

"Some etymological, lexical and stylistic specificities of the French medical vocabulary"

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Abstract

A new concept has emerged on the linguistic morrocan scene known as the technoelect. by "technoelect" we mean the set of lexical and discursive uses specific to a sphere of human activity. Claude Hagège was one of the first to use this term¹. We should state that the technoelect is not synonymous with terminology or jargon. The technoelect contains them but cannot be reduced to the lexical level alone. The technoelect is not, like terminology, essentially paradigmatic. Far beyond that, It contains complex units, called complex lexies² or synapses³. In this language, all linguistic domains (phonetic, syntactic, morphological, semantic, lexical) are mobilized in technoelect language productions, with a prevalence of the lexical aspect. In this article, we will present some specificities of the medical technoelect, illustrating them with concrete examples.

Keywords: technoelecte, medecine, terms, medical vocabulary.

INTRODUCTION

The evolution of medical terminology has been marked by the historical development of medicine and surgery. Medical terms have been translated from Greek to Arabic, from Arabic to Latin, and from Latin to French. The coexistence of these different languages, as well as that of various currents of The different systems of thought (Aristotelian or Platonic) have contributed to make it difficult to establish a univocal medical vocabulary. The concomitance of several linguistic systems has exposed us to a multiplicity of synonyms. Our medical language has borrowed their formulations from the three languages, just as it has constructed periphrases or metaphors to represent the concepts.

I- Etymology:

1. Words of Arabic origin :

Greek medicine was translated into Arabic. Thanks to translation, the Greek texts are preserved today in their Arabic versions. More than twenty works of Galen, the commentaries of Hippocrates and the treaties of Paul of Aegina. But this translation was undertaken from Syriac and very little from Greek to Arabic. The translators had problems interpreting the Greek into Syriac. In addition, they were responsible for translating Syriac and Persian medical works into Arabic. Thus, the translators were faced with the task of creating Arabic terms for the new concepts¹⁰⁰ brought by foreign medicine: Greek, Persian and Syriac. The translation of Galen's works into Arabic began when official medicine was dominated by Syriac physicians in the ninth century¹⁰¹. This task was carried out by unayn ibn Ishaq and his students⁴.

Arabic word borrowed from Greek	French translation
الكيمياء	alchemy / chemistry

¹ Cusin-Berche F., *De la langue ordinaire au(x) technoelecte(s)*, in J. Anis et F. Cusin-Berche (dir.), Difficultés linguistiques des jeunes en formation professionnelle courte. Diagnostic et propositions de remédiation, Actes du Colloque tenu à Paris X-Nanterre, 19-20 et 21 décembre 1994.

² MASSAOUDI, L., *langue spécialisée et technoelecte : quelles relations ?*, in Meta : journal des traducteurs / Meta: Translators' Journal, vol. 55, n° 1, 2010, p 132. Consulté en ligne sur : <https://core.ac.uk/download/pdf/59333899.pdf> le 15/03/2019.

³ Descamps et Phal définissent le vocabulaire technique comme suit : « Le vocabulaire technique est spécifique (propre à une science ou à une technique donnée). C'est essentiellement un vocabulaire de désignation qui fournit les nomenclatures, les terminologies... » p 12.

الكحول	alcohol
طبيب	doctor
جرد	Jarde or Jardon
جالب	Julep
قلي	Kali
قرمز	Kermès
ختمية	Ketmie
لعوق	Looch
سنا	Séné
شراب	Syrup
السوداء	Soda
طلق	Talc
الهند تمر	Tamarind

Table 1: Some words of Arabic origin⁴

Greek gave rise to more than two thirds of the medical vocabulary.⁶ In 440 B.C., Hippocrates and his disciples wrote 72 works based solely on the observation of the sick because, by religious prohibition, no human dissection was possible. If this censorship prevented It was not only a way to make progress in anatomical knowledge, but also to develop a great sense of observation in the practitioners, which is the basis of the current clinical examination.

Doctors used words from everyday language to create a living medical vocabulary. They grouped together several ideas or "images" to be described by a single term.

For example, the word myodeopsia, designating the appearance in the visual field of small spots due to shadows, projected on the retina, of floating elements of the vitreous body, is explained by muia " fly ", eidos " appearance " and opsia " vision ". This term is often replaced by "Flying flies".

The table shows some words of Arabic origin, as an indication. Some of them are used nowadays.

