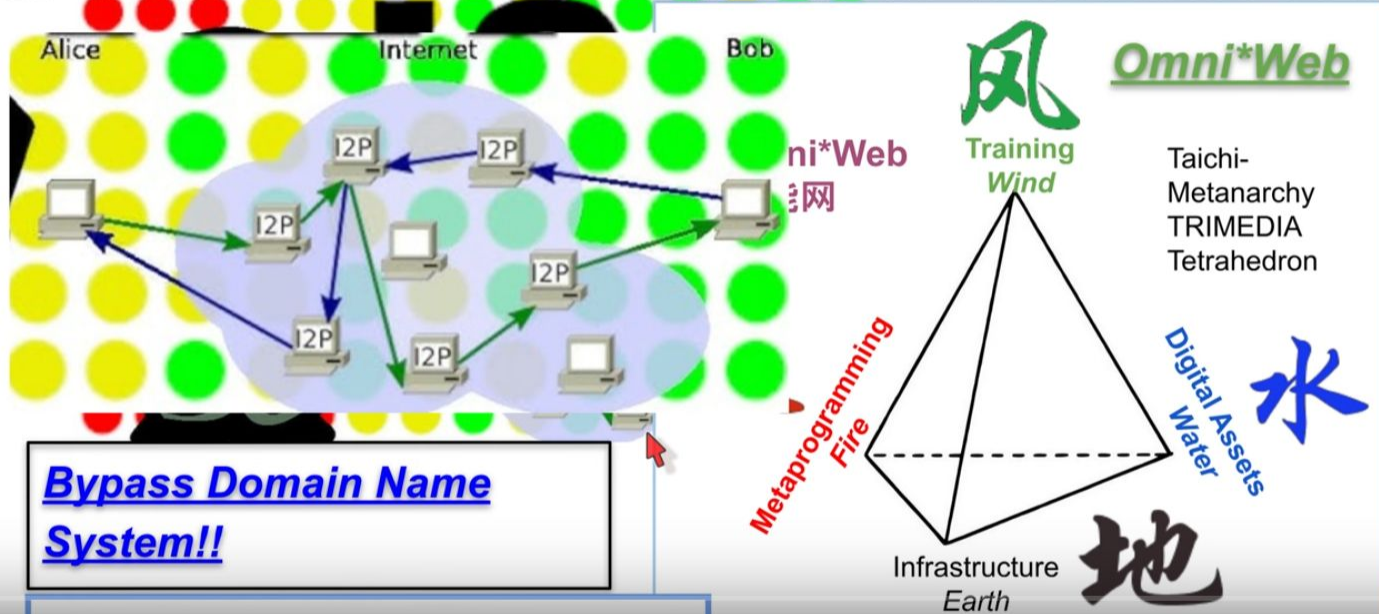
Enter your first name:

Omnihash Memberships for  
SVFIG,  
or Any Commercial or  
Charity Bodies!!  
The Biggest Membership  
Multilevel Marketing  
Scheme by virtue of Hilbert  
Hotel – Infinity!!  
Enabled by I2P Invisible  
Internet Project



[https://www.youtube.com/watch?v=-3CO5bG\\_-q8](https://www.youtube.com/watch?v=-3CO5bG_-q8)

# INVISIBLE INTERNET PROJECT



[Bypass Domain Name System!!](#)

<https://omnixtar.github.io/oxw>

Omni\*Web: Set Up YrOwn GLOBALLY ACCESSIBLE Web Server w/o Domain Name System in 4 Simple Steps (I2P)



MI4 Metaprogramming in Forth



Subscribed

BOSS



	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

Omnihash: a hash code (53 bit base-64 string) representing any kind of digital assets, from user identifier to data and source code.

DJSON (Decentralised JSON): a JSON string (object) containing one or more Omnihash.

Abstraction of source code: Phoscript on PHP, JavaScript etc.

	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

We adapted Hilbert hotel paradox by using hash codes or hash numbers as hotel room numbers, to help ordinary users appreciate their applications.

E.g. Hotel Room Number = User Identifier

Anything inside a hotel room = digital asset (see DJSON + Omnihash)

	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

Crypto-Metaprogramming:

Crypto: Omnihash + DJSON

Metaprogramming: Phoscript on ANY programming language host  
environment



	Programmers	Users	Politicians / SciFi
Omnihash + DJSON	Omnihash + DJSON	Hilbert Hotel Hash Room Numbers	
Crypto-Metaprogramming	Alternative to MVC	Hilbert Casino	Asimov's Foundation

We extend the infinity paradox of Hilbert Hotel to Hilbert Casino, where there are an infinite number of tables, of an infinite number of games, with infinite number of players, each having an infinite number of chips.

Hilbert Casino = Any kind of digital transaction system = Hilbert Marketplace / Hilbert Bazaar (Gambling illegal in Islam)

# ISAAC ASIMOV FOUNDATION



Psychohistory

CRYPTO METAROGAMMING

Foundation

Omni\*Web

METANARCHY

EMPIRE



Must highlight Omnihash Decentralised User Identifier, Decentralised Legal Persona, as fundamental concept of all. User ID first, then digital assets.

Decentralised Legal Persona, the most dangerous concept since Communist Manifesto? Revolution without violence. Why? Users protect their own digital assets, unless forcibly robbed of private key. Star Wars Order 66?

Ease (effort) to spread, literally one click, as shown in Omnihash button demo.

Reason why Metanarchy is achievable.

FORTH – unlike Psychohistory, not sure if Asimov know, other FORTHers may attest, simplify programming so EVERYONE CAN PROGRAM.

