

## **Introducing the Optimist Artificial Intelligence Software Series**

### **Optimist A-I Experiment and Results**

Variables	<ul style="list-style-type: none"><li>• Diagnosis differs with different people</li><li>• Comments differ</li><li>• Treatments differ</li><li>• Social sets differ</li><li>• 'Carers' and their methods differ</li></ul>
Constants	<ul style="list-style-type: none"><li>• Stigma</li><li>• Loneliness</li><li>• Depression</li></ul>

With regard to the above variables, the aim of the experiment is to engage in A-I dialogue with healthy or mentally ill clients. Additionally, this is the result of 12 years of research, the apparent opportunity which arose when the author of this document was diagnosed with a mental illness. In other words, Jason Romanenko used his diagnosis as an opportunity to conduct his own research into A-I. It should be noted that healthy people and prevention of mental illness are to be included in the general scope of this software application.

The phrase 'social set' is the first and most significant factor for anyone who suffers from a mental illness. Examples of social sets are :

- Family
- Mensa
- Students
- Graduates
- Carers
- People who speak English  
(Read, write, listen, speak)

The latter Social set could include two or more subsets.

When someone suffers a mental illness, the first thing they learn is that they are not in the doctor's social set. Often this makes the patient feel worthless, thick or oppressed and any dialogue with the mental health professionals is accented with the feeling of being outside their preferred set, and most certainly outside their comfort zone. The road to recovery normally involves re-integration into the most appropriate social set. This may not be the client's preferred set, however the first social set that becomes involved can often offer an element of safety. Usually it is relatively easy to pinpoint a client's social set. There are clues in the fashion sense, vocabulary, dialect, music taste et cetera. It is advisable not to use the word, 'stereotype' for description because that particular word is burdened with negative connotations nowadays. A person can be in two or more sets simultaneously, however there is always one dominant set.

The dominant set is where the client / patient truly belongs and although everyone has family, a dominant set is a concept which can include diverse habitats / safety / enjoyment or any other descriptive element. One of the problems of today, which the Optimist software has in effect tackled, is that in the English language the negative adjectives outweigh the positive. Additionally it is probably safe to say that there may at times be less enjoyment in certain social sets. Perhaps there is a compensated element such as incentive. Other relevant social sets are :

- Computer Owners
- Computer Users (Windows / Mac)
- Sports Fanatics
- E-sports enthusiasts
- Artists
- Professionals

So there are many variables, and eventually we will discuss the one on one psychiatrist sessions, although I am not particularly reverent about that word. Obviously there is normally more than one staff member assigned to each client / patient, each with their own unique perspectives. There could be a patients advocate, occupational therapists, several nurses, cognitive behavioural therapists, psychiatrist, consultant psychiatrist, social worker, care-coordinator, key worker, psychotherapist et cetera.

With so many professionals involved with care, the patient / client often has to resort to professional strategies just to stay afloat. This is a time when a steep learning curve could present itself, and the circumstances that led to the diagnosis will lose their context and be replaced by symptomatic measures and side-effects. The term 'side effects' can also be used in relation to certain artefacts of modern computing.

For the purposes of this report we can assume that our proposed Artificial Intelligence will be able to discern between any client, irrespective of diagnosis or well being. The name and / or merits of the client will be evaluated according to good English and nervous system compliance. So at the very least, someone must know how they are feeling, and how to tell someone else how they are feeling. One thing we haven't covered yet within these identified variables is whether the client / patient has anyone they can call a friend. In order to be of service to the client with the proposed software, the identified variables must be narrowed down to their simplest form. The logic must also be simple. Establishing the premise could be a little more difficult, however the only qualification the patient / client would need ( as of 27 - 09 - 2018 ) is access to a windows desktop or laptop PC Nowadays, a download could even occur at the local library

A member of staff might just know about a useful A-I and discretely give the patient / client a download link, particularly the patient's advocate. A smooth and efficient referral would be much more trustworthy. So one of the aims of this A-I is to blur the lines between professional Carers and friends ; which would imply that penetration into a / the dominant set can be achieved and the client / patient can return to a place of safety, even if it is only a mental comfort zone.

