- Original open call as JPEG [http://wiki.spinningkid.info/lib/exe/fetch.php?w=400&h=&cache=cache&media=private:shadow-search-text2-outlined.jpg]
- Full text of the "Human readable" version [http://northeastwestsouth.net/?q=node/395]

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Abstract

What would one do to design a search engine for shadow activities that are partially hidden, off-the-radar or stealthy?

Let's imagine that our almighty filtering technology intercepts the phrase “We meet at the bank to get the cash”. There are many possible interpretations for this phrase, we might be a couple of friends going to buy something together or it could be a crew of bank robbers the day before the crime. The semantics of this phrase are almost impossible to compute by current technology and depend on very highly contextual information that is absent in the comuniqué itself. Ambiguity is one of the many reasons why human language is such as hard nut to crack in the field of Artificial Intelligence. Artificial computers cannot yet grasp ambiguity. Much of the communication in human language relies on the fact that our interlocutors have a mental model of the reality that we are referring to more often than we realize. Most linguistic interchanges are devoid of meaning when analysed mechanically outside of the context of the utterance.

Let's imagine that we want to catch a very persistent crew of bank robbers that has been storming the banks of London for some time and is making the police seem incompetent to the public eye. We know that these thieves never use keywords related to their job in the communications to prevent being found out. We would inevitably have to embark on a work of investigative research, rather than a search. Most investigative research of this kind is still done by humans rather than computers. Computers might be used as tools to keep track of research materials, recordings of conversations, etc. But ultimately humans are called-in to evaluate and emit judgements over those materials. Imagine that after this research we find out that the leader of the crew is a blonde individual with a birth mark on her left eye and the word SUGAR tatooed on her neck that goes by the name of Jane van Doe. Now we have a very clear set of matching criteria with very little room for interpretation that can guide a direct search (as opposed to a research).

So the question still stands, how can we classify and highlight art-related activities that might be stealthy and how do we distil that method into an algorithm?

Ultimately we would need to run this algorithm on a computer that is capable of understanding the idiosyncrasies of human communication. Because no such computer exists yet or can be possibly designed with existing technologies using only electronics with no passion for semiotics. The following design for a device to run this algorithm is depends on an external computation we shall call, CONSULT_CROWD. This computation is to be performed by a computational device we can call the Art-o-Turk, which will serve as our semiotic discriminant. The Art-o-Turk is in essence, using current definitions a form of *crowdsourcing* as it involves using the computational power of crowds of human brains. See drawings for possible configurations of this Art-o-Turk device.

The Algorithm in Pseudocode

```
REPEAT
```

```
   intercept COMMUNICATION in CHANNEL
   RELEVANCE := CALL COMPUTE_RELEVANCE with COMMUNICATION and CHANNEL

   # check if relevance ranking is above editorial threshold
   IF (RELEVANCE > EDITORIAL_THRESHOLD)
      THEN
         append COMMUNICATION to RESULTS
         increase CHANNEL rating

UNTIL no more COMMUNICATIONS available


FUNCTION COMPUTE_RELEVANCE of COMMUNICATION from CHANNEL
   EVALUATIONS := CALL CONSULT_CROWD with COMMUNICATION  # call art-o-turk to evaluate communication
   FOR EACH single evaluation IN EVALUATIONS DO
      EVALUATION_SUM := EVALUATION_SUM + single evaluation

   RELEVANCE := (RELEVANCE / number of EVALUATIONS) # average
   CHANNEL_RATING := CALL CONSULT_CROWD with CHANNEL # call art-o-turk to rate channel
   return (RELEVANCE * CHANNEL_RATING)
END
```

Where:

- CHANNEL is the original source of the information
- CHANNEL_RATING is a factor that determines how likely is that channel of information to be providing information about stealth art activities.
- CONSULT_CROWD is a function encapsulating our semiotic analysis computation, this computation is performed in the Art-o-Turk virtual machine.
- EDITORIAL_THRESHOLD is a value of semiotic relevance, bellow which information cannot be published and it tends to decrease over time following a precise decay formula.
- everything behind the symbol ”#” is an in-line comment and should be ignored during sequential execution

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