

# Are there any non-existent things? Nation can exist?

Kenzo FUJISUE

## 1. Introduction

Descartes said that he cannot doubt his Cogito (his own recognition).

I think there is no necessity to doubt the existence of the external world. Because there is no contradiction or problems assuming that the external world, the real world, exists. Even if the external world is seen from the "brain in a vat", everything moves under integrated physical laws, and if others look like that they have the same recognition as we have, the world can be regarded as existence.

In philosophy, when arguing existence, mental/physical and mind/body is an issue. However, philosophical metaphysics too focuses on thought experiments and I think that corporation with science, such as physics and information science/brain science, is insufficient. Therefore, I would like to argue the concept of "the physical world of materials and energy" based on physics and "the information world of ideas/forms" based on information science/brain science. My concept framework may be easy to apply science to metaphysics.

In this essay, we would argue the "existence" in the physical world and the information world. Interesting! Good introduction.

## 2. Existence by Bits and Atoms

In my basic idea, the information world consists of "Bits" and the physical world consists of "Atoms". In other words, existence in the information world is made by bits and existence in the physical world is made by atoms (or sub-atomic particles).

The physical world must be controlled by laws of physics but the information world is not controlled by physics laws. We can fly and become young freely in our information worlds. And God and infinity can exist in the information world but not in the physical world. The physical world is limited by maximum length/size of 13.7 billion light-year distance and by minimum length of Plank length but we can believe existence of God and imagine infinity in our information worlds. The physical world is unique and shared by all human-beings. On the other hand, the information world is belonging to just one brain individually. Nice, clear explanation.

## The Information World & The Physical World



The comparison between the information world and the physical world is summarized as the below table.

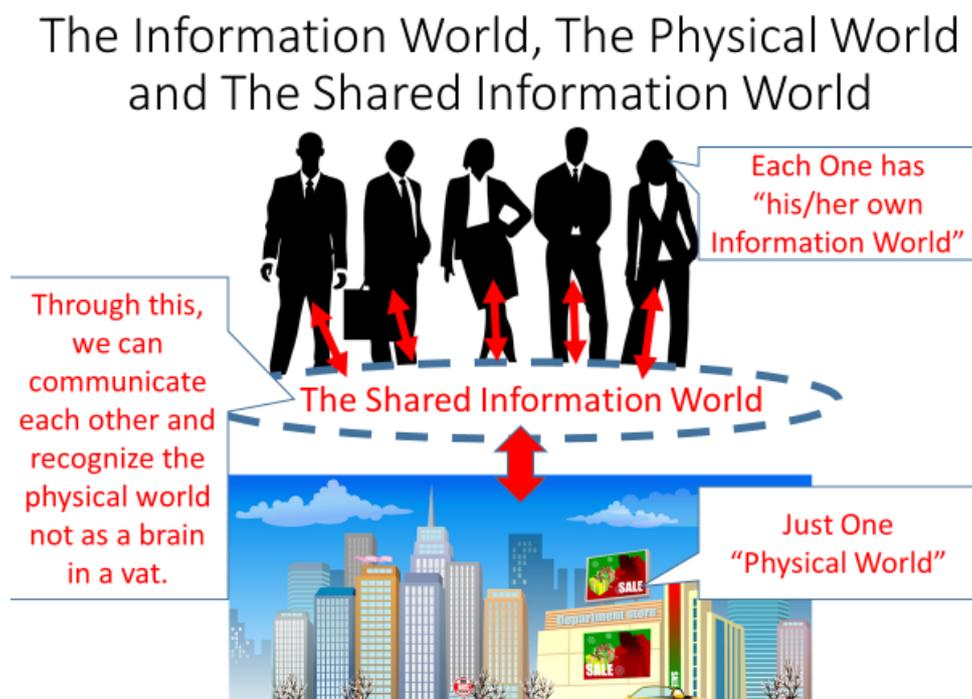
### The comparison between the Information World and the Physical World.

	Information World	Physical World
Essence	Intensity	Extension
Unit	Bits	Atoms
Attribute	Without laws (free)	Dominated by the laws of physics. (determined)
Number	Many The number of brains and computers (in future)	One Unique
Time	Return to the past	No return to the past
Physicality	Indivisible Indestructible	Divisible Destructible
Deterioration	No Deterioration (especially digital data)	Deterioration (entropy increase)
Recognition	Direct recognition	Indirect recognition
Share	Qualia in brain cannot be shared with others. One brain has one world	Reality can be shared with others. Multiple brains can share one real world
Expression	Information including language, formula. Processed by 0/1 data	Formula
Science	Information Science/Brain Science	Physics/Chemistry
God	Exist (not in all information world)	No exist

Infinity	Exist	No exist
----------	-------	----------

### 3. The Third World, “The Shared Information World”

I believe that dogs can have their information worlds that recognize the physical world. For example, my dog seems to dream and bark when sleeping. This means that the dog is creating his own information world. Nice! The difference between humans and dogs is that humans can share the individual information world. Humans can communicate with others by language, pictures, music, etc. This means that we can share our information worlds with others through media. Due to humans’ high ability to share our information worlds, I think that humans could build complex social systems such as legal systems, currency systems and nations. Good point.



