A 2022 Medical Terminology Update

with Pablo Mugüerza

Friday, October 14, 16:45 PT

As you may know, I am a physician and medical translator. My first presentation is more oriented to my side as a physician, and the second to my side as a linguist. But if any medical emergency arises during either presentation...feel free to call ANOTHER doctor: I have not practiced for many years.

Terminology is not what it used to be

Although terminology itself (as a scientific discipline) is undergoing a revolution thanks to **computational linguistics** and **text mining**,

we will talk about them on another occasion. But believe me when I tell you that they are the ones that bring the future to our profession.

Not my first time!

I have been making presentations on medical translation for more than 10 years. This is not the first time I will give an update on medical terminology.

CRISPR and T-CAR cells

Some translators who attended these lectures heard for the first time about CRISPR or T-CAR cells, for example, which today are everywhere.
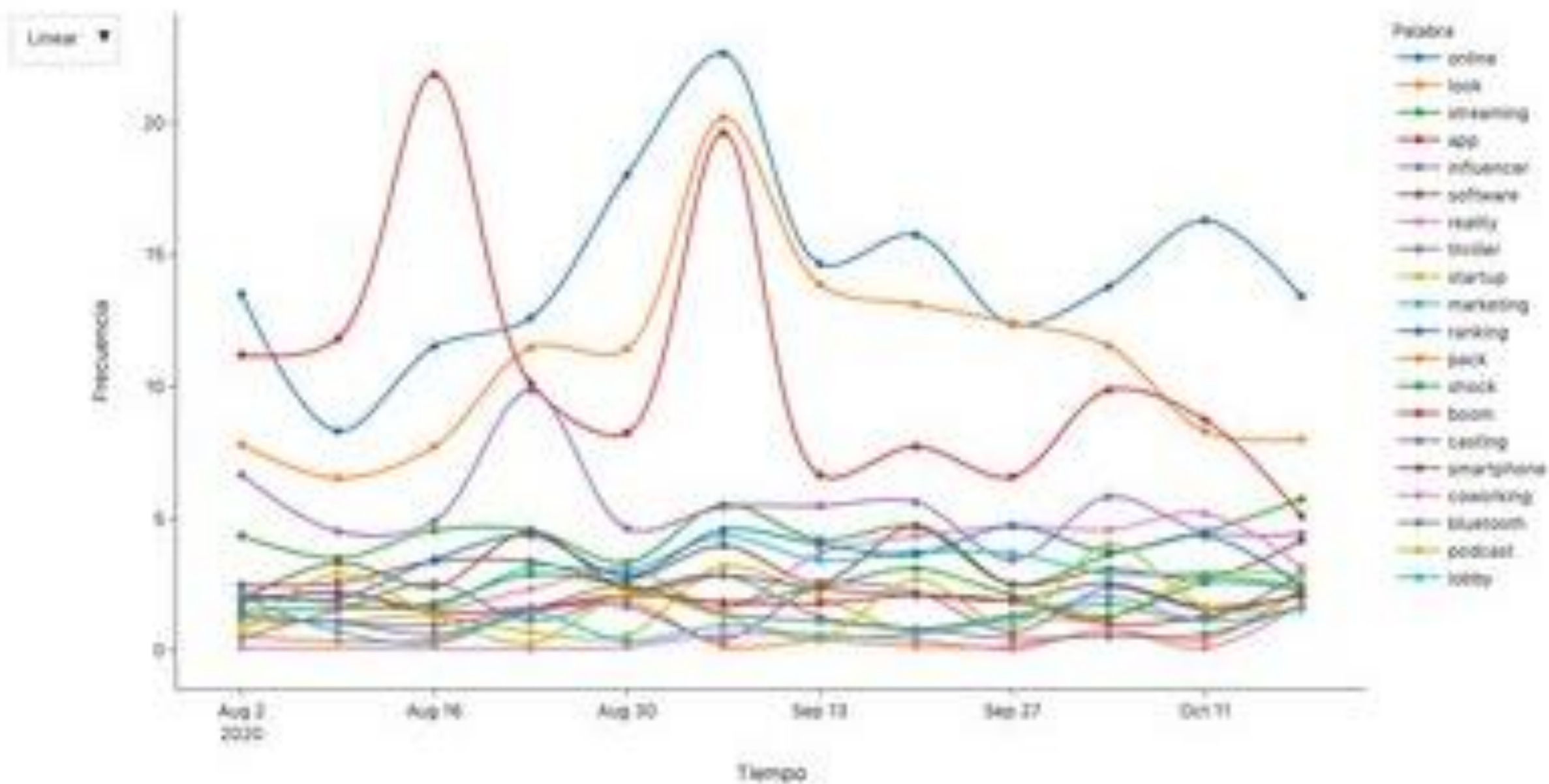
New terms and the end of this presentation!