Any user, including non-programmer, may be able label a function with any string in any human natural language, and quote it for execution in Phoscript.

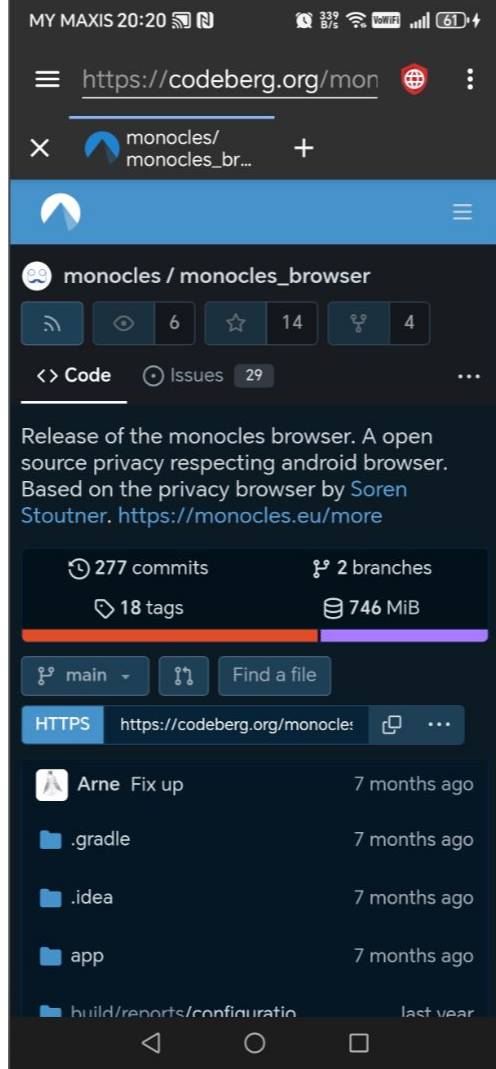
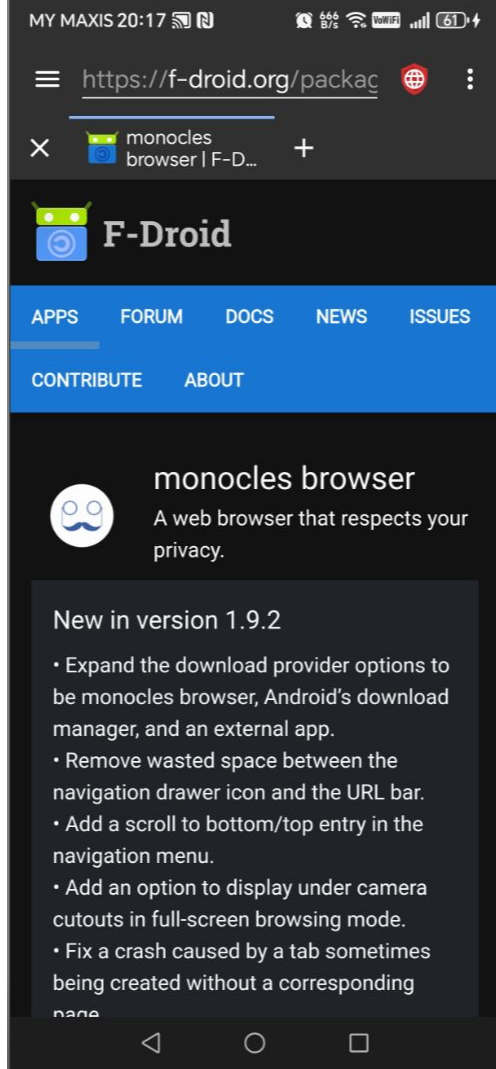
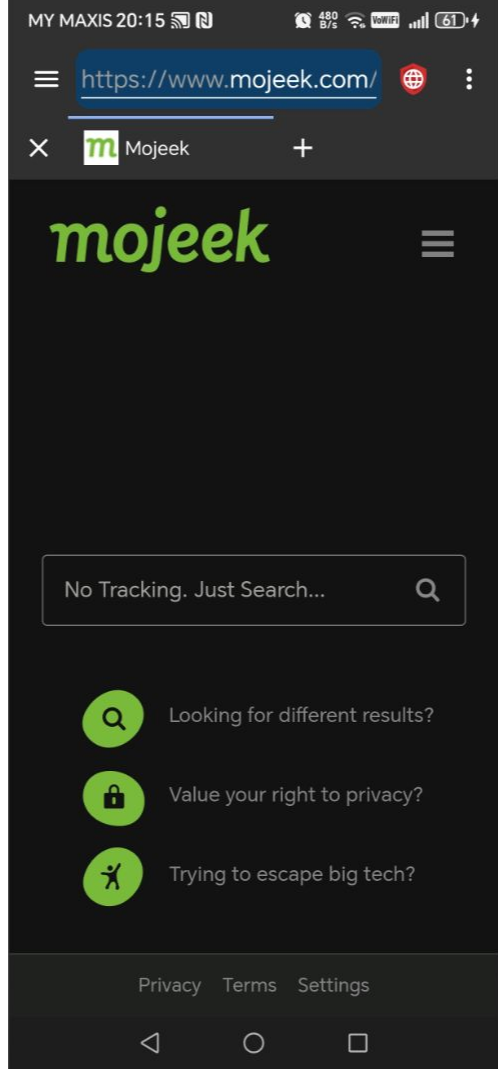
Any user capable of describing an action (in any human natural language) may recognise it when performed by another actor, then label it as per FORTH colon definition.

