
WANDERERS

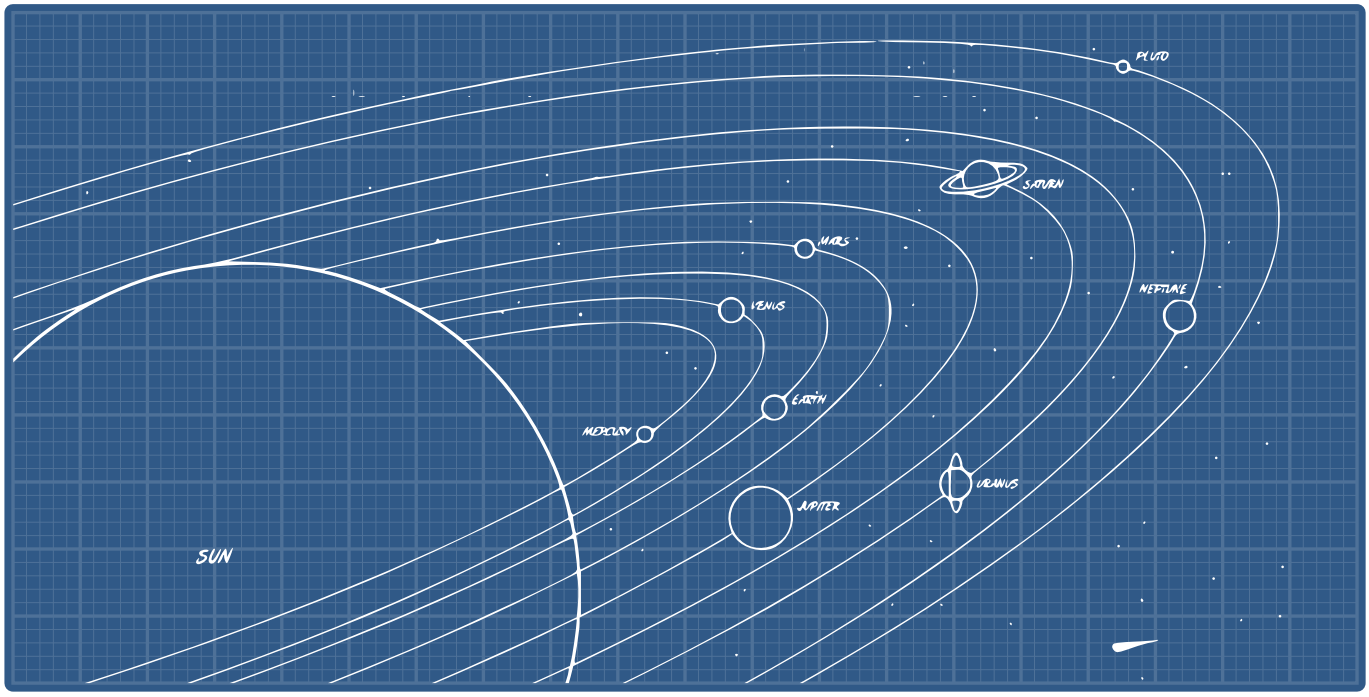
Inter-society link system.

Dunstan Becht

Wanderers is the last part of the Pale Blueprint initiative. It is designed as an extension of the Bulk dealing with the spatial expansion of human societies and their economic systems. It is preferable to read the previous projects before. This document sets out specifications and a guideline for the development of this last project.

Contents

1 Introduction



1.1 Development priority

Given the current social and climatic urgencies, the development of Entropy Economy System and Bulk will be favored over that of Wanderers. Wanderers concerns the expansion of humanity in space and is only a long-term anticipation work. However, it is important for the cohesion of the Pale Blueprint initiative to give a long-term direction.

1.2 Final form

The expected form of Wanderers is that of an extension to the Bulk. It will be imagined as the GPS of the future space traveler and as a large network of trade logistics. Many optimization algorithms already planned in the Bulk development **(4.1)**[A.2] will be needed for Wanderers. Hence the idea of making Wanderers a module of the Bulk, sharing the same libraries of tools.

2 Specifications

The Bulk being an intra-society management system, it will be necessary to add the following functionalities in the Wanderers module.

2.1 Cartography

A relevant spatial mapping system will need to be developed. It will be necessary to determine whether a Euclidean space is an acceptable approximation to manipulate the positions of the stars and their satellites.

https://en.wikipedia.org/wiki/Euclidean_space

https://en.wikipedia.org/wiki/Non-Euclidean_geometry

2.2 Astronomical object

A database of known celestial objects will be kept up to date. It would be interesting to use the following resources.

- http://exoplanet.eu
- https://exoplanetarchive.ipac.caltech.edu

2.3 Societies

The societies, as defined with **(3.8.1)**[A.1], must be listed and each of them will be associated with a habitable world from the previous database of celestial objects.

2.4 Trajectories

The module will include a trajectory calculator. Several modes of propulsion will be considered.

- https://en.wikipedia.org/wiki/Orbital_mechanics

2.5 Time dilatation

In space, it would be inappropriate to extend the UTC time standard (Coordinated Universal Time) to locate an event in time. It will be necessary to take into account the dilation of time, during transport, but also on the surface of each celestial object. A new standard will have to be developed to position an event in time while taking into account relativistic effects.

- https://en.wikipedia.org/wiki/Time_dilation

2.6 Raw materials

A heterogeneous distribution of raw materials on the colonized planets could give rise to the establishment of trade routes. To list the price and quantity of goods offered on each world in a global catalog seems wise.

A References

A.1 Entropy Economy System

https://paleblueprint.org/views/projects/ees/report/2020-04-20.pdf

A.2 Bulk

https://paleblueprint.org/views/projects/bulk/report/2020-06-20.pdf