Words of Latin origin :

Latin is an Indo-European, inflectional language, which means that nouns, adjectives and pronouns are declined. In other words, they adopt a different inflection, or even a different form in the case of certain pronouns, not only to mark gender and number, as in French, but also to indicate their function in the sentence (subject, direct or indirect complement, determinative, circumstantial...). This characteristic has made it possible to create scientific terms by composition. Prefixes and suffixes constitute a significant part of the medical lexicon, and make it possible to refine and specify the meaning of these terms.

If they are integrated into the French language, they follow its rules.

Latin term	meaning
coxa vara	very closed femoral neck-body angle
coxa vaga	very open femoral neck-body angle
Genuvalgum	leg out of alignment with the axis of the femur
Genuvarum	leg off center in relation to the axis of the femur

⁴ LEMRABET, Driss, in *introduction to the history of Maghrebi mathematics*, 2nd edition

ictus (apoleptic)	Sudden coma usually due to cerebral hemorrhage.
in vitro	means an examination done on a biological sample as opposed to "in vivo" on the living
Kraurosisvulvae	variety of general atrophy
Naevus	variety of benign skin tumor
patella bipartita	congenital anomaly of the limpet, divided into two
pretium doloris	injury related to the pain felt; it is a legal and forensic term
Pterygiumcolli	congenital anomaly of the base of the neck

scapula alata	congenital anomaly of the scapula region
sex ratio	ratio of the number of men to the number of women
Situsinversus	total inversion of the viscera
Speculum	endoscope for the ear, nose or cervix
Truncusanteriosus	common trunk artery, congenital anomaly
Valgus	deviated from the axis of the body
Varus	deviated inwards towards the axis of the body

Table2: some words of Latin origin⁵ &⁶

The table shows some words of Latin origin that are commonly used today in the medical lexicon.

Words of Anglo-Saxon origin:

For the past 60 years, the medical language has seen a strong increase in foreign lexicon, especially Anglo-Saxon. In most cases, the terms introduced have to be Frenchized or replaced by equivalent terms. Here are some examples of terms with their equivalents:

⁵ QUERIN, S. , *Dictionnaire des difficultés du français médical*, Nouvelle édition revue et agrémentée, Maloine, 2006, p.185

⁶ Danielle DE CLERCQ-Douillet and directed by Philippe Delsate for the Centre de Documentation pour l'Enseignement Secondaire et Supérieur, *Les, ETYMONS GRECS ET LATINS DU VOCABULAIRE SCIENTIFIQUE FRANÇAIS*.

Abstract	Abstract
Addiction	Addiction, or drug addiction
Alternating	Alternating mattress
anti-sludge	Anti-platelet agent
Auricularstandill	Atrial palsy (a type of heart disorder)
Banding	Strapping
birth control	Birth control
by-pass	Bypass, shunt, anastomosis
border-line case	Borderline or frontier case
check-up	Health check-up

Clearance	Clearance
Crushinjury	Crush injury
double blind test	Double-blind method
drill biopsy	Drilling-biopsy or biopsy by drilling
dumping syndrome	Hunting Syndrome
feedback	Self-regulation, shrinkage
germ free	Anoxic
grasping reflex	Infant's grasping reflex
Incidentaloma	Fortuitoma, tumor discovered by chance
Kissingulcer	Mirror Ulcer
Facelift	Remodeling or de-wrinkling
Monitoring	Monitoring
Nursing	Depending on the case: care, nursing, mothering...
Overdose	Overdose
pace-maker	Cardiostimulator
family-planning	Family planning

releasing factor	Liberin
Screening	Screening
Sideeffect	Often undesirable side effect
Spotting	Microrragia
Squatting	Squatting
Stipping	Eveinage or phlectomy
Thrill	Tremendous
Trapping	Trapping
wanderingpace-maker	Unstable control
Wheezing	Whistling

Table 3: English terms and their accepted equivalents⁷

These terms are indicative and not exhaustive, as the list is long.

The medical term has a heterogeneous etymology, which can be highlighted by the presence of a good number of prefixes or suffixes, presented in the following point.

Prefixes, suffixes:

Medical terms are composed of a radical, possibly associated with a prefix or a suffix.

The radical is the root of the word, e.g. the radical pharmac(o) refers to medicine, in pharmacy, pharmacology, etc.

The prefix is an element that is placed in front of the word, and modifies its meaning. Example: apyretic (not high temperature).