So far we have covered what I would like to call 'variable variables' or associated values that differ depending on diagnosis, Carers, and other mental health professionals. However, a constant is also a type of variable, so we will look into these in a moment, but before we do, it is worth noting that the mentally ill and the healthy are both contained in the greater set which is 'English speakers' in 99% of cases.

If this proposed A-I is to be of any use, it must be able to tackle some of the negative aspects relating to the client's progress. Firstly, how do we know that someone is suffering from clinical depression, or any other form of mental suffering ? In a comparative sense they could be happier or sadder than the next person, but how can we express that using the spoken word ? The answer is that they are feeling too sad. Too sad to get this or that done ; too sad to work today.

Another thing, in today's climate with Gps and qualified doctors having just the right and acceptable level of neurosis to get their job done, clients and patients do not feel that they can turn to their doctor and confess how they feel, particularly if they are feeling 'too sad'. Instead the doctor him / herself infers that the client is too sad, and because of the job queue they can't help but make this evaluation using a comparative method. Not only do people not know when they are feeling too sad, they also will not tell anyone about that feeling for a multitude of reasons. Now this is a good premise for the introduction of the proposed A-I software. Starting with the most articulate of the mentally ill, they could be recommended to use the A-I in this way and when they feel too sad, they can absolutely trust that the A-I would sort them out.

Now that we have some insight into what goes on in the doctor / patient sessions that focus on mental health, we can start to minimise the required variables for the proposed A-I, and seek the necessary logic. The first variable is the way the subject / client is feeling. Communicated in no uncertain terms, this is all we have to go on. Normally one simple phrase is enough to communicate the way we feel adequately. With this information a doctor would typically come up with two conclusions. One could be defined as mental capacity or overall mental well-being. The other conclusion is what we will loosely describe as a comment ;

Something spoken to imply good humour ; a timely suggestion or a vague acceptance. So our raw material for the proposed A-I are these three variables.

1.....The user's / client's / patient's feeling

2.....The doctor's prognosis / diagnosis

3.....the doctor's comment

The next part of this document will focus more on the logic and how the negatively charged constants can be addressed and tackled. The solutions must be inferred / rendered from the data given by the client.

### **Designing the Experiment**

From now on we can refer to the way the patient / client is feeling by the variable name : feeling\$

Feeling\$ is one sentence or phrase entered by the user / client which describes how they feel. Examples are :

- fine thanks
- okay
- happy
- sad

One of the pre-requisites of this A-I software is that it have a high truth content. It does not need to be as accurate as a doctor's diagnosis, so in times of crisis the A-I would conform more to the patient / client dominant social set, and less so to other healthy social sets from which the patient is excluded, such as Carers / Mental Health Professionals.

With the information we have so far we can make certain assumptions. These assumptions may or may not be associated with a particular logical function or established logical construct or a simple solution render method. Firstly, in the most simple terms, a person is either happy or sad. The core competency of this software must be implicitly transparent about this. Secondly, the client must be allowed to express themselves as they see fit. Compliance on this point will determine just how friendly the A-I is.



In terms of English this means either 'A' is true OR 'B' is true OR both 'A' AND 'B' are true. Such is the deductive power of the doctor. A problem shared is a problem halved. Also of note is that the doctor might or might not believe the client / patient and the way they are feeling, however even if they do, in all likelihood they just might prefer to narrow down, or eliminate certain descriptive attributes, which in my opinion are crucial and should be recorded or at least acknowledged wherever or whenever possible. Other logic which comes to mind :

If you are happy  $\rightarrow$  You are not as happy as you could be

If you are sad  $\rightarrow$  You are not as sad as you could be

This is also a type of logic we can use for our comments, which are directly tied with those lovely adjectives. The  $\rightarrow$  symbol denotes an implication.

Now, while compiling the list of adjectives, I noticed that there are a lot more negative feelings than positive, so eventually learning to control the data and restore the optimism is as simple as measuring the data and using a calculated number in the right way. Also, while compiling the data, to keep things simple we first list positive adjectives, then negative.