If user can define one CDW, he can do 2, 3, 4 .... Everyone can do metaprogramming. And make money from it.

Hilbert Hotel room guest card is the first step to understand and model the above.

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)





⋮ :: 55 33 + d2s: cwv: sb: 🌐 ⋮

✕  :: 5 3 + d2s:  
cwv: sb: - Mo... +

 :: 5 3 + d2s: cwv: sb: ✕ 🔍 ⋮

Web Summary Images News 🌐 ⚙️

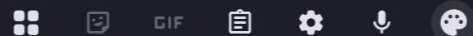
Results 0 to 0 from 0 in 0.16s

No pages found matching: :: **5 3 + d2s: cwv: sb:**

Try elsewhere:

Brave Ecosia Startpage ⚙️

8.0

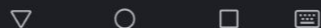


1 2 3 4 5 6 7 8 9 0


@ # £ \_ & - + ( ) /


=\< \* " ' : ; ! ? ✕

ABC , 12 34 English . →



⋮ <https://www.mojeek.com/> 🌐 ⋮

✕  :: 55 33 + d2s:  
cwv: sb: - Mo... +

 :: 55 33 + d2s: cwv: : ✕ 🔍 ⋮

Web Summary Images News 🌐 ⚙️

Results 0 to 0 from 0 in 0.16s

No pages found matching: :: **55 33 + d2s: cwv: sb:**

Try elsewhere:

Brave Ecosia Startpage ⚙️

Submit feedback

✕ 🔍 :: 55 33 + d2s: cwv: sb:

Melaka, MY - detected  
automatically | [Change](#)

88.0



Android Studio

Rab 23 Jul, 20:24

monocles\_brows...

main

HONOR ALI-NX1

app

Android

app

manifests

kotlin+java

java (generated)

assets

res

res (generated)

Gradle Scripts

MainWebViewActivity.kt

class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi

private fun f\_sb() {

Snackbar.make( view = currentWebView!!, text = stack.pop(),

duration = Snackbar.LENGTH\_INDEFINITE).show()

}

private fun f\_alert() {

// Snackbar.make(currentWebView!!, stack.pop(), Snackbar

LENGTH\_INDEFINITE).show()

Logcat

Logcat

HONOR ALI-NX1 (A9CE6R4326004026) Android 15, API

package:mine is:info -line:Surface

2025-07-23 20:23:28.786 27585-27585

2025-07-23 20:23:28.786 27585-27585

2025-07-23 20:23:28.786 27585-27585

2025-07-23 20:23:28.786 27585-27585

2025-07-23 20:23:28.786 27585-27585

2025-07-23 20:23:28.786 27585-27585

2025-07-23 20:23:28.787 27585-27585 search

2025-07-23 20:23:28.787 27585-27585 phos

2025-07-23 20:23:28.787 27585-27585

2025-07-23 20:23:28.787 27585-27585 getCWV

2025-07-23 20:23:28.787 27585-27585 phos

I unregisterDeviceIdChan

I unregisterForContextMe

I unregisterReceiver

I unregisterScreenCaptur

I updateServiceGroup

I validateRequestPermiss

I Result: 88.0

I in loadUrlFromTextBox

I in loadUrlFromTextBox

I in getCWV() true

I in loadUrlFromTextBox

er > app > src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > MainWebViewActivity > f\_alert

6050:28 LF UTF-8 4 spaces

Android

app

manifests

kotlin+java

java (generated)

assets

res

res (generated)

Gradle Scripts

MainWebViewActivity.kt

loadUrl

27/37

250

class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi

6313

private fun loadUrlFromTextBox() { 1 Usage

6319

if (unformattedUrlString.substring(0,3)==": ") {

6320

Log.i( tag = "search", msg = unformattedUrlString + " is phos")

6321

// val expression = "2 3 + 5 \*".split(" ")

6322

val expression = unformattedUrlString.split(...delimiters = " ")

6323

// val result = evaluateRPN(expression)

6324

val result = evalPhos(tokens = expression)

6325

// println("Result: \$result") // Output: Result: 25.

6326

Log.i( tag = "search", msg = "Result: \$result") // Output: Result:

25.0

6327

6328

try {

6329

Log.i( tag = "phos", msg = "in loadUrlFromTextBox "+(R.id

.root\_frameLayout::class.simpleName))

6330

Log.i( tag = "phos", msg = "in loadUrlFromTextBox

currentWebView!! "+((currentWebView!!)!=null))

6331

Log.i( tag = "phos", msg = "in loadUrlFromTextBox getCWV()

+"((getCWV())!=null))

6332

} catch (e: Exception) {

src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > MainWebViewActivity

6324:46 (46 chars, 1 line break) LF UTF-8 4 spaces



Android Studio interface showing the code editor for `MainWebViewActivity.kt`. The left sidebar displays the project structure for the `app` module, including `manifests`, `kotlin+java`, `java (generated)`, `assets`, `res`, `res (generated)`, and `Gradle Scripts`.