### 4. God, Nation, Physics Laws and Death are Existing?

Here, I would argue cases of things that exist in the shared information world, I would like to consider God, Nation, Physics Laws and Death.

First, God. God exists in one’s mind. Even the brain in a vat can hold some God. And God must be shared by others and when Gods are shared, religions such as Christianity and Islam were born. In the multiple shared information worlds, there are several Gods in each shared information world. Good. Just distinguish between the existence of God and the existence of

religion as a theory and as a social institution.

Second, physics laws. The laws of the physical world (e.g.  $E=MC^2$ ) are all unique, regardless of religion, language, and cultures. The physical laws must be same in all information worlds and can be indicated by mathematical expressions. It is not generated by individual beliefs but is proved by various observations and experiments and by mathematics. Descartes thinks that the laws of physics are created from God's belief.good.

Third, Nations, A nation cannot exist in one's belief. A nation can exist when many people believe a nation is in the shared information world. Nice point! People will act based on this shared belief of a nation. From this belief of a nation, legal systems and currency system are created in the information world, not in the physical world. The nation needs a territory and citizens, but there is no border nor citizens of a nation in the physical world. I think that Plato defines a nation as a realization system of good ideas. Also, Locke says, "Natural law is not written, it is found only in the human mind". In the past people tried to make a nation as a product of belief of God (Kingship divine right theory).

Forth, Death. My own death cannot exist in the information world. When one information world ends, it is one's death. When one's death occurs, one's information world, which can recognize one's death, disappears. In the physical world, one's death exists as end of work of one's brain. After humans' deaths, humans can leave their own "thought" in the shared information world, and can leave their DNAs in the physical world. It is interesting that both are ultimately information. Excellent argument.

	Information World	Shared Information World	Physical World
God	○ Exist even in one information world.	○ When God is shared, a religion is born. There are multiple Gods.	× Idols exist.
Physics Laws	○ Discovered by experiments and observation.	◎ Unique in all shared information world.	×
Nation	× Nation needs multiple beliefs of many people.	○ Nation is established by beliefs of many people just in the shared information world.	× Territory and citizens do not exist physically.
Death	× When dead, one	○ Recognized by others.	○ End of work of one's

	information world disappears.		brain.
--	----------------------------------	--	--------

## 5. Conclusion

I quest the existence of the nation as a member of the Diet. A nation exists only in the information world, not in the physical world and a nation must be recognized in many information worlds. When not only Japanese but also many people in the world believe the existence of Japan, Japan can be a nation in the globally shared information world. Nice argument and example!

In this context, is there possibility of the World Nation? My answer is YES. When many people of the world believe the existence of the World Nation in the information world, the World Nation can exist. Good!

At present, the internet transcends borders, translation technologies make language barriers lower, smartphones solve constraints of places. With the progress of information technology, the shared information world transcends national borders, extends beyond ethnic groups, and spreads all over the world. Finally, there is possibility of the world nation. The best example is this online class. Students all over the world are gathering in the "classroom in the shared information world". Great conclusion!

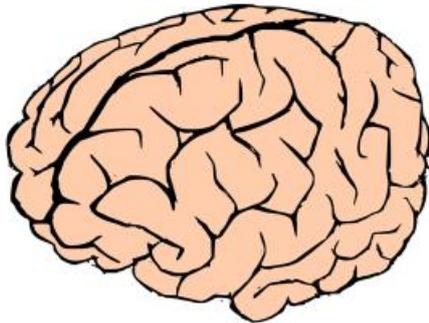
Hi Kenzo,

This is an engaging and original essay, clear, focused and extremely well written. You present a thesis, provide arguments and examples and engage with it critically. You have successfully implemented the material we learned to topics that particularly interest you, like God, death, nation, etc. And you provide a very good argument in support of the possibility of creating a World Nation. Overall, this is a very good essay. Great work!

## <A Piece of Cake>

The information world becomes a subset of the physical world. Information cannot be processed without physical energy and substances (eg, brains and computers). On the other hand, in the universe where the information world does not exist, the physical world is not recognized, the physical world becomes the same as not existing.

## The Information World & The Physical World need each other.



The information world needs the physical world. Because Information cannot be processed without physical energy and substances (eg, brains and computers).



If the information world does not exist, the physical world is not recognized,

The physical world is unique but that each person recognizes is different. The physical world that human beings can recognize is in a distance of 13.7 billion light-year radius from themselves. In other words, we can recognize the reach of light within the age of the universe. This means that the physical world that each person can recognize is different. This is because they are recognized from different positions and the perceptible ranges are not completely same.

Recognized Physical Worlds are not completely same from person to person.