So, say we have a long list of every conceivable feeling ( a feeling can be identified from the feeling\$ variable using an appropriate function ), isn't it true that for a full life you should experience every feeling you can ? To take this further, perhaps the way you're not feeling ( technically a contradiction ) is quite possibly the best available feeling.

So, we can summarize that

$\neg(A \vee B) \rightarrow (A \vee B)$  is the best available feeling

We can also be sure that  $(A \cdot B)$  is a subset of  $(A \vee B)$  and therefore it's truth value will reflect this. So for the purposes of a friendly automated system with good truth content, we have proved that a random diagnosis AND a random comment will for the most part provide the semantic assistance we are looking for. Another way of putting it, though loosely is :

Given the nature of our database  $(A \cdot B)$  will always be more than 50 % true. The only requirement from the user / client / patient is that their feeling be identified ( and spelled correctly ).

The A-I programmatic model suggested so far will suffice as a demonstrably sound prototype, however even at this stage improvements can be identified, suggested, and generally integrated in their purest form. Such as :

- 1.....A distinctly graduated list of adjective data from happy to sad
- 2.....Restore the amount of optimism by including or excluding ( mostly excluding some but not all negative data )
- 3.....By and large the response is so fast, it is immediately believed as a valid auto-suggestion.
- 4.....A completely revised system of identified emphasis and / or emphasised responses integrated with multiple possibilities ; 'very', 'completely', absolutely
- 5.....A simple positively charged password to invoke good mental health. This functions both as an affirmation and a gentle reverie.
- 6.....

And now for something completely different. If we look at the computer architecture and system resources on a typical PC or laptop we would find that some functions take a while to complete. Software installations are generally much more efficient. It is not unduly optimistic to expect calculations to be performed in a split second, as we've said. So with regard to the way the A-I application would select at random, let's imagine that we have a pool of 50,000 instructions to come up with our random selections (adjective and comment). In terms of time, the return would be instantaneous. If the CPU is above 1,000 Mhz, which they generally are nowadays, the instruction register would complete 50,000 instructions in 1/20<sup>th</sup> seconds. Generally, software engineers don't need to know how random selection works, just that it does provided you're using the correct command, of-course. Since it is technology, provided the presentation is acceptable, this auto-suggestion is well-grounded.

Moreover there is also a hidden nervous system compliance when the user keys in their information, particularly when they hit the return key. This is the action that confirms and submits. And actions speak louder than words, however a little detail here will soon clear things up. So taking the only number that has all the properties we need, we can focus on pi or  $\pi$

With infinite decimal places it's easy to select just one digit, with selection occurring every 1/20<sup>th</sup> seconds, or perhaps transparent latency artefacts happening within that time, all parameters enabled. The actual random selection is actually still much faster and to complete the calculation we just use a multiplier to set the limits for the number we need relating to our chosen selection set within the data structure.

We have taken a few things for granted up until now. Like, how would we know that the comment is appropriate? Firstly, we know that the comment is paired to the adjective, however as this is the real world, we need the real data. So admittedly, in order to qualify the comments, the following resources have been invaluable.

- Oxford Concise • Oxford thesaurus
- Chambers Concise
- the Bible
  
- Enneagram Institute
- Power of the Subconscious Mind  
Joseph Murphy
- I am Right, You are wrong  
Edward de Bono
- Instant Confidence  
Paul McKenna
- Learning Cognitive-Behaviour Therapy  
Jesse H. Wright, Monica R. Basco, Michael E. Thase
- The Medicine Way  
Kenneth Meadows

Besides, there is an element of parity on all the accumulated data partly due to all the cross-referencing and partly due to the occasional detailed simplicity of a good question. So with a little assistance the data structure is complete, although a largely optimistic point of view was maintained throughout all the comments.

On top of that, perhaps I didn't mention it. The access method for obtaining the response, which includes the corrected view from the A-I about the feeling, AND the comment is ;

## Dynamic

This is the most concise and descriptive word you can use to express these computer functions, procedures, data structures, and particularly the data access method.