Nowadays we have new medical terms every single day. In preparation for this presentation I stopped collecting them last September 30, but since then a few have appeared. Maybe one or two will emerge somewhere while we are here. We have a scientific estimation: 20 new anglicisms per day

This were the 20 more frequent anglicisms from Aug 2 to Oct 11 2020 (frequency per each 100.000 words).

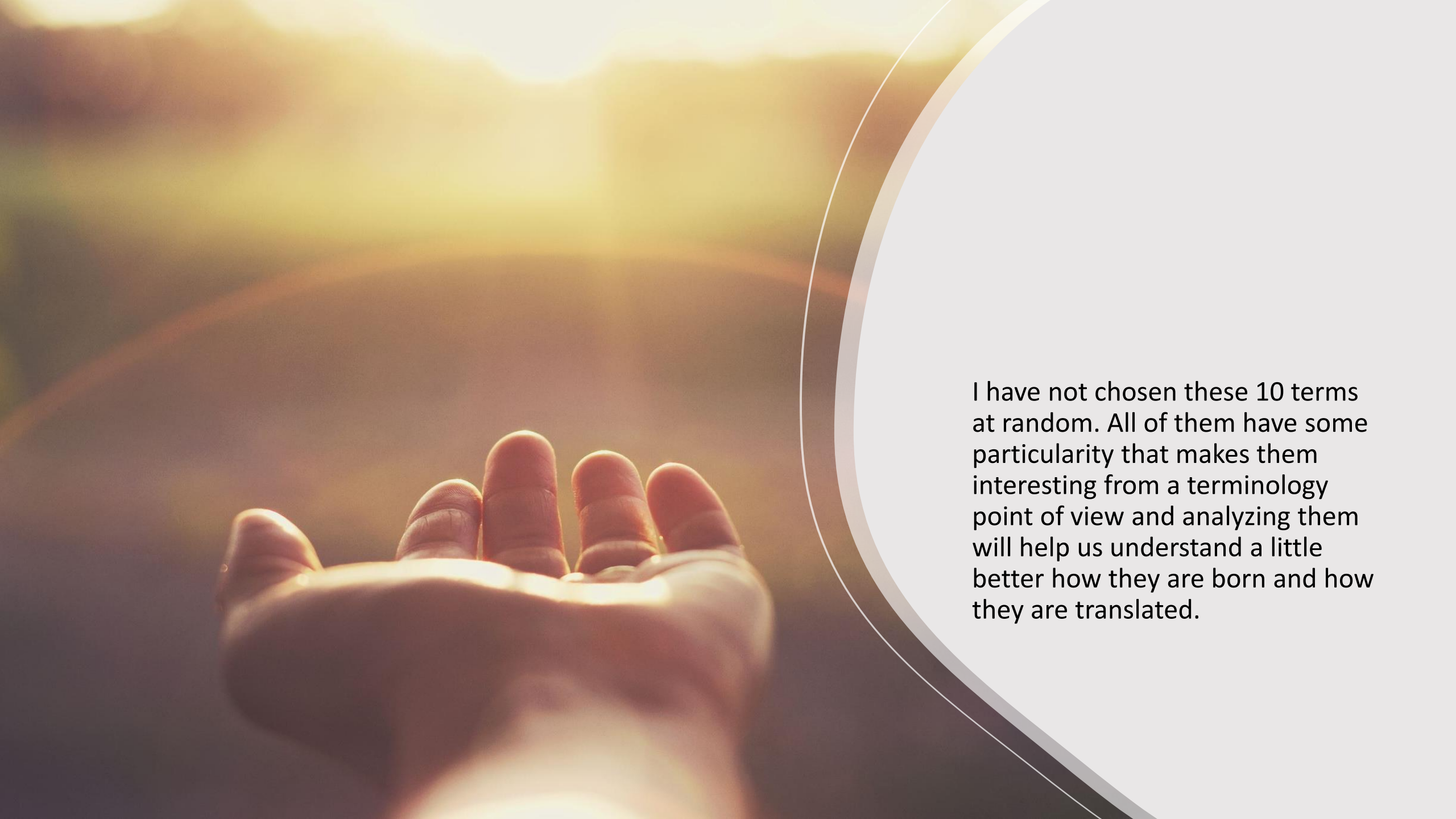|	
Online	Ranking
Look	Pack
Streaming	Shock
App	Boom
Influencer	Casting
Software	Smartphone
Reality	Coworking
Thriller	Bluetooth
Startup	Podcast
Marketing	lobby

