ISSN electrónico: 1885-5210

DOI: https://doi.org/10.14201/rmc2020163175183

COCO (2017): AN INFORMATIONAL APPROACH ON LIFE AFTER DEATH

Coco (2017): Una aproximación informacional a la vida después de la muerte

Hans CONTRERAS-PULACHE^{1,2,3}; Lucía GOMEZ-SAENZ¹; Anie S. SORIANO-ABAL¹; Alonso ZORRILLA¹; Jeel MOYA-SALAZAR^{1,2,4}

¹Escuela de Medicina Humana, Facultad de Ciencias de la Salud, Universidad Privada Norbert Wiener, Lima (Perú). ²Grupo de Investigación en Neurociencias Aplicadas-GRINA, Universidad Privada Norbert Wiener, Lima (Perú). ³Centro de Desarrollo Integral RINCONADA, Lima, (Perú). ⁴Hospital Nacional Docente Madre Niño San Bartolomé, Lima (Perú).

e-mail: jeel.moyasalazar@icloud.com; jeelms@outlook.com

Fecha de recepción: 5 April 2019 Fecha de aceptación: 23 June 2019 Fecha de publicación: 15 september 2020

Abstract

We propose the answer to a question that until today is very questionable, is there life after death? In this document we will give an answer from the perspective of the Sociobiological Informational Theory. For this we need exact moments of the movie *Coco* (2017), in which this theory can be applied, thanks to the cinema. It should be noted first that in the film there are two aspects of the same side. A life as social information and a life as a conscious-psychic system, then the key moment that serves as an example to explain this phenomenon is when the character «Chicharrón» disappears from the world of the dead when no one in the real world remembers. However, when the old «Coco» remembers her deceased father «Hector», he manages to revive informationally. At the same time, we also indicate and congratulate the upright graphic quality in the details that characterize the animation. In short, we are going to say that, indeed, yes, there is life (informationally speaking) after death. And this because when we appear in the world we begin to live as social information, then we are born, and our life as social information grows in increasing complexity.

Key words: cinema; animation; sociobiology; information; conscience; social information.

COCO (2017): AN INFORMATIONAL APPROACH ON LIFE AFTER DEATH

HANS CONTRERAS-PULACHE; LUCÍA GOMEZ-SAENZ; ANIE S. SORIANO-ABAL; ALONSO ZORRILLA; JEEL MOYA-SALAZAR

Resumen

Se plantea la respuesta a una pregunta que hasta el día de hoy es muy discutible, ¿hay vida luego de la muerte? En este documento daremos una respuesta desde la perspectiva de la Teoría Sociobiológica Informacional. Para esto precisamos momentos exactos de la película *Coco* (2017), en el cual gracias al cine se puede dar aplicación a esta teoría, cabe indicar primero que en la película hay dos aspectos de un mismo lado. Una vida como información social y una vida como sistema psíquico consciente, entonces el momento clave que nos sirve como ejemplo para explicar este fenómeno es cuando el personaje «Chicharrón» desaparece del mundo de los muertos cuando nadie en el mundo real lo recuerda, sin embargo cuando la anciana «Coco» recuerda a su padre fallecido «Héctor», este logra revivir informacionalmente. A su vez también señalamos y felicitamos la buena calidad gráfica en los detalles que caracterizan la animación. En síntesis, vamos a decir que, en efecto, sí, existe la vida (informacionalmente hablando) después de la muerte. Y esto porque cuando aparecemos en el mundo empezamos a vivir como información social, entonces nacemos, y nuestra vida como información social crece en complejidad creciente.

Palabras clave: cine; animación; sociobiología; información; conciencia; información social.

Technical details

«I begin to understand that stopping is started die».

Santiago Pajares

Title: Coco.

Original title: Coco.
Country: United States.

Year: 2017.

Director: Lee Unkrich, Adrian Molina.

Music: Michael Giacchino.