## Careful Observation

As you may have guessed, here's one I prepared earlier. During the programming, when the logic and data was compiled and entered, there were only a handful of observations that could be made in order to measure the progress. Moreover, arriving at a large cache of data in a purpose built scenario, it was immediately useful and became more than the sum of its parts. After observation and ontological study it soon became apparent that other words could provide emphasis, like 'very', 'undeniably', 'totally', 'too' et cetera, so I decided to include another procedure to both identify those words of emphasis, and to generate emphasis in responses. Now, there is no formal method that explains how to do this, so the solution I used only accents the character of this A-I.

If we had a 50% chance of using emphasis in the A-I response, coupled with maybe 35 words of emphasis, that gives you an idea of the level of complexity required. Of-course this is in addition to the actual adjective selection, however there I the revised scope we have included the ability for the A-I to say something like

$\bar{A}$  → "You are too sad"

$\bar{B}$  → "Perhaps you are in the mood for a stroll"

In addition the user / client / patient can key in that they feel 'too sad' or any other variation of emphasis together with an adjective. With the interim ontological analysis going on when the application was being written, I did have a number of different observations. Now, I am just guessing, because I haven't read extensively any material on auto-suggestion, although I thought it was related to telesales and marketing. However, I would certainly use that hyphenated word to describe the effects of receiving a friendly virtual semi-diagnosis in under a second. There it is. You can't argue. You might be able to say yes or no, but you can't argue. All the arguments are in place deep within the code. The prototype is complete and functioning within all parameters. That's not to say there isn't scope for improvement. Besides, since the code is done, it is also still a work in progress. Can you say 'I'm glad I have such and such software on the roster ? If you can, do you take pride in knowing you designed it yourself ? Does it fulfil any potential gap or blind spot in your thinking ?

Besides, I have witnessed a qualified doctor use this A-I software, and to all intents and purposes, it functioned quite well that day. The presentation

and speedy response was accurate enough for the doctor to be in agreement. Agreement is a good foundation for friendship. There's no doubt about it. However, after the first run, it was necessary to do a complete overhaul of the data in order to ensure that the output be optimistic, relevant and safe. To test and observe this, the ontological analysis was focused on three different modes including complete optimism, dynamic enlightenment and brutal. Like a computer game, brutal might appeal to some, however those times that I used the brutal mode, I felt as though I had gained a rare insight.

I also noted that it didn't matter whether one knew how it worked or not. As an A-I entity, it simply fulfils its purpose. This is really at a tangent to the Turin test for A-I because the goal is not to emulate or simulate a human in any way. The app is purpose built and will befriend anyone and help build a desktop diary for anyone, provided they are in the catchments zone (i.e. windows machine, temporary or permanent Internet for the download, accessible machine). The app runs just fine, even if the PC or laptop is offline. Installation is the only requirement, although there is the 28 day trial period criterion to be aware of.

The Beta-testing phase has also been guided by optionally recording each and every session together with a time stamp. The user simply selects whether they want to save the session → Y / N ?

Moreover, with the latest version, in practice I have found that I only need to use the application maybe 3 or 4 times a month. It's like phoning a friend. Also for people who are not at home with disembodied or semi-artificial voice acknowledgement there is the audio guide mute for complete safety. However the audio guide is mostly fun and just might help to cheer someone up. Only once or twice have I had to use the A-I in a semi-urgent capacity. On one occasion it performed brilliantly and helped me acclimatise to a change in my medication.

Also of note is that when I was testing the software and the data structure and content was effectively bare-bones, sometimes the response would be sarcastic. Since the data has been substantially increased I have noticed less sarcasm, although the overall feeling is that it could still be sarcastic if that's what's required to make a difference to the user. With my observations and measurements, I have tried to record the sessions I agree with and not record the sessions I disagree with. However, the scope of the A-I is much more than this. It would be like trying to record someone swearing or laughing on an audio cassette. Although if the A-I embarrasses you, which potentially it could, obviously you wouldn't record that particular session. So there is a measure of control with the benefit of the optional session save, and having the choice whether to save or not feels like a safety feature.