As a reference: let's take a look at the largest and most important existing English-to-Spanish medical translation dictionary.

Version 3.01 (March 2022) had **47 334** entries, and

version 4.01 (September 2022) has **60 757** entries.

I don't think we have time to analyze those 13 423 new entries. I have selected some and added others that appeared while I was working in the last weeks.

I have not chosen these 10 terms at random. All of them have some particularity that makes them interesting from a terminology point of view and analyzing them will help us understand a little better how they are born and how they are translated.

Ways of incorporating new terms

There are at least 13 known mechanisms for new words to be born (back formation, compounding, conversion, eponyms, onomatopeia, etc.). Today we will see different cases of

Derivation

Repurposing

Loanwords

Error

Palabras del Egeo, by Pedro Olalla

The noise made when scratching the surface of stone, wood or leather, gave rise to the onomatopoeia [hraw]; from that root comes our word grabar, *to record*. That voice still dwells in the verb [harasso] (which is grabar y rascar, *to record* and *to scratch*), in the first sunlight that tears the veil of night [hárama] [haraugé] and in the very notion of character [haraktér], which is something we carry engraved in our soul and our genes. From that remote voice also comes the verb [grafo] escribir, *to write*, and the noun [gramma], letra, *letter*.

1. Aquamation: derivation (a strict neologism)

Cremation: late 19th century (as *cremation*): from Latin *cremare* 'burn'.

With aquamation, or "alkaline hydrolysis", **the body of the deceased is immersed for three to four hours in a mixture of water and a strong alkali, such as potassium hydroxide, in a pressurised metal cylinder and heated to around 150C.**

'Hidrólisis alcalina' in Spanish, but also Why not 'fluidification '?

2. Background risk: loanword

In **behavioral economics**, a background risk is a risk that cannot be avoided or insure, a risk that an individual cannot diversify or avoid/. Probably its use in medicine is a loan from this context.

In **epidemiology**, baseline risk is the incidence of the disease, or outcome of interest, in the population. My proposal: 'riesgo basal'. NOT 'riesgo inicial'.

In **medicine** it usually makes reference to genetic risks. My proposal: 'riesgo de fondo'

2. Background risk: loanword

EXAMPLE: The estimated background risk of major birth defects is 6-10% in women with pre-gestational diabetes with a glycated haemoglobin (HbA1C) >7 and has been reported to be as high as 20-25% in women with HbA1C >10.

Background risk is not to be confused with risk background: bBackground risk is a type of risk, in which background qualifies risk.

Risk background, then is a type of background (such as medical, surgical or lifestyle background).

Background risk is not to be confused with risk factor: something that increases the chance of developing a disease.

Risk factors affect a whole population; background risks are personal risks.

3. Cell-in-cell: repuporsing

The cell-in-cell phenomenon refers to the presence of one cell within another.

This phenomenon (endosymbiosis) can occur

1) in tumor cells: the phenomenon is associated with the prognosis of cancers: it promotes tumor progression in most situations, but it can also inhibit tumor progression.

Transient cell-in-cell formation underlies tumor relapse and resistance to immunotherapy

2) in non-tumor cells. Mitochondria formed when bacteria capable of aerobic respiration were ingested; chloroplasts formed when photosynthetic bacteria were ingested. They eventually lost their cell wall and much of their DNA because they were not of benefit within the host cell. Mitochondria and chloroplasts cannot grow outside their host cell.

4. Ontology (and folksonomy): a new definition for a more-than-classic term (repurposing)

The Neo-Latin term "ontology" comes, on the one hand, from the Ancient Greek ὄντος (ontos, "being, that which is") and, on the other hand, also from the Ancient Greek -λογία (logíā) "study".