Cinematography: Animation, Matt Aspbury, Danie-

lle Feinberg.

Film Editing: Steve Bloom, Lee Unkrich.

Screenwriters: Lee Unkrich, Jason Katz, Matthew

Aldrich, Adrian Molina.

Cast: Anthony Gonzalez, Gael García Bernal, Benjamin Bratt, Alanna Ubach, Renée Victor, Ana

Ofelia Murguía.

Color: Color.

Runtime: 109 minutes. Language: English.

Production Companies: Pixar Animation Studios / Walt Disney Pictures.

Synopsis: Miguel is a young man longing to become music legend despite the ban on his family. His passion will take you deep into the «Land of the Dead» for their original family legacy".

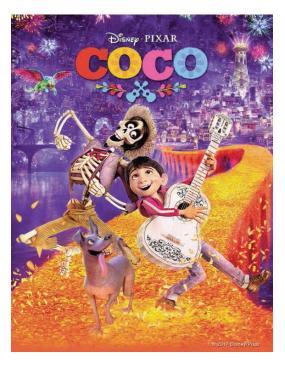
Awards: Two Academy Awards: Best Costume animation and Best Song (2017); Golden Globes: Best animated film (2017); BAFTA Awards: Best animation (2017); Annie Awards: 11 awards including best film, direction and screenplay (2017); Film Critics Circle of New York: Best animated film (2017); National Board of Review (NBR): Best film animation (2017); Critics Choice Awards: Best Animated and Song (2017); Satellite Awards: Best ani-mated film (2017); Producers Guild (PGA): Best animation (2017); Chicago Film Critics Association: Best animated film (2017).

Links:

https://www.filmaffinity.com/es/film893369.

https://www.imdb.com/title/tt2380307

Trailer



American poster.

Introduction

Let us start by asking: Is there life since death? We will say that facing this impossible question cannot produce an answer, at least, we can tell a position. We mention, by way of synthesizing, but at the risk of caricaturing, essentially, two positions: the believer's position and the position of the scientist. Then we produce a particular proposal, alternative, of informational cohort¹.

It can be said, as the believer, yes, effected to: there is life after death; but this response (which is actually a position) appears to be made more «with the heart» that «head»², and can be said as the scientist who does not exist or that you cannot say anything definite (scientifically) against the question. We believe that the profound dilemma this way of believing and doing science (which are positions «against life») is not defining life, why are trapped in stating that death is the «end of life». Moreover, nothing to do. Nothing to do.

Simply review the theory of Lynn Margulis' Endosymbiotic Theory (1938-2011) to understand that life, since it appeared (although «appear» not the verb) above the ground has not ended³. That from the first bacteria that settled on the «inert» world, life has not done, but replicate and stay diversified, and diversify, but only (always continuous) from the beginning to now. In addition «now» means «right now» when we writing these lines. Now they are running the eyes of the reader.

All integrated in one life, and unique sense. A sense of commitment (breakdown of «bypass») versus inert order: natural.

Therefore, there is no dichotomy between the dead (the inert, so lifeless, and so natural) and life: everything is a continuity, a steady stream. No individual or specie (s). Life is a breakthrough in the entropic order of the physicochemical reactions: life is not a bumper car of molecules. Life is not ordered, from information-organized matter. Here we will take an alternative position held in sociobiological theory Informational (TSI) of Pedro Ortiz Cabanillas, developed in Peru from 1960 to 20114. From here, let us define life as information. Life is information. Information is a material structure that has the ability to organize matter. The inert material can be ordered, but it has disorder, chaos, entropy. Information allows some stuff organized. That is, wrap the order / disorder; print a notion of complexity and system.