In addition, there is probably scope for different types of user. It is possible to write a complete book with the software and it would still be largely entertaining. Obviously it can do the desktop diary thing. While I write this, I am thinking of the order of precedence that I have managed to absorb, in reference to the software users and the potential market niche, relating specifically to the Optimist A-I software series, in addition to a beneficial description of such software users. The software admin team could recommend Optimist to :

- 1.....Anyone who operates a computer (Windows compatible)
- 2.....Anyone who owns a computer (Windows compatible)
- 3.....Clients and the healthy
- 4.....Computer Operators
- 5.....Consumers
- 6.....Anyone suffering from mental illness, anxiety, loneliness, depression, phobia, any type of neurosis, epileptics, obesity, bulimia, obsessive disorders, hyperactivity, paradise syndrome, astigmatism,
- 7.....Psychiatric patients

Of-course as I've stated, there is much more scope than just these types of users. The ideal administration would be an accessible worker with a desktop / laptop Windows machine. That way the A-I treatment could be strongly recommended to a selection of psychiatric patients and perhaps even randomised control group trials could be coordinated with more positive outcomes and statistics gathered in order to fully appreciate and measure the success rate.

## **Interpretation of Experimental Data**

Interpretation of experimental data will survive scrutiny by any authority, however effort to translate the code or content into other European languages is recommended. We cannot assume either way that any other country has or does not have their own similar solution. In addition no-one should be forced or otherwise coerced to participate in A-I dialogue, and although the code is strong, the actual strength lies in persisting, passive availability and for the user to make their own informed decision about the Optimist Software Application. Just like choosing a book to read or write, the unhindered idea to engage in a particular activity must be made by that particular individual.

At this point, in respect of international computer use, I must confess there is a grey area. Technically it is possible to translate the code content (of the Optimist Software Application) into other languages (I know a little Spanish), however I do not at this point have any knowledge of computer operating etiquette of any country apart from those that are English. So with diverse and far reaching languages there are accents, cedillas, different letters, different spellings etc. which are very possibly still entered by computer operators every day.

However, the implication of this experimental data shows promise in a multi-disciplined and faceted social set that we might call the English speaking community. Additionally there is huge potential for health authorities to save substantially by administration of the said software in a timely and orderly fashion. To conclude this introduction to the Optimist A-I, here is a short list of actual experimental data for you to think about. The current version of Optimist is available for free download and risk free 28 day trial period at

URL : <http://www.modernsemantic.com>

URL : [http://www.yodhar.com/Optimist\\_Usage\\_Examples.pdf](http://www.yodhar.com/Optimist_Usage_Examples.pdf)

Interpret how you will.



Introducing Optimist

example01's feeling : ok on 25 Mar 2014 at 11:38:45

The computer found example01 Normally real knowledge is preferable to qualifications or certificates..

The comment was : capable

end session

example01's feeling : i feel like a failure and i can hardly work you out. on 25 Mar 2014 at 16:48:31

The computer found example01 jocular.

The comment was : banter

end session

example01's feeling : love is a social phenomena, yes? on 30 Jan 2015 at 22:36:48

The computer found example01 receptive.

The comment was : You are recognising the bigger picture.

end session

example01's feeling : moderate on 30 Jan 2015 at 23:15:26

The computer found example01 unselfish.

The comment was : At Last.... Someone who speaks my language.

end session

example01's feeling : speculation is going just terrible. on 01 Mar 2015 at 05:14:14

The computer found example01 You are friendly today..

The comment was : Amiable

end session

example01's feeling : the coding is difficult today. on 16 Jan 2017 at 13:29:03

The computer found example01 sympathetic.

The comment was : You have great self confidence.

