

LAMASSU

A prototype for a speculative video game.

Conceived and designed by Federico Campagna and Jelena Viskovic.

Lamassu is a prototype for a speculative video game, designed by Jelena Viskovic and Federico Campagna and supported by The London Doctoral Design Centre LDoc and AHRC. It presents one territory, which is experienceable as four, different-yet-simultaneous worlds. The player can enter *Lamassu* as a group of human city planners, as a fungal macro-organism, as the host of the souls of as-yet-unborn creatures, or as a rock. Worlds and ludic conditions vary, depending on the metaphysical and metaethical settings of each character.

Background

The prototype for the speculative videogame *Lamassu* was developed as a useful way to test the key concepts which emerged in my doctoral thesis *Metaphysics and Metaethics in the Design of Strategy Video Games*. A detailed discussion of the game is situated in this appendix.

The immediate motivation behind this production derives from the interviews that I conducted with a number of professional video game designers, where my interviewees were asked to comment on the role of philosophy in the design process of video game-worlds. Many of the interviewees expressed some difficulties dealing with the technical language of philosophy, and they suggested to produce a prototype that would allow them to visualise and experientially test my suggestions. The idea of creating a prototype of a speculative video game was further reinforced by my study of speculative games, such as those created by Molleindustria¹ and by Stefano Gualeni² – where political and philosophical ideas are ‘played

¹ *Molleindustria* [website], <https://www.molleindustria.org/>, (accessed 12 August 2020).

² *Stefano Gualeni* [website], <https://www.gua-le-ni.com/games>, (accessed 12 August 2020).

out' in the form of digital, ludic simulations – and by my interest in the method of 'speculative design', as theorised by my original supervisor Anthony Dunne and by Fiona Raby.

Having discussed this possibility with my supervisors Teal Triggs and Dylan Yamada-Rice, and on the basis of their encouragement and support, I sought funding from LDoc (the body that has generously supported my doctoral research) and I obtained £ 2,000 to hire a video game designer. I was lucky enough to know video game designer and artist Jelena Viskovic (like me, an *alumna* of the now-defunct R.C.A. course *Design Interactions*), and together we created this prototype. While the concept, character design and the structure of the video game are mine, the programming, technical development and visual design of the game are Jelena Viskovic's work.

Concept

Lamassu allows the player to experience first-hand some of the ideas presented in my thesis. In the text of my thesis, I suggest that: 1) the fundamental architecture of video game-world can be read through the lenses of philosophy, especially metaphysics and metaethics; 2) it is possible to modify video games – and thus, to innovate the range of video games currently on offer – by modifying the philosophical (specifically, metaphysical and metaethical) parameters that structure the fundamental architecture of a certain video game-world.

In order to allow the player to experience the multiplicity of worlds that can be disclosed by a manipulation of metaphysics and metaethics, I have opted for a solution that lets the player enter a game-world composed by four different-yet-superimposed worlds. Hence the name of the game: the Mesopotamian *Lamassu* (*figure 1*) was a mythological creature whose body was made up of a lion, a bull, a human and an eagle, and who stood symbolically for the constellations seen as a series of zodiacal figures. The original model for some of the angelic creatures of Judaism, as they are described in the Old Testament, the *Lamassu* also featured in Christian iconography, where it was presented in the deconstructed figure of the Tetramorph (*figure 2*). In the context of Christianity, the Tetramorph stands for the totality of

the dimensions composing Jesus Christ, and thus, symbolically, for the different dimensions that make up the 'phenomenal' world. An echo of the *Lamassu* survives in the Muslim iconography of Buraq, the multi-morphic, human-faced winged steed that Mohammed rode during his 'Night Journey' across the universe (*figure 3*). I have drawn inspiration for the name of this video game from this array of symbolic meanings, with particular reference to the mythological (i.e. narrative), angelic (i.e. revelatory) and multi-dimensional (i.e. metaphysical) aspects.

The speculative video game *Lamassu* takes place within the contours of one territory, which emerges in the shape of four different worlds. Consistently with a phenomenological understanding of a 'world' as that particular *cosmos* (order, arrangement) of meaning which is projected by a subject, the territory of *Lamassu* emerges as a unique 'world' on the basis of the specific character that experiences it. There are four characters populating the territory of *Lamassu*: human city-planners (HCP), fungi, the souls of as-yet-unborn creatures (AYUC), and a rock. Each of them lives in a unique world, whose fundamental architecture is built around specific metaphysical and metaethical parameters. By moving from one character to another, the player moves from one world to another, while remaining within the borders of one sole digital territory.