The suffix, is an element that is placed after the word, modifies its meaning. Example: pharyngitis (inflammation of the pharynx). Here are examples of prefixes and suffixes, according to their etymology with examples:

Prefixes of Greek origin:

French prefixes	Greek prefixes	direction	examples
a-	A	privé de	acéphale; athée
an-	An	sans	analphabète; anarchie
ana-	Ana	de bas en haut, à l'inverse	anachronisme; anastrophe
anti-	Anti	contre	antialcoolique
apo-	Apo	hors de, à partir de, loin de	apostasie; apostrophe; apothéose

⁷Ibid, p 186-187.

archi-, arch-	Archi	au plus haut degré qui commande, qui est au-dessus	archifou; archimillionnaire archevêque; archidiacre
cata-	cata	de haut en bas, complètement	cataracte; catastrophe
di(a)-	dia	à travers, séparé de	diagonal; diaphane; diorama
dis, di	dis	deux fois	diptyque, disyllabe
dys-	dys	avec difficulté	dysenterie; dyspepsie
ecto-	ecto	en dehors	ectoplasme
en-	en	dans	encéphale; endémie
end(o)-	endo	à l'intérieur	endocarde; endocrine
épi-	epi	sur	épiderme; épizootie

Table 4 : some prefixes of Greek origin⁸ & ⁹

Here are some prefixes whose origin is Greek, with their French counterparts, as well as their meanings and some examples. And we can already see their importance in the medical lexicon.

Prefixes of Latin origin:

French prefixes	Latin prefixes	direction	examples
ab-, abs-	ab	loin de, séparation	abduction; abstinence
ad-	ad	vers, ajouté à	adhérence; adventice
anté-	ante	avant, précédant	antédiluvien; antépénultième
bis-, bi-	bis	deux	bipède; biplace
circon-, circum-, circum-	circum	autour	circonlocution; circumnavigation
co-, col-, com-, con-	cum	avec	coéquipier, collection; compère; concitoyen;
contra, contre	contra	contre, en face de	contradiction
dé-, dés-, dis-	dis	cessation, séparation	désarmer, dépolir, disjoindre, dissymétrie
déci-	deci	dix	décimale; décimètre
ex-	ex	hors	expatrier; exporter
ex-	ex	qui a cessé d'être	ex-député; ex-ministre

⁸ <http://cm1cm2.ceyreste.free.fr/paulbert/prefix.html>, consulté le 2/12/2018.

⁹ Ibidem, p 139.

extra-	extra	extrêmement hors de	extra-fin extraordinaire; extra-territorialité
in-, im-, il-, ir-	In-, im-, il-, ir-	1. dans	infiltrer; insinuer
		2. privé de	illettré; impropre; inexact; irresponsable
inter-	Inter-	entre	interallié; interligne; international
intra-	Intra-	au-dedans	intramusculaire; intraveineux
juxta-	Juxta-	auprès de	juxtalinéaire; juxtaposer

Table 5: prefixes of Latin origin.^{10 & 11}

Here are examples of Latin prefixes, with their French counterparts, and examples of their uses in the French language in general, and in the medical (scientific) lexicon in particular.

Most French words have a Latin origin. They come from the popular Latin of the Roman armies that conquered Gaul in the 1st century B.C. (popular formation); others were constructed later, over the centuries, from classical Latin (learned formation).

Suffixes of Greek origin:

French suffixes	Greek suffixes	direction	examples
-algie	-algie	douleur	névralgie
-archie	-archie	commandement	monarchie
-mark	-mark	qui commande	triéarque
-theatre	-four	qui soigne	pédiatre
-bare	-bare	pression	isobare
-bole	-bole	qui lance	discobole
-carp	-carp	fruit	péricarpe
-scene	-scene	récent	éocène
-cephalon	-cephalon	tête	dolichocéphale
-cosm(o)	-cosmo	monde	microcosme
-crate	-crate	qui a le pouvoir	aristocrate, bureaucrate

Table 6: Suffixes of Greek origin.^{12 & 13}

We will note there that there are other words, these are as an example.

Suffixes of Latin origin:

French suffixes	Latin words	direction	examples
-cide	-cide	qui tue	infanticide
-cole	-cole	relatif à la culture	vinicole, viticole
-culteu	-cultor	celui qui cultive	agriculteur

¹⁰ ibid

¹¹ Ibidem, p 139

¹² ibid

¹³ Ibidem, p139

r			
- cultur e	-cultura	art de cultiver	horticulture
-fère	-ferre	qui porte	mammifère
-fique	-facio	qui produit	frigorifique
- forme	-forma	qui a la forme de	cunéiforme, filiforme
-fuge	-fuga	qui fuit ou fait fuir	transfuge, vermifuge
-pare	-parere	qui enfante	ovipare
-pède	-pes	qui a des pieds	bipède, quadrupède
-vore	-voro	qui se nourrit	carnivore, herbivore

Table 7 : suffixes of Latin origin¹⁴

Here is a non-exhaustive list of Latin suffixes, commonly used in the French medical language. The original meaning is kept, the morphology of the term is preserved and/or slightly modified.