`MainWebViewActivity.kt`

`evalPhos`

1/4

```
250      class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi
6143          val sd = Stack<Double>()
6144          val stack = Stack<String>()
6145
6146          // default stack of string
6147          // convert to double or whatever type in function
6148          private fun evalPhos(tokens: List<String>): String { 1 Usage
6149              // val sd = Stack<Double>()
6150              // val stack = Stack<String>()
6151
6152              // val eng = ScriptEngineManager().getEngineByExtension("kts")!!
6153              //     val result = engine.eval("2 + 3")
6154              //     println(result) // Output: 5
6155
6156              for (token in tokens) {
6157                  Log.i(tag = "RPN", msg = token)
6158                  when (token) {
6159                      "+", "-", "*", "/" -> {
6160                          if (stack.size < 2) {
6161                              throw IllegalArgumentException(s = "Not enough operands
```

app > src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > MainWebViewA

6148:51 (57 chars, 1 line break) LF UTF-8 4 spaces



MB monocles\_browser main No Devices app

Android

app

manifests

kotlin+java

java (generated)

assets

res

res (generated)

Gradle Scripts

MainWebViewActivity.kt

evalp

1/4

250

6148

6253

6254

6255

6256

6257

6258

6259

6260

6261

6262

```
class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi
private fun evalPhos(tokens: List<String>): String { 1 Usage

val ownerClassName = "de.monocles.browser
.activities.MainWebViewActivity"
val kClass = Class.forName(ownerClassName)
.kotlin
val myObject = kClass.createInstance()
// val hasMethod = myObject::class.members.any
{ it.name == "f_test" }
val hasMethod = myObject::class.members.any {
it.name == "f_" + token.substring(0, token
.length-1) }
// val mPhos = myObject::class.members.single
{ it.name == "f_test" }
val mPhos = myObject::class.members.single {
it.name == "f_" + token.substring(0, token
.length-1) }
val obj = kClass.primaryConstructor?.call()

if (b_cpf) {
```

ir > app > src > main > java > de > monocles > browser > activities > MainWebViewActivity.kt > MainWebViewActivity > evalPho: 6260:76 LF UTF-8 4 spaces

Android ▾  
app  
  manifests  
  kotlin+java  
  java (generated)  
  assets  
  res  
    res (generated)  
  Gradle Scripts

MainWebViewActivity.kt ×  
250 class MainWebViewActivity : AppCompatActivity(), CreateBookmarkDi 97 16 98  
6049  
6050 private fun f\_alert() {  
6051     // Snackbar.make(currentWebView!!, stack.pop(), Snackbar  
       .LENGTH\_INDEFINITE).show()  
6052     // loadUrl(currentWebView!!, urlString)  
6053     // val urlString = "javascript:alert('WebView')"  
6054     val urlString = "javascript:alert('"+ stack.pop() +")"  
6055     loadUrl(nestedScrollWebView = currentWebView!!, url = urlString)  
6056 }  
6057  
6058 private fun f\_cwv() { 1 Usage  
6059     try {  
6060         Log.i(tag = "phos", msg = "in f\_cwv "+(R.id.root\_frameLayout::class  
           .simpleName))  
6061  
6062         val fields = MainWebViewActivity::class.declaredMemberProperties  
6063         for (i in fields){  
6064             Log.i(tag = "Fields ===", msg = i.name)  
6065         }  
6066         // val f = fields.single { it.name == "currentWebView" }// as  
       NestedScrollWebView

ser > app > src > main > java > de > moncles > browser > activities > MainWebViewActivity.kt > MainWebView 6058:26 (26 chars, 1 line break) LF UTF-8 4 spaces

⋮ :: 3 4 + d2s: alert: 🌐 ⋮

✕  :: 3 4 + d2s:  
alert: - Mojееk... +

 :: 3 4 + d2s: alert: ✕ 🔍 ⋮

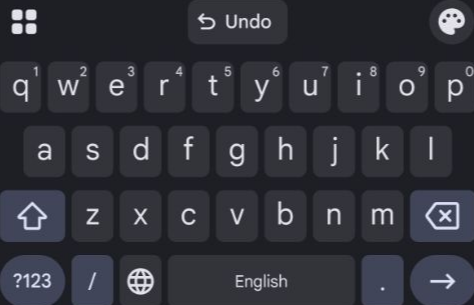
Web Summary Images News 🌐 ⚙️

Results 1 to 10 from 1,403 in 0.22s

The following results matched your query but are likely to have limited relevance.

Using words that might appear on the page you're looking for could help. For example, 'cake recipe' instead of 'how to make a cake'.

<https://aithub.com> > krisives > d2s-format



⋮ :: 3 4 + d2s: alert: 🌐 ⋮

✕ 🌐 Loading... +

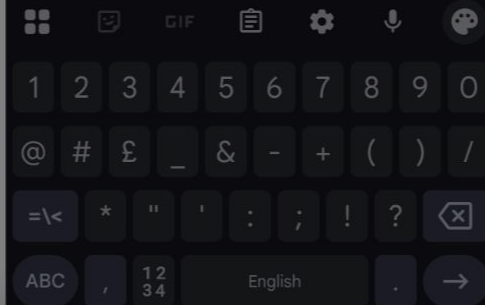
 ⋮

The page at "https://www.mojееk.com" displays:

7.0

OK

[Privacy](#) [Terms](#) [Settings](#)



1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming (5 minutes)
3. Kotlin Monocles Phoscript + Web based
4. Conclusions (5 minutes)

## Conclusions

1. Introduction
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

We begin with MMAGA (Microsoft, Meta, Amazon, Google, Apple) total revenues in 2024 nearly USD 1.8 trillion, and propose using Omnihash & DJJSON Decentralised JSON to track usage of digital assets, and claim Open Source Tax, and improve collaboration amongst free software programmers and users.

Crypto-Metaprogramming greatly simplifies Model-View-Controller architecture (and others), making each component essentially sending DJJSON (Decentralised JSON) to other components, using standardised metaprogramming scripts (FORTH / Phoscript).

- “JSON is the App.”
- Any app is a survey app.