The paradoxical coexistence of different worlds over one territory is represented through features of visual design and through ludic elements. Each character sees the map of their world in a unique shape, which derives from a symbolic design featuring in *Pirot kilim* – textiles that used to ritually accompany shamanic practices (i.e. practices of multi-dimensional travelling) in the rural areas of south-eastern Serbia.³ (*figures 4 and 5*)

³ For an overview of the magic significance of the *Pirot kilim*, see M. Veselinovic, 'Magic and mystery weaved through threads of Pirot carpets', *CNN*, 22 December 2014, <http://edition.cnn.com/2014/12/22/world/europe/pirot-carpets-serbia/index.html>, (accessed 12 August 2020).



Figure 1. Lamassu, from Nimrud. XI century BC. Pergamon Museum, Berlin. (Public domain)



Figure 2. Tetramorph, from Anton Koberger's incunable Bible, 1483. (Public domain)



Figure 3. The Prophet Muhammad riding Buraq. Anonymous, 18th century. (Public domain)

The separation of each world from the other is highlighted by the fact that, while playing as one character, the player has no clear vision (with the exception of the rock) of what is taking place in the other worlds. Such a mutual invisibility represents the incommunicability between separate worlds, which has been a frequent object of study in contemporary philosophy and psychoanalysis.

Despite their separateness, however, the four worlds in fact coexist with each other over one same territory. Activities performed by one character within their own unique world affect the (different and equally unique) worlds of the other characters, and they are in turn affected by what takes place within them.

Details of each world, and of the connections between worlds, are listed and discussed below in reference to each character.

Fruition of the game is intended to be accompanied by the personal intervention, in the form of talks, lectures or workshops, by the co-authors of this game.

Story

This speculative game has a minimal narrative structure. To a certain extent, it attempts to fulfil Ian Bogost's call for "games without stories."⁴ Rather than a complex narrative, *Lamassu* has a complex setting: a certain territory, experienced as four different 'worlds'.

The territory of *Lamassu* is inhabited by four characters: human city planner (HCP), fungi, the souls of as-yet-unborn creatures (AYUC), and a rock. The first two, HCP and fungi, inhabit this territory in a way that could be described as a form of colonisation, or of occupation: they

⁴ "Games are not a new, interactive medium for stories. Instead, games are the aesthetic form of everyday objects." I. Bogost, 'Video Games Are Better Without Stories', *The Atlantic*, 25 April 2017, <https://www.theatlantic.com/technology/archive/2017/04/video-games-stories/524148/>, (accessed 12 August 2020).

attempt to maximise their presence over the territory by saturating their respective worlds. The other two characters have very different ways of inhabiting the territory of *Lamassu*. The AYUC embody the potential for proliferation of the HCP and the fungi: they are the new, possible items in the worlds of the HCP and of the fungi, observed in their 'potential' state. Whenever such potential is 'actualised' in the worlds of the HCP and of the fungi, the AYUC see their host depleted. For the AYUC, the experience of inhabiting the territory of *Lamassu* consists in a desperate struggle not to be 'born' into any of the other worlds – since, for them, being born corresponds to dying in their own world. Finally, the rock inhabits this territory in a completely separate and autonomous way. The rock sees the world as one, sole musical keyboard – which is composed of the features of all the other worlds, plus a series of elements that belong exclusively to the rock's world. Differently from the other characters in the game, the rock has no 'mission' as such: its only mission is to enjoy its own music-making.

Please see below for the details of each character.



Figure 4. Patterns for Pirot Kilim



Figure 5. Weaver working on a Pirot Kilim.

Further development

Before detailing the four worlds and their specific settings, it is necessary to stress the prototypical (and thus, unfinished) nature of *Lamassu*. Due to budget and to time constraints, Jelena Viskovic and I could produce only a very stylised model of what *Lamassu* could potentially become.

We were able to implement only a limited number of features for each character, and only a limited selection of playable characters. Furthermore, we could make playable only one character at the time, while the other characters (and their worlds) remain virtually inert.