Abbreviations and acronyms :

Like all technical languages, medical language is a heavy consumer of abbreviations, acronyms and acronyms. Two kinds of abbreviations can be identified : either a word that is a little long that is shortened, usually by deleting the end; or a word created by juxtaposing the first letter (the initial) of each word forming an expression that would be too long to state, a form called abbreviation.

Apart from acronyms and abbreviations, abbreviated forms of common medical vocabulary are frequently used, such as "app" for appendicitis, "cardio" for cardiologist or cardiology, "coelio" for laparoscopy, "ech" for ultrasound, "neo" for neoplasm (synonym of cancer), "réa" for resuscitation or resuscitator, "scan" for scanner, etc. Abbreviated forms are used much more often than full words, but only in spoken language, never in writing. As for acronyms, when the new word is pronounced letter by letter, it is an acronym; each letter is capitalized. Here are two common examples : HIV is Human Immunodeficiency Virus; an MRI is Magnetic Resonance Imaging.

When the word thus created is pronounced syllabically, forming a real word, it is an acronym: AIDS or Laser are acronyms (see below).

It should be noted that each medical discipline has its own acronyms¹⁵, and that it can happen that two specialties use the same acronyms with a completely different meaning; for example, a gynecologist will use abortion as a voluntary interruption of pregnancy, while a cardiologist will use it as left ventricular insufficiency. But it also happens that some specialties use abbreviations that are only known in their specialty.

All of this can lead to confusion, sometimes unfortunate, or misunderstanding¹⁶.

In an acronym, the letters that form it are pronounced syllabically, as in AIDS (Acquired Immune Deficiency Syndrome) or LASER (Ligh Amplification by Stimulated Emission of Radiation). However, it is customary to write "laser" without a capital letter, as if it were a noun and not an acronym.

Genre :

According to the French Ministry of Foreign Affairs' Gender and Development strategic orientation document (2007):

*"The gender approach is based on the analysis of the processes that differentiate and hierarchize individuals according to their sex (...=) as a concept, the gender approach analyzes the power relations between women and men based on the assignment of socially constructed roles according to sex. (.....) As an objective, the gender approach promotes equal rights and an equitable sharing of resources and responsibilities between women and men."*¹⁷

Gender is not sex. It refers to a function that should not be linked to the sex of the person performing the function.

There is no general rule, for French as for other languages, however, we can remember that :

Nouns ending with a silent "e" are often feminine nouns. Example: diet, constraint.

Are usually male:

The names of the bones. Examples: tarsus, metatarsus, elbow, wrist, forearm, etc. Exception: patella, anvil, scapula)

¹⁴ Ibidem, p 139

¹⁵ Ibid, p 178

¹⁶ BOSSY,J., *La grande aventure du terme médical, filiation et valeurs actuelles*, Montpellier, Sauramps, 2015 , pp. 58- 61.

¹⁷ http://www.adequations.org/IMG/article_PDF/article_1035.pdf

The names of the muscles. examples: deltoid muscle, tibial muscle, sternocleidomastoid muscle.

Are usually female:

The names of the arteries (exception: the basilar trunk, the brachiocephalic trunk)

The names of the veins (exception; the coronary sinus, the cavernous sinus...)

For drugs, each has a name, and one or more trade names, i.e. each drug has a main active ingredient, but the drug may have several names depending on the manufacturing pharmaceutical company. A simple rule applies:

Any name with the -ine is feminine, for example: chlorpromazine, kanamycin, cimetidine;

any name with the -ide inflection is masculine. Examples: lanatoside, thalidomide.

N.B.: the same rule applies to chemical entities. Examples: an amine, a benzodiazepine, a phenothiazine, but an amide, an imide, a hydrazide, a heteroside, a phosphatide.

Gender and sex:

The gender/sex dichotomy is always a source of confusion. Medical language is no exception to this rule. The noun that designates a function has a gender, but, in principle, no sex¹⁸. In the army, for centuries, there were only men; nevertheless, we have always said "a sentry". The same goes for "the navy" and "the watch". As for the word "person", which is feminine, it designates a man as well as a woman. As for the word "individual", which is masculine, it designates both a man and a woman. A group of people, persons (feminine) or individuals (masculine) form a population (feminine) or a people (masculine).