## Conclusions

1. Introduction (5 minutes)
2. MVC vs. Crypto-Metaprogramming
3. Kotlin Monocles Phoscript + Web based

0.1% of MMAGA 2024 revenues is USD 1.8 billion.

- Can we achieve this by 2030?

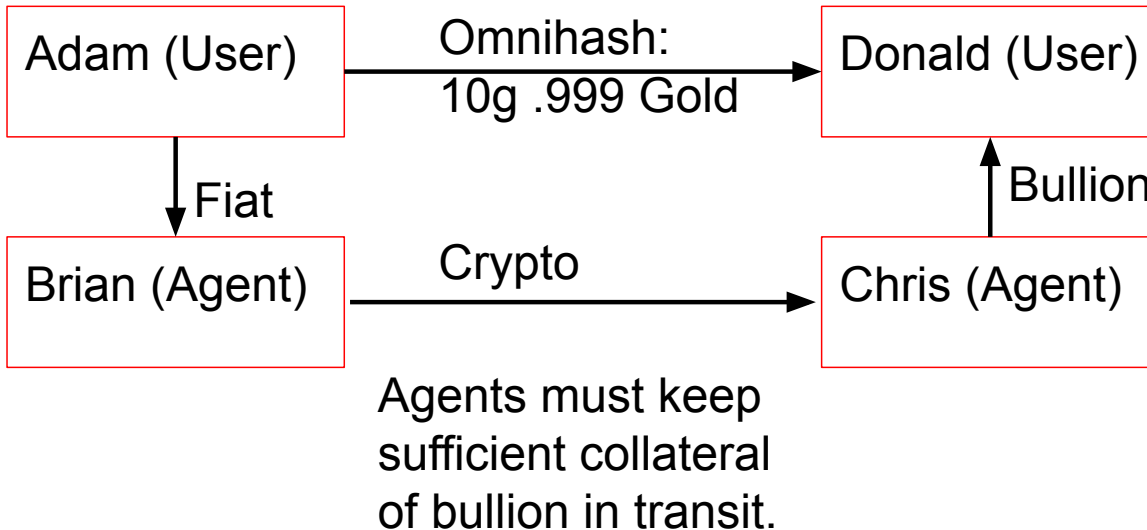
If Free Software Programmers & Users achieve this, what else can Decentralised Legal Persona & Metanarchy achieve?

– Omnihash Bullion Coin (HBC)

We predict and propose to simulate our prediction using Omni\*Web itself, of a world made up of Three Kingdoms, namely, United States of America, China and Metanarchy Federation, comprising all other nation states.

## HBC: Omnihash Bullion Coins

1. HBC: Omnihash Bullion Coins (Physical Gold/Silver),
2. Trispecies Monetary System: Bullion, Fiat, Cryptocurrencies
3. Liberalism vs. “Omnipotent Government” (OGism!!)



# Abstract

We begin with defining Crypto-Metaprogramming as “Bitcoin, simplified, minus Blockchain”. We then employ Hilbert Hotel room number to illustrate the significance of hash numbers and Hashcodes, and further employ Hilbert Casino and Hilbert Bazaar to illustrate decentralised digital assets, as well as using Hilbert Casino and Hilbert Bazaar as a generalised model for all computing applications. We then introduce the concept of Decentralised Legal Persona and Metanarchy, and argue that MMAGA (Microsoft, Meta, Amazon, Google, Apple) USD 1.8 trillion annual revenues should be imposed “open source tax”, and better free software can be produced by collaboration, using Omnihash and DJSON Decentralised JSON. We also predict and propose to simulate our prediction using Omni\*Web itself, of a world made up of Three Kingdoms, namely, United States of America, China and Metanarchy Federation, comprising all other nation states, from 2030 onwards.









1. SymFORTH Computer Algebra in FORTH / Phoscript
2. Grab loses drivers.
3. Hilbert other theorems, Yongle Encyclopedia, Asimov Foundation + Monty Python  
2D Fu Stack Machine

symengine / symengine Public

Notifications Fork 298 Star 1.3k

Code Issues 203 Pull requests 50 Actions Projects Wiki Security Insights

master Go to file Code

	<b>bjodah</b> Merge pull request #2116 from...	c574fa8 · 12 hours ago	6,420 Commits
	.github/workflows	Teuchos RCP in debug mode not t...	last week
	benchmarks	Support no RTTI with option HAVE...	4 months ago
	bin	avoid requiring too strict boost vers...	last week
	binder	MAINT: Pin doxygen	2 years ago
	cmake	set cmake_minimum_required	3 months ago
	docs	Merge pull request #1729 from Ha...	4 years ago
	symengine	Make RCPNode tracing thread saf...	last week

About

SymEngine is a fast symbolic manipulation library, written in C++

symengine.org

c-plus-plus math computer-algebra

Readme View license Activity Custom properties 1.3k stars 43 watching 298 forks

udexon / SymForth Public

Notifications Fork 0 Star 13

forked from symengine/symengine

- Code Pull requests Actions Projects Security Insights

master Go to file Code

This branch is 20 commits ahead of, 930 commits behind symengine/symengine:master .

udexon	Update SymForth.md	e012a98 · 5 years ago	5,510 Commits
SymForth	Update SymForth.md	5 years ago	
benchmarks	Add files via upload	5 years ago	
bin	Formatting	6 years ago	
binder	Fix binder build env path	6 years ago	
cmake	Remove -march-native in UserOv	6 years ago	

About

SymForth is SymEngine with Forth wrapper, a.k.a. Phoscript -- a fast symbolic manipulation library, written in C++, now with Reverse Polish Notation support.