In a more complete form – and on the basis of a larger budget and of more time – *Lamassu* would allow for a series of other features, the first of which would be:

- An A.I. playing the other three characters, while the human player ‘inhabits’ the world of the fourth one.
- A multiplayer option. Four players could play simultaneously on four different stations, thus experiencing the territory of *Lamassu* through four different perspectives and, thus, worlds – at once reciprocally invisible and effectively interconnected.

Characters

Human City Planners (HCP)

The ‘world’ of the HCP resembles that of most turn-based AAA strategy video games, such as my case study, *Total War: Rome 2* (TW:R2). The territory of *Lamassu* appears to the HCP as a map and a series of menus, delineating the available range of actions, the points achieved,

and so on. As discussed in my thesis, their world can be described metaphysically as a 'Platonic' *cosmos*.

The resemblance between TW:R2 and the world of the HCP applies also to its metaethical settings. For the HCP, there are such things as ethical facts: victory conditions are objective, and their existence is not dependent on the emotions, desires, opinions or cognitions of the populations living within the game-world (or, for that matter, of the player). The game has an implicit, in-built notion of the 'good' (i.e. victory), which is based on a series of identifiable parameters. Like TW:R2, the world of the HCP espouses a form of moral realism, thus orbiting within the field of cognitivism.

Unlike TW:R2, however, the world of the HCP contains an ironic, Sisyphean element: just as the HCP are about to reach the victory conditions set by the game (a certain level of accrued resources, capital, etc), these same conditions automatically increase, becoming a horizon that is always beyond reach. Ultimately, victory is impossible for the HCP – similarly to how the ideology of perpetual growth in contemporary capitalism is destined to fall always short of its own ideal objectives. This ironic element suddenly reverses the metaethical settings of the HCP's world: as claimed by John Mackie's 'error theory', the apparently real ethical facts of the HCP's world are in fact merely illusions, and no 'moral' behaviour is ever correct.

Below are the details of the metaphysics, metaethics, and intra-worldly interactions of the HCP.

Metaphysical settings:

- Ontology:
 - o Non-existing objects? Yes (Meinong and the Stoics).
 - o Two worlds? Yes (Plato).
 - o Univocal, equivocal or analogical existence? Analogical (Aquinas).
 - o Existence vs. essence? Theoretical, but not actual distinction (Avicenna).
- Universals: Platonic realism (two-worlds ontology).
- Particulars: Bundle theory (Berkeley et al.).

- Possible Worlds: Abstractionism (Plantinga).
- Time: Growing block theory (Broad). Only the past is real: the HCP live in the past, their time is the past.

Metaethical settings:

- Error Theory: every ethical judgement (i.e. judgement on the basis of a supposedly 'good' movement towards 'victory') is illusory, and fundamentally wrong. (Mackie).

How they influence the world of the other characters:

- Fungi: by creating 'sanitation' buildings, the HCP can slow down the spread of fungi in a certain area and kill the spores that are already in place.
- AYUC: by increasing their own activity, the HCP deplete the host of AYUC.
- Rock: buildings created by the HCP feature as musical elements in the world of the rock.

How they are influenced by the other characters:

- Fungi: the fungi 'poison' the regions where they spread, damaging the buildings of the HCP.
- AYUC: some of the options available to the AYUC have an impact on the HCP (as detailed in the AYUC screen). When the AYUC are fully depleted, they bring about 'the end of the world', thus freezing the world of the HCP.
- Rock: the rock has no effect on the HCP.

Fungi

The fungi begin as a series of nodes, which can expand by emitting spores. When spores encounter other spores or other nodes, the fungi increase their size and their occupation of

their world. The ultimate aim of the fungi is the creation of one, uninterrupted macro-organism, which occupies the totality of the map. Victory is achieved when the occupation rate of the territory by the fungi is 100% – but this victory is always temporary, lasting only as long as the HCP do not undo it, or until the fungi naturally withdraw (such auto-depletion is in-built within the fungi).

In its stubbornly expansive relationship to the territory, the fungi almost mirror the HCP, but with a few important differences. Firstly, the fungi have no menu vs map (i.e. they do not have a Platonic two-worlds structure), and they experience time continuously (i.e. real-time gameplay). Secondly, the fungi can actually achieve their victory conditions, although only temporarily.