So there are no rules for gender. It is arbitrary

Singular or plural?

Some medical terms, especially those that designate symptoms, are generally used either in the singular or in the plural: constipation, diarrhea (not diarrhoea, as is often heard), migraine, pyrosis; conversely, nausea, vomiting, menstruation. For defecation, one goes "to the stool" to make "stools".

The plural follows the rules of the language¹⁹. The nouns in "al" have a plural in "aux", except for the classic exceptions (chacal, recital, festival...) but also natal and the words derived from it, one must say prenatal and not prenatal examinations.

Words for a group of activists:

Some words designate a group of people, regardless of the gender of the members who make up this group: the French are all the French people, whether they are men, women, children or transgender people; the militants are all the people who are militant within a party.

Two words are problematic: "nurse" and "midwife". For the latter, although this profession is essentially female, there are a few men who practice it, but, as far as I know, they are called "midwives", which is a bit confusing. To get around the difficulty, they can be called "midwives", which solves the problem.

As far as "nurse" is concerned, this profession is more and more often mixed, and we say, of course, "a nurse" to designate a man who exercises this beautiful profession. The difficulty begins when we use "nurse" to designate the whole profession, as in the expression "school of nursing". Should we say "school of nurses", which is a bit long to say.

Title and duties:

With regard to the gender of words designating functions or titles, the current trend is to feminize these words when the holder of the title or function in question is a woman:

In this case, the word "auteure" or "professeure" is used, whereas no masculine word ending in "-teur" or "-sieur" gives "-teure" or "-sseure" in the feminine form, or "docteure"²⁰

In the same way, in France, the president of a court is addressed by saying

The question of whether a woman should be called "Madame President" or "Madam President" seems to be settled in favour of "Madam President". The question of whether to refer to women as "Madame President" or "Madam President" seems to have been settled in favour of "Madam President". For judges, the matter also seems to have been decided, since from now on it is appropriate to say "Madame Justice".

However, it is important to differentiate between the title and the function: when using the word

The word "doctor", depending on the circumstances, designates either a function, which can be used in the feminine form (doctor or doctoresse), or a title, in which case the masculine form is used: Mrs. Doctor Unetelle.

So-called medical bibliography:

¹⁸ QUERIN, S., *Dictionnaire des difficultés du français médical*, op.cit., p. 124.

¹⁹ Ibid, p 194.

²⁰ Ibid, p 88.

Bibliography (from the Greek *bibliōn*, book, and *graphein*, to write) consists of reviewing the medical literature on a given subject to gather scientific or educational information. The articles that appear in scientific journals are listed as "bibliographic references". This is known as a "bibliographic search". If several physicians get together to share the results of their research, they do a "bibliography session".

At present, if a doctor wants to be known, it is essential that he or she publishes in an Anglo-Saxon journal, therefore in English. Otherwise, his work will go largely unnoticed. For a doctor who wants to continue to improve his or her skills, it is necessary to understand medical English in order to find relevant information on a given subject. This is called "bibliography".

The bibliography is the basis of what is called "Evidence Based Medicine", which should not be translated as "evidence-based medicine" but as "evidence-based medicine", the word "evidence" being a so-called "false friend". It is also called "evidence-based medicine". This approach consists of not asserting anything that has not been validated by serious medical literature (not all medical articles have the same scientific rigor).

Information validated by one or more publications is often referred to as "documented" by "literature".

Medical literature:

Contrary to what one might think, when we speak of "medical literature", we are not talking about novels written by doctors, nor about novels featuring doctors (as we speak of "detective literature" when the heroes are policemen or crooks...).

This expression refers to all scientific or educational production published by physicians for their colleagues, on exclusively medical subjects.

Although, under the Anglo-Saxon influence, medical articles no longer have any literary value, this expression has continued to be used. Indeed, there are now strict rules for writing medical articles, which are all similar in form, including in French journals. Only the message, the substance, changes. All "literature" has been carefully evacuated.

Some figures of speech:

Paronyms and pleonasm: similarities and convergences:

One sometimes hears confusion between "agonize" and "agonir" which are paronyms. It is the first of these two verbs that corresponds to the noun "agony". Of someone who has just died after a painful agony, we would say "he has agonized for a long time". To agonize means to insult or insult:

"He insulted him" is a common expression, which sounds like a pleonasm.

"Voire même": this is the prototype of the pleonasm, since "voire" means "and even".