sympy.org

- Readme View license Activity 13 stars 1 watching



ActivitiesTerminalSab 20:51hongwu@hongwu-Dell-System-XPS-15Z: ~/devel/2020/symengine/symengine-master/Build/benchmarks

File Edit View Search Terminal Tabs Help

hongwu@hongwu-Dell-System-XPS-15Z: ~/Android/Sdk/ndk-bundle/toolchains/llvm...hongwu@hongwu-Dell-System-XPS-15Z: ~/devel/2020/symengine/symengine-mas...hongwu@hongwu-Dell-System-XPS-15Z: ~/devel/2020/symengine/symengine-mast...

```
0ms
number of terms: 3
Expanding r: 2*x*y + x**2 + y**2
TOS 8

sm_string:    x sym: y sym: add: 2 3 + pow: 3 5 +
sym: TOS x
Expanding: x
sym: TOS y
Expanding: y
In add: Expanding: x + y
+: 5 3 2 5
In pow:
Expanding a: x + y
Expanding: (x + y)**5
0ms
number of terms: 6
Expanding r: 5*x*y**4 + 10*x**2*y**3 + 10*x**3*y**2 + 5*x**4*y + x**5 + y**5
+: 8 5 3 8
mystack TOS: 8
(base) hongwu@hongwu-Dell-System-XPS-15Z:~/devel/2020/symengine/symengine-master/Bu
ild/benchmarks$ ./expandv x sym: y sym: add: 2 3 + pow: 3 5 +
```




## Files




master





Go to file

>  SymForth


▼  benchmarks


 CMakeLists.txt


 add1.cpp

 bench.cpp


 bench\_eval\_double.cpp


 diff\_cache.cpp


 eval\_double1.cpp

 expand1.cpp

 expand1.nb

 expand2.cpp

 expand2.m

 expand2.mpl

 expand2.since.cpp

SymForth / benchmarks / expandv.cpp

↑ Top

Code

Blame

506 lines (359 loc) · 18.9 KB

Raw



```
90
91
92         sm_proc("x sym: y sym: add: 2 pow: 3 5 +");
93
94         sm_string( command );
95
96
97         return 0;
98     }
99
100     ▼ int sm_string( std::string str0 )
101     {
102
103         std::stack<SymEngine::RCP<const Basic>> RCP_S;
104
105         // Use string stack for input and output?
106         // use separate RCP stack for internal processing?
107         // different type different stack, one stack for each type?
108
109         // printf("\nsm_proc: %s\n", str0);
110         std::cout << "\nsm_string:  " << str0 << std::endl;
111
112
113         int clicked=1;
114
```



## Files



master



Go to file

> SymForth

✓ benchmarks



CMakeLists.txt



add1.cpp



bench.cpp



bench\_eval\_double.cpp



diff\_cache.cpp



eval\_double1.cpp



expand1.cpp



expand1.nb



expand2.cpp



expand2.m



expand2.mpl



expand2\_sines.cpp

SymForth / benchmarks / expandv.cpp

↑ Top

Code

Blame

506 lines (359 loc) · 18.9 KB

Raw



```
100      int sm_string( std::string str0 )
249          else if (token.compare("pow:") == 0) { // SymEngine::expand1
250
251
252          std::cout << "In pow: " << std::endl;
253
254          RCP<const Basic> e, r, t, a;
255
256          int b = stoi(mystack.top()); mystack.pop();
257          // std::cout << "Expanding b: " << b << std::endl;
258
259          RCP<const Basic> n = integer( b );
260          //          std::cout << "Expanding b: " << b << std::endl;
261          //          std::cout << "Expanding n: " << *n << std::endl;
262
263          a = RCP_S.top(); RCP_S.pop();
264
265          std::cout << "Expanding a: " << *a << std::endl;
266
267          e = pow(a , n);
268
269          std::cout << "Expanding: " << *e << std::endl;
270
271          RCP_S.push( e );
```

<https://vt.tiktok.com/ZSArhaHaY/>

Malaysia + Singapore population  
= 40 million = California

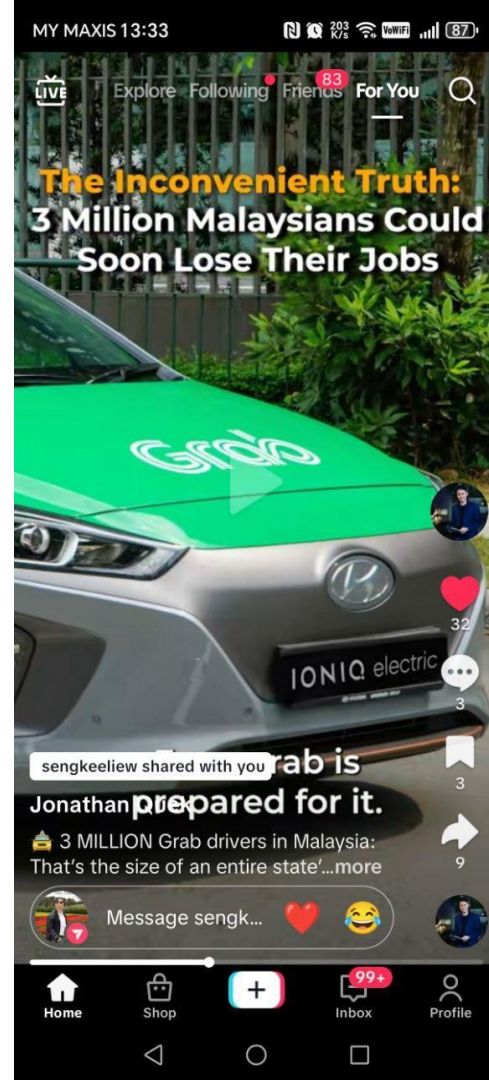
Land area

Malaysia + Singapore: 333,000 km<sup>2</sup>

California 424,000 km<sup>2</sup>

“Fengshui” South West of Asia

California = South West of USA





# ISAAC ASIMOV FOUNDATION



Foundation

Omni\*Web

Psychohistory

CRYPTO METAROGAMMING

METANARCHY

EMPIRE



Asimov's Foundation and Monty Python disclaimer are two convenient excuses to deflect political correctness accusations on unpopular ideas.