4. Ontology (noun):

The branch of metaphysics dealing with the nature of being (from Parmenides to Schopenhauer)

A cross-connected network of relevant concepts, which makes explicit, classifies and organizes the assumptions and terms of the domain in question" (Schalley, Musgrave, & Haugh, 2014).

Definitions of ontology in the linguistic context

A set of concepts and categories in a subject area or domain that shows their properties and the relations between them

In communication sciences and artificial intelligence, a network or data system that defines the existing relationships between the concepts of a domain or area of knowledge.

Short thumb phalanges
Abnormality of terminal thumb epiphysis
Abnormality of the end part of the outermost bone of the thumb
Abnormality of end part of thumb innermost long bone
Absent end part of thumb innermost long bone
Bracket shaped end part of thumb innermost long bone
Cone-shaped end part of thumb innermost long bone
Enlarged end part of thumb innermost long bone
Fragmentation of end part of thumb innermost long bone
Irregular end part of thumb innermost long bone
Increased bone density of end part of the innermost bone of the thumb
Small end part of thumb innermost long bone
Speckled calcifications in end part of thumb innermost long bone
Triangular end part of thumb innermost long bone
Absent end part of thumb outermost long bone
Bracket shaped end part of thumb outermost long bone
Cone-shaped end part of thumb outermost long bone
Cone-shaped terminal thumb phalanx epiphysis

5. Payload (an old term acquiring a new meaning – away from etymology)

Originally, this English term referred to the authorized weight ('carga útil') that can be carried by a truck, ship, aircraft or other vehicle.

Later, it expanded its semantic scope to include the explosive load carried by a ballistic missile.

Until not so long ago, all drugs had the same components: one or more active pharmaceutical ingredient (API, active substance, bulk drug, bulk drug substance, drug substance or verum) and excipients. Nothing else.

However, in the field of nanopharmacology and pharmacotherapy, it is increasingly common for "the biologically active molecule of a compound drug" to contain "another molecule that acts as a vehicle".

In this particular case, the active ingredient is called **payload**, which an author proposes to translate as "active load" (carga activa).

My proposal: molécula de transporte, o transportadora; transportador (carrier).

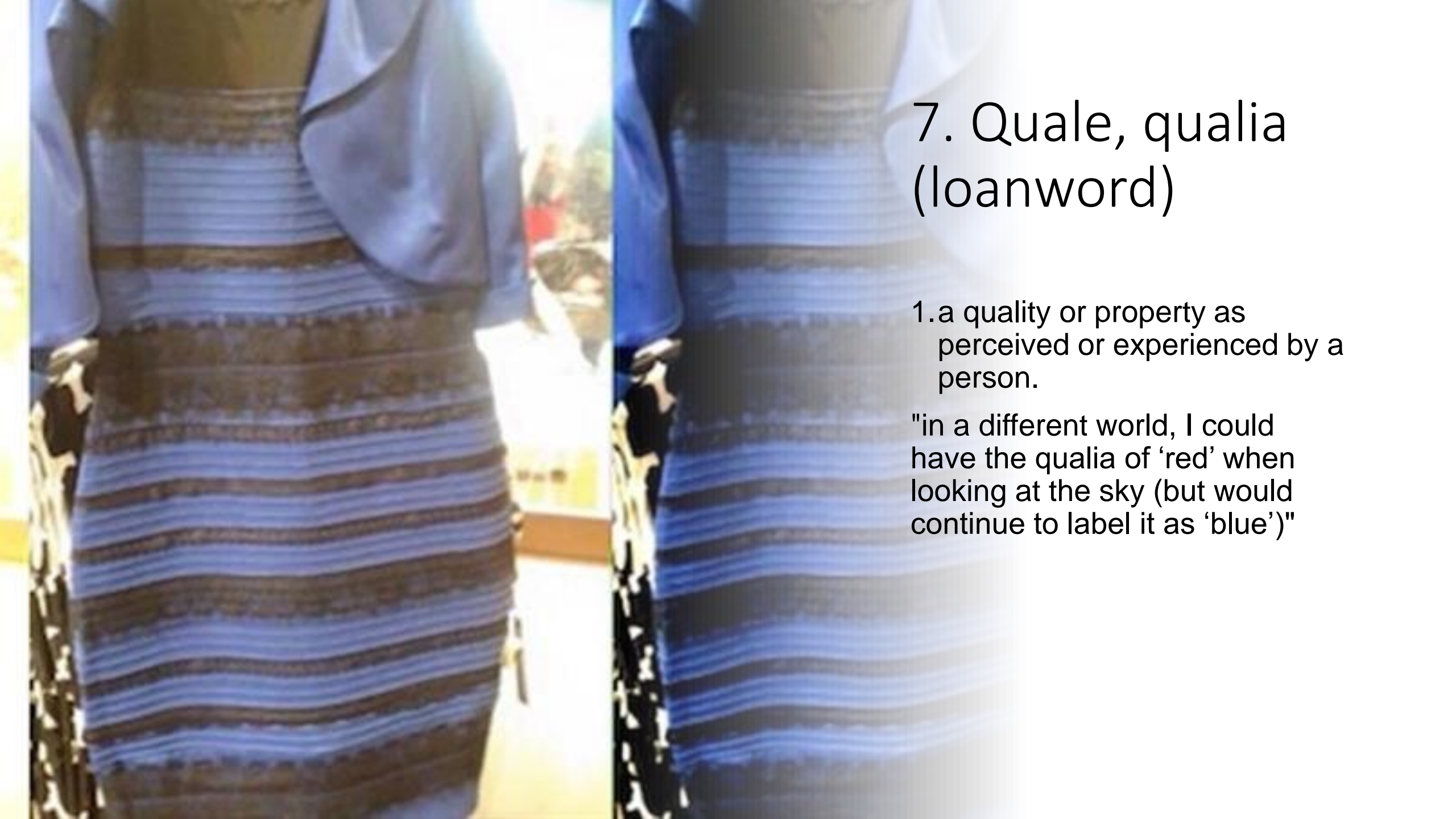# 5. Payload (an old term acquiring a new meaning – away from etymology)

