

Agora v1

Self: anagora.org/go/agora-roadmap-2020

See also: flancia.org/agora, flancia.org/go/agora-protocol

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Objective

I talk a lot in general terms about the [Agora](#), but I haven't written much specifically about how I think it could be implemented and made to work. The mental models behind it; the data structures; the protocols. This document tries to tackle this problem in as concrete and illustrative a way as it is available to me right now, focusing on a specific possible implementation of the Agora; a "first version".

An Agora is a space

An Agora is, in perhaps its most basic definition, a *public space*. It can be seen as a subspace of widely known spaces such as the real world ("meatspace") and the internet ("cyberspace"). While in the Agora, no matter the base substrate, people agree to follow certain rules; patterns of behaviour. We call this an Agora's *base contract*. Example: anagora.org.

The base contract can be extended by individuals as per mutual public agreement. Groups can use these extensions to define further subspaces within the Agora. The following are examples of subspaces:

- (Space) **Agora**
 - Its contract defines protocols to be followed by all Agoreans. For example: everybody must announce public goals and follow the Principle of Charity.
 - (Subspace) **Stoa**: a subspace for public discussion.
 - Its contract defines protocols to be followed for optimizing communication and mutual understanding. For example: everybody must follow the Principle of Charity.
 - (Subspace) **Library**: a subspace containing books and encyclopedias.
 - Its contract defines its contents. For example: an Agora might include only books that are considered *examples* of constructive thought; or it might include all books (or pointers to them, when available).
 - (Subspace) **Forest**: a subspace containing a collection of [digital gardens](#).
 - Its contract defines its contents. For example: an Agora might include only some cross-section of the digital gardens of participating members, as deemed relevant to the Agora; or it might include all gardens everywhere.

Implementation plan

The following are versions of the Agora in cyberspace only. Many real world Agoras, of course, are known to [exist](#).

v0

As of the time of writing (2020-10) the Agora v0 is online in anagora.org. It is based on MediaWiki. It has few active users except for yours truly.

v0.5

The Agora v0.5 will focus on an implementation of the Forest subspace based on a **distributed social knowledge graph**.

The knowledge graph will be based on:

- Markdown notes, optionally created/maintained/indexed through tools such as Foam/Obsidian.
- Git repositories, by default one per user.
- A convention for cross-repository linking and interfacing.

Agora participation model

Imagine we take two random volunteers. They have different personalities; if we model humans as Flancians¹, as arrays of ethical-epistemological positions, they intersect to some extent but very likely belong to diverse partly overlapping groups. Our task is to suggest n topics to them, such that they should visit them in conversation if they are willing. The topics can be then chosen as if to maximize/minimize the chance that one of them changes their positions on a topic within some mode of discussion.

1. Let F be the set of volunteers².
 - a. Each volunteer, f , can be modeled as state plus an universal evaluation function for positions; hypotheses.
 - b. State influencing how f evaluates an hypothesis forms an explicit model for the world that a certain volunteer holds true or useful, $M(f)$.
2. Let $P_0(f)$ be the set of positions, that is, the theory that f holds true a priori; this is part of their Best Known Model of the world.
 - a. $P(f)$ can be modelled as a map from (strings explaining ethical and epistemological positions) to (a real number indicating feeling of truthiness as reported by f).
3. Let $P_n(f)$ be the theory of f after n rounds of discussion.
 - a. A round of discussion could be modelled as an event in a timeline where f_0 and f_1 discuss a position and adjust their evaluation of it according to their reciprocate models, which predict whether the other person is likely to be right, and particularly more correct than the first party, about a certain question of interest.

Agora self-assembly protocol

We propose the Agora, a protocol that enables participating parties to self-assemble in increasingly useful sets.

¹ A Flancian is a [spherical human](https://flancia.org/flancian). See also: flancia.org/flancian.

² Throughout this document I use uppercase to indicate sets; lowercase to indicate set items; and function notation to express arbitrary functions that are applied with agent and object or matching sets as parameters (hopefully clear by context).

- f broadcasts their model of the world, as explicit as they can make it, with a stated intent of full sincerity within a framework and fitness for a purpose. This means opinions on all positions that are considered relevant to a matter at hand and that can be asserted clearly, as tracked on a designated public platform.
- f expresses a target intent, that is, a desired state as described within their model. This is framed as a *should-proposition*.
- Within F , selection for a round of debate takes place:
 - A debate group $D = f_0 \dots f_k \subseteq F$ is chosen based on a metric of compatibility of their self-reported models and target intents.
- D debates positions required to tackle a tension, that is, either a mismatch in actual models or plans of collaboration (a sequence of P) that moves the group closer to an incrementally better intent.
- D collaborates. committing to communicate openly and accepting others' opinions when they can be proved to be demonstrably better than those previously held in free and public debate, following this protocol according to stated positions and values.
- Loop.

Appendix: other implementations

Social

Any social network can be used as an Agora, provided users have a way of pointing out they would like to operate under the Agora protocol. In most social networks this can be accomplished via the use of [hashtags](#).

Knowledge graphs

Knowledge tools such as Roam Research or Athens can provide a platform to build an Agora. A wiki can make for a lightweight knowledge graph, such as the reference implementation in [anagora.org](#).

The Agora v1 as described above is based on git and a Markdown-based knowledge graph built with Foam, Obsidian or any other note taking tool that uses Markdown notes as its backend.

HTTP connectors and federation

Note a federated social knowledge graph complementing both of the previous approaches can be built on top of HTTP links and redirects.

In particular the protocol could be implemented on top of a “go links” platform. A “go link” is a [lightweight named HTTP redirect](#): They are popular at many companies, such as Google, where they constitute an implicit shared knowledge graph. Think lightweight social bookmarks; a user can visit `go/example` to link it to a target URL of their choice. Thereafter visiting it will redirect every user to the same URL.

This approach benefits from network effects; go links are generally useful for users even if they are not interested in knowledge graphs or online collaboration.

- Every domain can expose a URL space for their go links.
 - In [flancia.org](#), this is every URL under [flancia.org/agora/](#); for example this document lives at [flancia.org/agora/protocol](#).

- Resources that have the same go link in different domains can be seen as being linked by an implicit bidirectional link a la Roam.
 - If a different user of the platform has a different opinion that they would like to express in a resource independent from this document, they can link /agora/protocol in their own domain to their own take.
- (new) Meta-nodes can also be created; these are nodes that are about other nodes or somehow build on them.
 - In particular, /about/X contains the *judgment* of the owner of the domain about node X as declared in the Agora and what their current plans for future action related to the node are.

This plus a system for callbacks to reinforce bidirectional links should be sufficient to implement the protocol.

Argument mapping

TODO.