Below are the details of the metaphysics, metaethics, and intra-worldly interactions of the fungi.

Metaphysical settings:

- Ontology:
 - o Non-existing objects? No (Quine).
 - o Two worlds? No (Aristotle).
 - o Univocal, Equivocal or Analogical? Univocal (Duns Scotus).
 - o Existence/Essence? No theoretical or actual distinction (pre-Avicenna).
- Universals: Austere nominalism (Abelard).
- Particulars: Aristotelian theory of substance (the fungus as pure substance)
- Possible Worlds: Concretism (Lewis).
- Time: Minimal A-theory, 'moving spotlight' theory (Cameron).

Metaethical settings

- Cognitivism: moral judgements can be assessed in terms of truth and falsity)
- Realism: moral facts and properties exist, and they are independent of opinion)

- Naturalist reductionism: moral properties are reducible, that is they are identical, to natural properties. (Brandt and Railton)

How they are influenced by the other characters:

- HCP: when the HCP create 'sanitation' buildings, they reduce the fungal population. When they create low-budget buildings, they favour the increase of the fungal population in that area.
- AYUC: some of the options available to the AYUC have an impact on the fungi (as detailed in the AYUC screen). When the AYUC are fully depleted, they bring about 'the end of the world', thus freezing the world of the fungi.
- Rock: the rock has no effect on the fungi.

How they influence the other characters:

- HCP: when the fungal population is too strong over a certain area, there is a negative impact on health and building productivity.
- AYUC: when the fungi are strong the host of AYUC are depleted at a faster rate.
- Rock: fungal spores and nodes feature as musical elements in the world of the rock.

As-Yet-Unborn Creatures (AYUC)

The AYUC are the 'souls' of the creatures (human and non-human) that have not yet been born. The characters of the HCP and of the fungi can 'pull down' the AYUC from their *hyperuranion*, and they can embody them within newly-born creatures of their own species. The AYUC attempt to resist this downward pulling towards the worlds of the HCP and of the fungi, and their dynamics within the game are those of an all-out resistance. The player experiences the AYUC as one, unified figure, whose 'life-force' is depleted or replenished depending on the activity of the other players.

For the AYUC, the world appears as a labyrinth, which they navigate by choosing at each turn between a series of different strings of text (composed of fragments from four poems written by me – each of 17 lines, as many as the number of effects that the AYUC can have on the other characters). The text is selected, and thus dynamically composed, by the player on the basis of poetic affinities between the various strings – in a fashion not dissimilar from surrealist literary experiments. Each string has a unique impact on the other characters (although the player does not know which of the fragments will activate that effect), and every choice performed by the AYUC has, as its immediate effect, also the lengthening of the available lifetime of the AYUC.

The gameplay of the AYUC consists in a desperate exercise of endurance: if they do not select anything, the ‘birth rate’ of the AYUC (equal, to them, to a ‘death-rate’) increases, and their available lifetime shrinks. If the AYUC remains inactive and their lifetime runs out completely, their host is utterly depleted and the AYUC loses. This brings about literally the ‘end of the world’ for the HCP and for the fungi, whose worlds suddenly freeze. The event of an apocalypse induced by the depletion of the AYUC’s host also impoverishes (but it does not freeze nor does it destroys) the musical world of the rock.

Below are the details of the metaphysics, metaethics, and intra-worldly interactions of the AYUC.

Metaphysical settings:

- Ontology:
 - Non-existing objects? Yes (Meinong and the Stoics).
 - Two worlds? Yes, and more (Plato, as modified by Suhrawardi – the three worlds are: the text; the AYUC; the other worlds that drain them).
 - Univocal, Equivocal or Analogical? Equivocal (Gnosticism, against Duns Scotus).
 - Existence/Essence? Theoretically and actually distinct (Mulla Sadra).
- Universals: Metalinguistic nominalism. The world of the living is the fable of the AYUC. (Sellars)

- Particulars: Substratum theory. The AYUC *themselves* are a naked substratum. (Locke).
- Possible Worlds: Abstractionism (Plantinga).
- Time: Shrinking block theory. Only the future is real: the AYUC live in the future, their time is the future. (Apocalypticism)

Metaethical settings:

- Cognitivism: moral judgements can be assessed in terms of truth and falsity)
- Realism: moral facts and properties exist, and they are independent of opinion)
- Naturalist reductionism: moral properties are reducible, that is they are identical, to natural properties. (Brandt and Railton). If the 'natural' conditions of the AYUC are considered in terms of the profound impact that is exerted upon them by external forces (the pull of the living HCP and fungi, and the endless output of textual fragments written by an invisible hand), it is also possible to interpret their metaethics as a form of Supernaturalism.