EXAMPLE: The main objective of this work was to demonstrate which kind of payload is the suitable choice for antibody-drug conjugates directed to widely expressed tumor-associated antigen (https://pubmed.ncbi.nlm.nih.gov/35624189/) .

6. Peritoneal implant (Sep 2019; error)

Incredible as it may seem, the term peritoneal implant may not correspond to any type of implant (device, apparatus, tissue or substance placed or deposited in the peritoneum), but to a peritoneal metastasis (a peritoneal localization of metastasis).

EXAMPLE: serous tumor implants are deposits of ovarian serous tumors on peritoneal surfaces, lateral pelvic gutters, right side of diaphragm or omentum, usually close to primary.

7. Quale, qualia (loanword)

1. a quality or property as perceived or experienced by a person.

"in a different world, I could have the qualia of 'red' when looking at the sky (but would continue to label it as 'blue')"

9. Soil (my personal contribution; Sep 2018)

- It can function as a noun or as a verb:
- 1 [s.] As a noun, it has two frequent meanings:
- (a) soil, earth, ground. ● native soil (native soil, patriotic soil), rich soil (fertile soil [or ground]; as opposed to poor soil, bad soil), soil-borne fungi (soil fungi; but soil-borne diseases, soil-borne [or soil-borne] diseases, or, what is the same, soil-borne), soil science (soil science), soil-transmitted helminthiasis (geohelminthiasis).
- (b) [US] dirt, as a synonym for soiling. ● visible soil (visible soiling).
- 2 [v.] As a verb, to soil usually corresponds to soiling or soiling (also 'soiling' or 'soiling' in the euphemistic sense of involuntarily defecating on clothing or bedding). ● soiled dressing, soiled linen, soiled sanitary napkin or soiled sanitary pad
- Soiling: suciedad. ● *heavy soiling* (mucha suciedad).
  2 encopresis o incontinencia fecal, depending on context.

10. Tokenize, to (repurposing)

In 2019 the RAE advised to wait for the anglicism "token" to settle down. I'm afraid the RAE has much more patience than the users of the language.

To tokenize patients is to anonymously link multiple disparate data sets together at the patient level, providing manufacturers with the most comprehensive view of the patient journey while maintaining a minimum risk of re-identification. https://bit.ly/3Me5xzO

But you can also tokenize healthcare, for instance:
https://risk.lexisnexis.com/healthcare/healthcare-tokenization

COMPUTING substitute a randomly generated identifier for (a sensitive piece of data) in order to prevent unauthorized access."sensitive data has been tokenized or strongly encrypted"

LINGUISTICS break (text) into individual linguistic units."our text gets tokenized into terms"

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Thanks for attending!

Any questions?