Another example of a pleonasm is "to be proven true". Indeed, "to be proven" means "to be true", and is used especially to speak of a notion in which one was not sure, until then, that it was exact, currently with certainty. Example: when someone is accused of a crime, we say until the verdict that he is "presumed guilty"; if he is condemned by the Justice, his guilt becomes

A diagnosis is "proven", or when a doctor suspects a diagnosis, and after necessary tests, it becomes "proven".

"Universal panacea": a panacea is a remedy that works for all ills. It is therefore universal in nature.

Solecism:

The subjunctive is frequently used after the conjunction "after that", which is a mistake called "solecism". In fact, the use of the subjunctive is correct with "before that", since it is a hypothesis (what is announced may not happen). It is therefore appropriate to say

"before I was".

On the other hand, after the conjunction "after that", we are in reality: what we are talking about has indeed taken place. It is therefore the indicative that is appropriate, not the subjunctive: "after that I am".

Eponyms :

Larousse²¹ defines eponym as: who gives her name to something: Athena, eponymous goddess of Athens.

The use of eponyms in medical terminology²² is very frequent, although researchers prefer to use an appropriate scientific name, eponyms continue to be found in use. They are eponyms as long as a syndrome, disease or diagnosis is called by the name of the person who discovered it, instead of by a specific scientific name.

Here are some examples:

²¹ <https://fr.wikipedia.org/wiki/Éponymie>

²² CHEVALLIER, J., *Précis de la terminologie médicale*, op.cit., pp. 179-181.

--Eponyms for investigations:

Addis: flow rate per minute of red blood cells and leukocytes in the urine,

Barr: particularity of cells of female nuclear sex ;

Combs: immunological test for incomplete antibodies ;

Quick: test to measure the coagulability of blood for the monitoring of anticoagulant treatment;

Thorn : method of functional exploration of the adrenal cortex.

--Eponyms in therapeutics:

Besredka: technique used during vaccination to avoid intolerance accidents;

Unna: wrap for treatment of varicose ulcer;

Luccherini: corticosteroid therapy in intra-spinal injection in case of sciatica.

--Eponyms in Pathology:

-Adams-stokes: syncope by cerebral ischemia due to arterio-ventricular block;

-Addison: chronic adrenal insufficiency;

-Alzheimer's: variety of dementia;

-Charcot: amyotrophic lateral sclerosis, a severe nervous disease;

-Dressler: inflammatory syndrome observed after myocardial infarction.

Spelling :

The circumflex accent :

The use of the circumflex accent is disappearing²³. It is no longer used on the o of ptosis and ptosis; it is neglected on colon and megacolon; it is still used for cranium, but not for cranium-(...).

Omission of the accent again on syndrome. But it persists for symptom.

There is no fixed rule but the tendency is to omit the circumflex.

Hyphen:

The hyphen is very present²⁴ in compound medical terms, sometimes necessary, sometimes unnecessary. Often contested, here are its different uses in medical terminology:

Words of the general vocabulary, mixed with the medical lexicon: à-coups, cul-de-sac, mort-né, nouveau-né...-
Those that separate and connect two proper names: Pierre Marie-sain-ton,

-Those that separate and connect two whole words: acid-alcohol, vesicle-strawberry...

-Those that separate two juxtaposed vowels, which can be read as a single graphic unit: genito-urinary, radio-isotope...

-Those that allow the isolation of numbers within compound words: alpha-1; glycose6, etc.

-Those preceding a capital letter: anti-H1

-The nouns that follow the word "no": non-aggression.

²³ Ibid, p 195.

²⁴ Ibid, p 195.

N.B.: Generally speaking, a hyphen is not used between a radical and a prefix, or between a radical and a suffix, but there are many exceptions, which vary according to the evolution of the language, for example: atrioventricular, anatomopathology, cardiovascular.

Capitalization:

The first letters of surnames, the letters (A, B, C...) that designate vitamins, the letters that make up the acronyms (such as IgG) are written in capital letters

For the Latin names of animal and plant nomenclatures, knowing that there are three levels: family, genus and species, species have been named since Linnaeus using a binominal nomenclature (genus and species). Thus, each species is formed by two words: the first one designates the genus, distinguished by a capital letter at the head and followed by the species (generally a qualifying adjective).

Example: we write Homo sapiens and we now know that it is the name of a species.

N.B.: when it is a subspecies, three names are needed to designate it, for example: Homo sapienssapiens. This way of identifying subspecies is often neglected especially in recent medical articles.

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