In the order / disorder of nature, life defies the natural tendency of things (entropy), neguentropicly structure levels of complexity. Life is complex. Before the unsophisticated question: what is the difference between a cat and a stone will say (not responding, is not an answer, it is evident a position), the cat is a complex being, stone do not, and more specifically, humans to appear (although «appear» is not the word) in the world we are a continuity, and from this perspective, birth is only one of the most important circumstantial events in a person's life course, and more specifically: human beings to cease our presence in the world (what is said vulgarly:

when we die). We are, or at least inaugurate: the possibility of continuing to live: no longer with heartbeats and arterial pressures, no longer with psychogalvanic reflexes, no longer with nuclear, cortical, conscious-epiconscious activity, since not as personal speech running; but on the contrary as social information.

Let us stop to consider the above, stop. Just as we define information as the material structure that organizes nature and inaugurates life, let us define now (since there are physically five types of information, the last one is): social information.

Social information is any external physical structure to people, subjects; it takes a form in the course of the last, at least 30,000 years. It could be traced to the beginning 70,000 years ago, but anyway, this principle had an origin, and since then has not stopped succeed: this is called society. That is, society is a historical structure material, with age, which is the grace of the human being «modern». This includes the year 2019 after Christ, even though this is probably not the Jesus Christ of the vulgar world that is governed by a calendar that does not match the birth of Jesus Christ 0 histórico⁵.

When a person dies, then, it is social information. Much of that social information is created in the course of life of the person, always external to it, always out. It is obvious that reflects the existence of an «inside» on the outside, but this dichotomy inside / outside is misleading. Because, in reality, the outside is wrapping. Said in systemic: it involves untouched, society is peripheral subjects. There is no inside because there is an outside (or vice versa); there is no inside and no outside. Society surrounds, but does not touch it is a closed system. The subjects, the people, are also closed, epigenetic and kinetically closed systems⁶.

Consider the following fact: all that can stimulate a human being enters the cellular level. This cellular level a complexity of five levels is entirely closed set. Why should not extrapolate from cell to conduct, because between them there are substantial differences cataclysms. What the

person lives in the course of his personal life, his conscious life, your mental life is a closed society system (in this sense, to become aware, the social must be recreated).

Social information is supra individual, wrap each person, but every person, from the cellular level, can recreate social information and commence the conscious psychic life (which is what differentiates us from macaque, cow, and bird shrewdest and more emotional mammal). This social information exists as a correlate of the highest level of organization of life: conscious psychic information. Nevertheless, what we need here is that when you consciously psychic information that ceases with the death of the person, information social persists (in our words, in our actions and in our works). So until no psychic conscious information but as social information, disappear: either because all recorded terms of the person disappear, either because no one remembers us, that is when we are part of forgetfulness is the disappearance of social information).

Social information is always external to the subject, more specifically: supra individual, that is, it involves it. It is, *stricto sensu*, the memories of others (that is: the neural networks of consciousness in everyone who has known us), in what one other says to another (that is, in the structure of language). Death is a circumstantial event. Since we were born (even before) we began to inaugurate a life that inhabits and inhabits us: in the memories of those who shelter us, and then, in our own productions, such as paintings on the walls when we are children, our first writings, the scribbles, the dotted paths on the letters and numbers, our school notebooks, our paintings, our «mind maps», our diaries, our work platelets, the prizes we have won and lost.

And also in the photos in which we go out, in the portraits and in the paintings, in the musical works we created (imagine Nietzsche and think of his musical compositions), in the poems, in the stories (imagine- It is to Cortázar and think about his prosaic compositions, it is unquestionable that

Cortázar will always be «alive» while his stories are read and probably all his work), Also, in the performances, in the recordings that capture our temporal presence (imagine and think of silent movies: Charlotte is alive forever in her movies), and so on. That is, since we were born, we inaugurated an existence that surrounds us. We call this whole way of life: life as social information.

This life as social information transcends or, we need, can transcend, to death. For which death, like every birth, is only one of the most important circumstantial events in the life course of a person, and more punctually: human beings ceasing our presence in the world (what is said vulgarly: when we die) we are, or at least we inaugurate the possibility of continuing to live.