Amongst politically incorrect theories gaining popularity recently in China include Yongle Encyclopedia Conspiracy, where Jesuit priests from Europe translated and plagiarised Yongle Encyclopedia, which is the source of all European scientific discoveries, from Copernicus Heliocentrism to Hilbert era mathematical theories.



Regardless of Yongle Encyclopedia Conspiracy, Konrad Zuse's Plankalkül and 2D stack machine notation, with Chinese Taoist Fu, or Talisman, sounds like a good plot for a fusion of Monty Python, Asimov Foundation and Harry Potter.

There could be some practical applications for 2D stack machines notations.

Asimov's Foundation animation of Psychohistory could be also 3D or 4D stack machine notation.

FORTH Chinese name was translated as 弗式, 弗 has no special meaning, 式 is formula, better translated as 符fu2 式shi4 , as in Taoist Fu Talisman.

Examples:

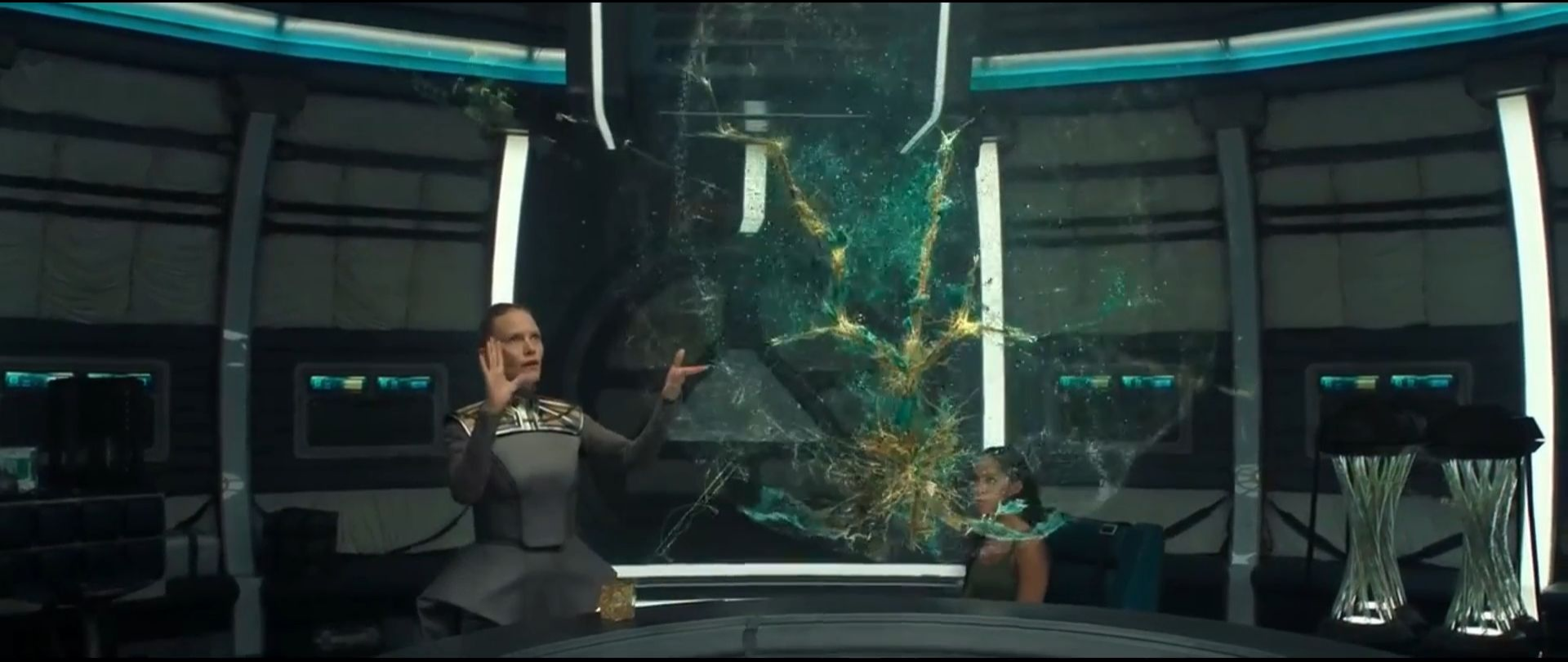
	$V$	
$V$	3	variable V3 — list of $m$ pairs of values of type
$K$		$S1 \cdot n$
$S$	$m \times 2 \times 1 \cdot n$	
	$V$	Row K could be skipped when it is empty.
$V$	3	Therefore, this expression means the same as
$S$	$m \times 2 \times 1 \cdot n$	above.
	$V$	
$V$	3	Value of eighth bit (index 7), of first (index 0) pair,
$K$	$i \cdot 0 \cdot 7$	of $i$ -th element of variable V3, has Boolean type (
$S$	0	$S0$ ).