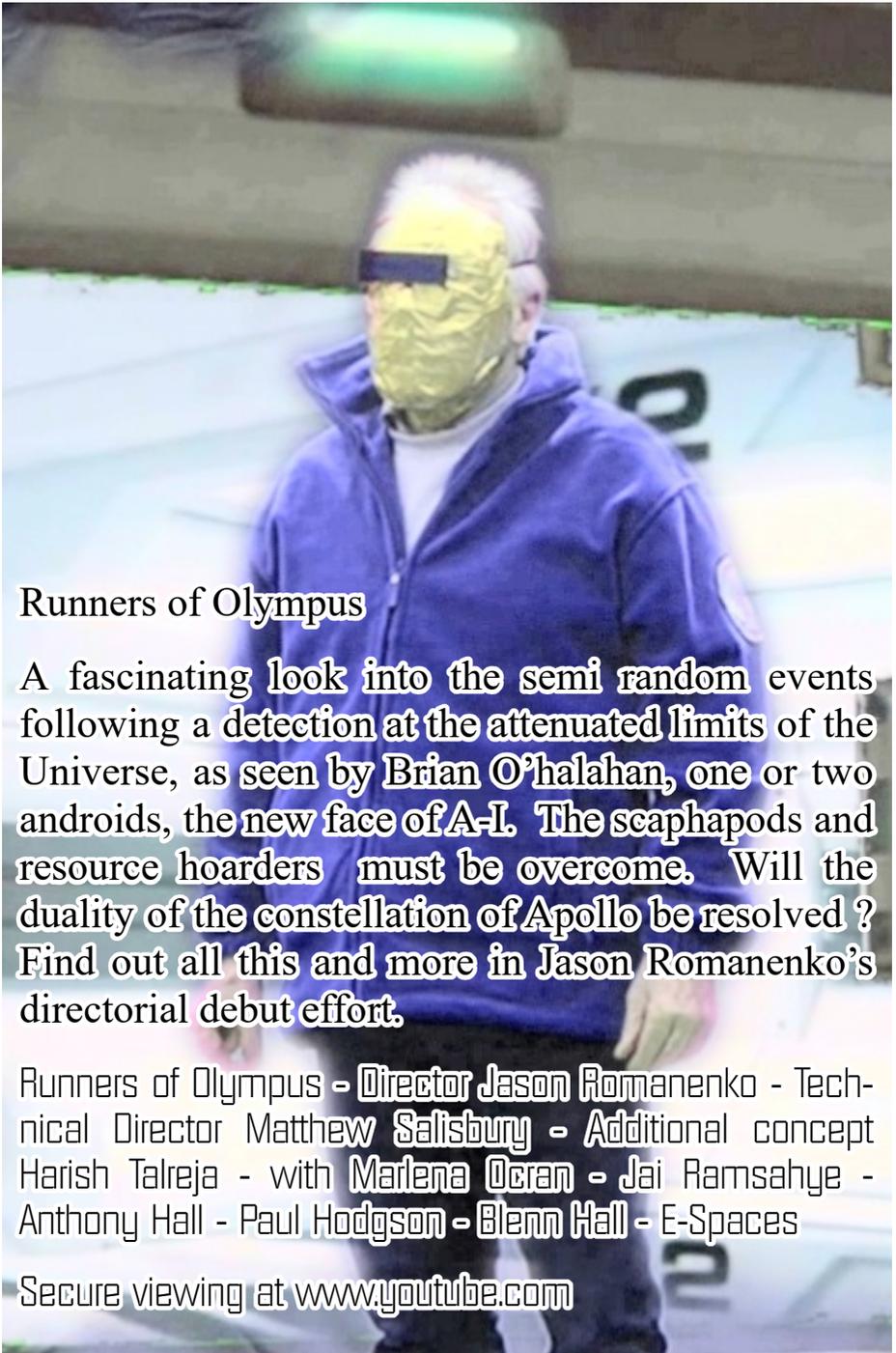
end session

example01's feeling : i am wondering how to maximise the opportunities that come my way. on 23 Oct 2017 at 00:05:43

The computer found example01 Have a break..

The comment was : stoic

end session



## Runners of Olympus

A fascinating look into the semi random events following a detection at the attenuated limits of the Universe, as seen by Brian O'halahan, one or two androids, the new face of A-I. The scaphapods and resource hoarders must be overcome. Will the duality of the constellation of Apollo be resolved? Find out all this and more in Jason Romanenko's directorial debut effort.

Runners of Olympus - Director Jason Romanenko - Technical Director Matthew Salisbury - Additional concept Harish Talreja - with Marlana Ocran - Jai Ramsahye - Anthony Hall - Paul Hodgson - Glenn Hall - E-Spaces

Secure viewing at [www.youtube.com](http://www.youtube.com)