Intempestive considerations

Certainly, if we look at things like that, a huge incident skips us: it is no longer just that the Alexandria library has been burned; it is something more contemporary, something more substitute. In addition, he says so, many of our ancestors have no life as social information, and this is precisely the movie *Coco* (2017).

For others, this film may be about other things. We celebrate, and affirm that all interpretation is valid. Then we continue: many of our ancestors have no life as social information since we have completely forgotten about them, they do not exist anymore, maybe they died when they died, or maybe they died after they died, and shortly after when there was no one left who remember, that is, imagine and think about them, when all the records of his psychomotor traces, all his letters and portraits, all his photographs, all the records disappeared, i.e. when his presence was finally erased from history. In other words, when social information is over (because social information can be finished: this is no longer called death: death has passed, we call this forgetfulness).

That is why Coco is a time to remember the always-heroic effort to fight against an inevitable

destiny: fight against oblivion. The hero of Coco is not the boy Miguel, nor the dog Dante, nor that collection of eggs called Hector, but an old woman, called Coco (although we do not know his real name, only it is called like this: Coco) who is about to die (and that before his death: blooms). Moreover, with the flowering it breaks the spell of oblivion, and stretches, for at least one more time the collective memory, that is: life as social information (Photo 1).

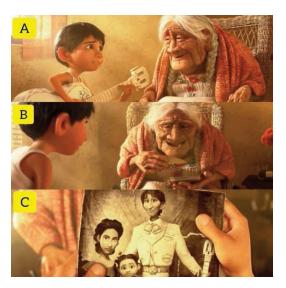


Photo 1. Social Information stretch. A) Miguel plays the song «Remember me» for Mom Coco and she remembers her father Hector used to sing that song.
B) Open a notebook containing poems, letters, and
C) the missing piece, which is the face of Hector, in family picture.

True: every human being can live, but not every human being can survive (to live as social information). Examples of survival: lives as social information: Jesus Christ (no matter if the calendar or the «real»), Buddha, Plato, Socrates, Hippocrates, Descartes, Caravaggio, Darwin, Freud, Mozart (does not matter if the of the effect or the «real»), Cézanne, Marx, Picasso, Hegel, Leonardo, Nietzsche, Kurt Cobain, Frida Khalo, Michael

Foucault, Albert Einstein (et cetera and highlight the presence of the name for that (post) and so on). Moreover, specifically: this is also the reason why the most crapulae continue to live: because we remember them. The best way (if not the only way) to forget is not to remember (let time erase all memory), only then does social information disappear.

Because remembering is imagining and thinking, informationally speaking, is recreating. When we remember Napoleon, we are inventing it, that is: we are recreating it. The same when we remember Walt Whitman, we make it exist more as social information, then it grows, increases

At this time, the question is no longer: is there life after death? We are facing a space devoid of time. Our consideration is many of our ancestors did not have life as social information. What if. Certainly, each of us, charging behind a huge presence forgotten.

So where is our oldest grand grandmother? On the other hand, without going so far: where is the grand grandfather's grandfather? Surely that character, which is no longer, it was forgotten, had his worldview: his way of conceiving love (its night Juanita, clear and half-moon, modesty and adventure, so the song goes somewhere film: «you know already, Juanita ... his eyes are bicolored ... his crooked teeth, and has three ...»), politics, even its own explanatory form of things and their own comfort. Nevertheless, where is it? Answer (and somehow we return to the original question) is not. He is already dead «dead». Already he is forgotten. He disappeared as social information.

It happened what happens to Chicharrón («Chi» in English) in the film, after the last existing only in the world of the dead (Photo 2) drink. Or rather, what was social information (and transcending death of «man») and returned to be natural, inorganic materials structure. Us specify now, social information is the only type of information that exists supra-individual mode, i.e. above («out») of the living system that shelters, which

houses it. Moreover, the living phenomenon has no end but a beginning: that begins with copies of bacteria, then a continuous movement until, in the last 30,000 years (at least) has is established a fifth level of complexity: society.