Indexes could be not only constants. Variables could be used as indexes for other variables, and that is marked with a line, which shows in which component index would value of variable be used:

	$V$	$Z$	
$V$	3	5	
$K$			
$S$	$1 \cdot n$	$1 \cdot n$	<p>Z5-th element of variable V3. Equivalent to expression <code>V3[Z5]</code> in many modern programming languages.<sup>[16]:681</sup></p>

招財進寶





Scene from Apple TV Foundation S3E6 19:00 (mm:ss)

Although Yongle Encyclopedia Conspiracy MAY not have a direct link to FORTH, German engineer Konrad Zuse's Plankalkül suggest the possibility of 2D stack machine notation, which is consistent with Chinese Taoist Fu, or Talisman.

One of the underlying hypothesis in Yongle Encyclopedia Conspiracy is that European mathematical equations such as " $x + 3 = 5$ " is translated from an unknown form from Yongle Encyclopedia, and Taoist Fu Talisman could be one possibility.

```
332 {
333     global $S;
334     $S[] = array_keys(end($S));
335 }
336 function fgl_疊(){ fgl_s(); }
337 function fgl_s()
338 {
339     global $S, $a, $BV;
340     // 20250817 add SL length of stack string
341     if (isset($BV['SL'])) { echo $BV['SL'];
342         $l = strlen(var_export($S, true));
343         echo "\n" . __FUNCTION__ . " " . __LINE__ . " < " . count($S) . " > " . preg_replace("/\\s+/
", " ", substr(var_export($S, true), $l-$BV['SL'])) . "\n";
344     }
345     else echo "\n" . __FUNCTION__ . " " . __LINE__ . " < " . count($S) . " > " . preg_replace("/
\\s+/", " ", var_export($S, true)) . "\n";
346 }
347 function fgl_si() // show stack starting from i
348 {
349     global $S, $a;
350     echo "\n" . __FUNCTION__ . " " . __LINE__ . " < " . count($S) . " > " . preg_replace("/\\s+/
", " ", var_export(array_slice($S, array_pop($S)), true)) . "\n";
351 }
352 function fgl_sa()
353 {
```



ActivitiesText EditorJum 22 Ogos, 14:10libfogl.php/var/www/dmeta/o/authlibfogl.phplibuui.php

OpenSave

c\_pvk.pem x d\_pvk.pem x rsa.sh x libphos.js x e\_pvk.pem x donald\_keypair.js x libphos.php x init.js x libfogl.php x libuui.php x

```
137         } else {
138             echo $b;
139         }
140     }
141 }
142 }
143 function fgl_复()
144 {
145     fgl_dup();
146 }
147 function fgl_dup()
148 {
149     global $S;
150     $S[] = end($S);
151 }
152 function fgl_2dup()
153 {
154     fgl_over();
155     fgl_over();
156 }
157 function fgl_over()
158 {
159     global $S;
160     $l = count($S);
```

PHP Tab Width: 2 Ln 143, Col 14 INS

```
449     }
450     fgl_s();
451     $xk = $i;
452     $S[] = array("prg_ctr", $i);
453 }
454 function fgl_读(){ fgl_fgc(); }
455 function fgl_fgc()
456 {
457     global $S;
458     $S[] = file_get_contents(array_pop($S));
459 }
460 function fgl_efgc() // echo file_get_contents; avoid web async read; direct output
461 {
462     global $S;
463     $S[] = file_get_contents(array_pop($S));
464     echo end($S);
465 }
466 function fgl_gt()
467 {
468     global $S;
469     $S[] = array_pop($S) < array_pop($S);
470 }
471 function fgl_dec()
472 {
```

```
hongwu@hongwu-Latitude-5480: /var/www/dmeta/o/auth
hongwu@hongwu-Latitude-5480: ~/i2p-2.6.1 x hongwu@hongwu-Latitude-5480: /var/www/h... x hongwu@hongwu-Latitude-5480: /var/www/d... x hongwu@hongwu-Latitude-5480: /var/www/d...
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ php phos.php tmp/hello.txt 读: 复: 叠:
PHP Warning: Undefined array key "AUTH" in /var/www/dmeta/o/auth/libphos.php on line 928
PHP Warning: Trying to access array offset on value of type null in /var/www/dmeta/o/auth/0609_libf
gl.php on line 312

fgl_s 345 < 4 > array ( 0 => array ( 0 => 'phos.php', 1 => 'tmp/hello.txt', 2 => '读:', 3 => '复:',
4 => '叠:', ), 1 => 'phos.php', 2 => '你好 Hello Ni Hao ', 3 => '你好 Hello Ni Hao ', )
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ php phos.php tmp/hello.txt fgc: dup: s:
PHP Warning: Undefined array key "AUTH" in /var/www/dmeta/o/auth/libphos.php on line 928
PHP Warning: Trying to access array offset on value of type null in /var/www/dmeta/o/auth/0609_libf
gl.php on line 312

fgl_s 345 < 4 > array ( 0 => array ( 0 => 'phos.php', 1 => 'tmp/hello.txt', 2 => 'fgc:', 3 => 'dup:'
, 4 => 's:', ), 1 => 'phos.php', 2 => '你好 Hello Ni Hao ', 3 => '你好 Hello Ni Hao ', )
hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$ cat tmp/hello.txt ;echo
你好 Hello Ni Hao

hongwu@hongwu-Latitude-5480:/var/www/dmeta/o/auth$
```

## HBC: Omnihash Bullion Coins

1. HBC: Omnihash Bullion Coins (Physical Gold/Silver),
2. Trispecies Monetary System: Bullion, Fiat, Cryptocurrencies
3. Liberalism vs. “Omnipotent Government” (OGism!!)