How they are influenced by the other characters:

- HCP: the greater the activity of the HCP, the faster the host of AYUC depletes.
- Fungi: the greater the activity of the fungi, the faster the host of AYUC depletes.
- Rock: the rock has no effect on the HCP.

How they influence the other characters:

- HCP: some textual choices by the AYUC have direct consequences on the HCP (as delineated in a text box on the top-left corner). When the AYUC runs out of time, the HCP can no longer build anything, and their game is terminated.
- Fungi: certain textual choices by the AYUC have direct consequences on the fungi (as delineated in a text box on the top-left corner). When the AYUC runs out of time, the HCP can no longer reproduce or expand, and their game is terminated.
- Rock: the 'souls' of the AYUC, visible as little blobs in the labyrinth, feature as musical elements in the world of the rock. If the AYUC run out of time, thus deactivating the

HCP and the fungi, they simultaneously deplete the range of musical features in the world of the rock – where only a few, ‘native’ features remain.

The Rock

The geological realm is represented within *Lamassu* by a single rock, made of an unspecified material. The rock is presented as having an inner life that revolves entirely about music-making: within itself, a rock endlessly composes and plays its own music. To the rock, the territory of *Lamassu* emerges as one, complex keyboard, where all the features from the other three worlds are playable as musical instruments. The rock has no effect whatsoever on the other characters, which in turn do not perceive its existence.

The rock is the only character in the game that can truly win – although its victory is unlike most victory conditions in ‘normal’ video games. At any point, the player inhabiting the rock can click the *WIN!* button, thus claiming victory. Victory is celebrated on the rock’s screen by the appearance of a banner displaying the four designs of the four worlds of *Lamassu*, plus a salvo of red confetti. When the rock decides to win its game, nothing happens to the other characters, and their worlds are not affected by this event. Once it has won the game with the rock, the player can restart their game as a rock by exiting and re-entering the rock’s character (that is, by performing what Gualeni and Vella call de-roling and en-roling – as discussed in my thesis).⁵

Below are the details of the metaphysics, metaethics, and intra-worldly interactions of the rock.

Metaphysical settings:

- The rock performs the role of what exceeds the field of metaphysics and of ontology, and as such it does not wish to have any particular metaphysical settings. (Although, obviously, it is bound to have a metaphysical structure of its own: non-existing objects

⁵ See *intra*, 6.1.

do not exist; there is only one world; existence is predicated univocally; existence and essence are indistinct; universals do not exist, concrete particulars are primitive and non-analysable; possible worlds are concretist; time is presentist).

- At a symbolic level, the character of the rock is meant to bring to the fore the problem of 'oblivion of Being' denounced by Martin Heidegger throughout his work (and particularly in his famous volume *Introduction to Metaphysics*). The interface of a player acting as the rock in *Lamassu* is substantially reducible to that of a program to compose music – with the difference that the playable keys in the program correspond to the entities that populate all four worlds, and as such are neither permanent nor stable. Also, differently from a music program, the rock is able to declare victory at any point, thus suspending its game.

Metaethical settings:

- The rock has no objectives as such, except composing and performing its own music. Unlike all other characters in *Lamassu*, the rock has always present on its interface a button that allows it to claim victory at any moment. For the rock, victory (i.e. the 'good') is a matter of decision based on mood/emotion.
- This peculiarity corresponds to the metaethical position represented by the non-cognitivist strands of emotivism and/or prescriptivism (Ayer, Stevenson, Hare).

How it influences the other characters:

- The rock has no influence whatsoever on the other characters.

How it is influenced by the other characters:

- The other characters provide the rock with the playable musical elements. Were the other characters to disappear (as it happens for example when the AYUC run out of time), the rock would lose the vast majority of the playable musical elements.