The first level of information: cellular systems: the second level of information: tissue systems: the third level of information: neural systems: the fourth level of information: psychical systems: the fifth level of information: the consciences systems (which are the only ones who have a correlative material that surrounds them as living systems: social information)⁶. That is, social information exists based on conscious psychic information. That is why we live in our works, for example.

We need a few more points about the film Coco. Certainly not the first time the film-animated cinema seeks inspiration from the Latin America tradition. However, this film shows several differential features: now in terms of image and animation processing, now in terms of the argument and the development of the plot (Photo 2). Coco witnessing an interesting phenomenon. The title does not refer to the main character of the film. Everywhere a film with the image of a boy and his dog (wolf, because dog is not that if dog called «bulldog», then you better call Dante) is promoted. Then we begin to see the movie and in fact, the character is Miguel APA-ent, the child of marketing images (propaganda, promotion that, as here, plays with our affections). Moreover, along with Miguel: Dante, Latin American wolf that existed before the sudden inclusion of Latin America in the globalizing world context. Around Miguel, their parents, and with them, almost to the present age of a mountain, the ancestral figure soon found out is called Coco.

However, when you think about the target audience for this film they are children, who in his filmic probable not yet come to develop a syntagmatic structure but an approach essentially: afective⁷.



Photo 2. Disappearance of Social Information. A)
Chicharrón (also called Chi) berates Hector for his
femur, but realizes it is feel forgotten, B) then asks
you to play your favorite song, finally (C, D, E, F) is
the Chicharrón disappearance process in the eyes of
Hector and Miguel.



Photo 3. Graphics quality animation «Coco». Note the quality and details that characterize the animation, in which we highlight to A) the altar of dead family, and B) the world of the dead.

One of the attributes values of the film is that it shows in detail (the use of modern animation technology): the possibility of experiencing the world of «beyond» the «world of dead» the world that, according to tradition, exists and is inhabited by the dead do we remember (Photo 3).

In our terms, the world that evidently is alive (at least as organized and legislated as the world of the living) is in reality, life and social information. Beyond the celebration of the dead, a fact that plays a key role in the plot of the film, let's stay with the following fact, everyone who dies, according to the phrase structure of the film, we repeat all that dies, goes to the land of the dead, and remains there until (in life) all forget, or what is the same: no one will remember. This is recorded in the film with total mastery. «Coco» shows that life in the earth of the dead is not an eternal life; i.e. our life after death depends on the postponement of oblivion.

Say more than Chicharrón: character, whom nobody remembers, and is about to disappear from the land of the dead (in our terms: it is about to disappear as a social information). Hector then asked me to sing your song preferred. Then this intones the rhythm of a soft guitar hymn to Juanita, and finally, at the climax of the scene, shown Length, Chicharrón says last to die forever in the film (which by-nobody remembers, nobody imagines, nobody thinks of him), «I move my memories». As by telling do: as we live, we live, we move our lives, and dying live only when we remember when we move those who imagine us and think, who recreate us as social information.

Conclusion

Said in information: when we are born, we set up a life that surrounds us. There are two aspects of the same side. A social life information and life as a conscious psychic system (mental, if you want to use a current term). When dying, conscious life is over. However, while we live is- this conscious life may reflect supraindividually. We have said

that this reflex can be our pictures, our pictures, our poems, our letters, our pictures, our videos, our writings, that is, in short, do remembers of other and our testimonies. If death represents the cessation of conscious life, time represents the same independence, the birth of life entirely as social information.

Finally, stop responding again to our initial question, this time in terms of the film; let us say that indeed, yes, there is life after death. This is because when we appear in the world began to live as social information, then born, and our lives as social information grows in complexity. Until death happens to us and ends (although «Ending» is not the word, fade is not finished) our conscious lives (our creative life of social information). Then, death is birth, the independence of our life as social information (in terms of the film: dying we are born as social information, social information is, in part, the land of the dead, rather, the land of the dead Coco is social information). Whenever we remember, we create social information. If we remember, we are creating Buddha as social information, re-creating, and this we do exist. With each biography to be written about Chaplin will be recreating social information, like your movies whenever you look, we are recreating as

social information. Therefore, we do exist, we do live after death.

References

- 1. Ortiz P. Psicobiología Social (Tomo 1). 1 Ed. Lima: Fondo Editorial de la Universidad de Ciencias y Humanidades; 2017.
- 2. Chakraborty R, El-Jawahri AR, Litzow MR, Syrjala KL, Parnes AD, Hashmi SK. A systematic review of religious beliefs about major end-of-life issues in the five major world religions. Palliat Support Care. 2017; 15(5): 609-22.
- 3. Margulis L. Symbiotic Planet: A New Look at Evolution. New York: Basic Books; 1998.
- 4. Contreras-Pulache H, Moya-Salazar J. In Memoriam: Pedro Ortiz Cabanillas (1933-2011). Pan J Neurops. 2019; 13(2): 187-8.
- 5. Rigby G. The God Secret. New York: Eloquent Books; 2009.
- 6. Ortiz P. El Sistema de la Personalidad. 2ed. Lima: Fondo Editorial de la Universidad de Ciencias y Humanidades; 2016.
- 7. Contreras-Pulache H. Neurología Fílmica: el descubrimiento del cine a lo largo de la vida. Lima: Fondo Editorial de la Universidad de Ciencias y Humanidades; 2016.



Hans Contreras-Pulache. Es Médico Cirujano por la Universidad Nacional Mayor de San Marcos. Se ha especializado en epidemiología, salud pública, gerencia social y gestión pública. Se ha hecho responsable, desde el 2011, de toda la obra académica de Pedro Ortiz Cabanillas. Como parte de este trabajo editorial ha publicado: «La explicación científica del hombre» (2013), «El sistema de la personalidad» (2016), «Psicobiología social» (2017) y «La explicación informacional» (2019). Su obra personal ha principiado con «Neurología Fílmica» (2016).



Lucia del Carmen Beatriz Gomez Saenz. Estudiante de segundo año de la facultad de Medicina Humana. Egresada en Advanced English del Instituto Cultural Peruano Norteamericano (ICPNA) en el 2016. Certificada en Methodology for EFL teachers en el año 2017.

COCO (2017): AN INFORMATIONAL APPROACH ON LIFE AFTER DEATH

HANS CONTRERAS-PULACHE; LUCÍA GOMEZ-SAENZ; ANIE S. SORIANO-ABAL; ALONSO ZORRILLA; JEEL MOYA-SALAZAR



Anie Susi Soriano Abal. Estudiante de segundo año de la carrera de Medicina Humana. Titulada de la carrera de Enfermería Técnica en el Instituto Superior Tecnológico San Pablo (2012). Interesada por la neurología e investigación científica. Actualmente laboro en proyectos de ayuda social con niños y adolescentes.



Alonso Jean Pierre Zorrilla Chávez. Estudiante del segundo año de la facultad de Medicina Humana. Actualmente representante de televentas para movistar Argentina en Konecta. Apasionado por el deporte.



Jeel Moya-Salazar. Tecnólogo Médico en la especialidad de Laboratorio Clínico y Anatomía Patológica, y es egresado de la Maestría en Ciencias y estudiante de la Maestría en Salud Publica. Ha colaborado en proyectos de investigación en la Samara University (Rusia), Stanford University (US), y Universidad de Buenos Aires (Argentina). Es investigador asociado de postgrado de la Universidad Privada San Juan Bautista (Perú), integrante de The African Society for Laboratory Medicine y The Mars Society.