

DEFINITIONS IN TERMINOLOGY

I. Definition is a problem in just about any field or activity that requires it. Why?

- a) subject of theoretical interest among philosophers - logicians, mathematicians, lexicographers, thesaurus-makers, etc. Philosophers have debated whether meaning has to do with the 'thing' or with the word for the 'thing'.
- b) a plethora of types: see attached extract

II. How about in Terminology?

- a) plethora of type-names:
 - (i) lexicographic (says same thing in other words, e.g. via paraphrase, synonymy, TL equivalent, or usage comments)
 - terminological (gives information on position of concept in structure of knowledge)
 - encyclopaedic (gives additional information of general interest);
 - (ii) terminological (creates concept) – terminographic (documents existing concepts)
 - (iii) by analysis – by synonyms – by paraphrase – by synthesis – by implication – by denotation – by demonstration

Notice that these types correspond to different perspectives

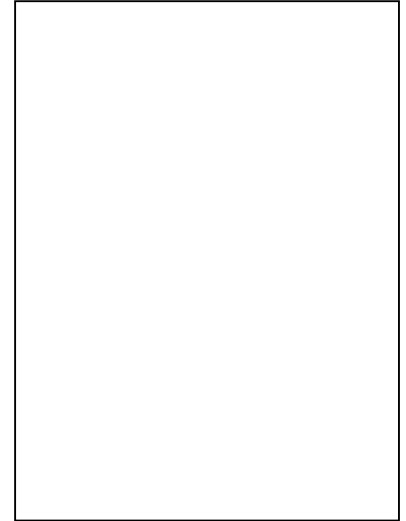
- b) context for definition in terminology heterogeneous: different 'definers', targeted users, subject fields:
 - (i) original creator of idea
 - (ii) a professional body
 - (iii) subject or nature of material to be defined
 - (iv) language planner/terminographer in African languages in S.Africa, who has to cater for teachers, translators & also needs to persuade/stipulate

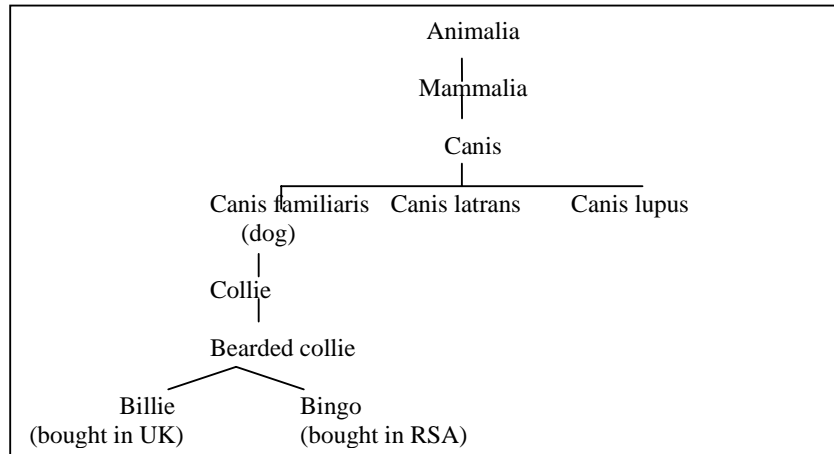
c) challenge: given heterogeneity, how does one develop a critical sense of judgement when: reading recommendations/literature on definition in terminology, or reading definitions in specialized sources?

III Concretising problem

- a) Here is an easy to find recommendation of the so-called ideal terminological definition: A definition in terminology states the (1) genus proximum of the term to be defined and (2) the characteristics that distinguish this definiendum from coordinates that share the same genus.

Let's explain this with the following conceptual system of part of the animal world:





An example would be: Billie is a bearded collie (genus proximum) I bought while studying in the UK (characteristic distinguishing Billie from Bingo which was bought in RSA during a terminology conference)

Definiendum	“Definitior”	Definiens	
		Genus	Distinguishing characteristics
Billie	is a	bearded collie	I bought while studying in the UK.
Hypochondriasis	is a	psychiatric disorder	in which a person reports physical symptoms and is especially preoccupied with the certainty that these symptoms represent a serious disease.

b) **Exercise:** Here are some definitions of medical concepts from THE MERCK MANUAL (1997). Which ones fit the above recommendation and which do not. Why?

1. Influenza (flu) is a viral infection that causes a fever, runny nose, cough, headache, a feeling of illness (malaise), and inflammation of the lining of the nose and airways.
2. Somatoform disorders is a relatively new term for what many people refer to as psychosomatic disorder. In somatoform disorders, either the physical symptoms or their severity and duration can't be explained by any underlying physical disease. Somatoform disorders include somatization disorder, conversion disorder, and hypochondriasis.
3. An intracranial hemorrhage is bleeding inside the skull.
4. The term *psychosomatic disorder* has no precise definition. Most often, the term is applied to physical disorders thought to be caused by psychologic factors. However, no physical disorder is caused exclusively by psychologic factors. Rather, a physical disorder has a necessary biologic component – a factor essential for the disease to occur.
5. Paraneoplastic syndromes are the remote effects of cancer (most commonly lung and ovarian cancer) on many different functions of the body, often those of the nervous system.
6. Shy-Drager syndrome is a disorder of unknown cause in which many parts of the nervous system degenerate.

COPY DEFINITIONS THAT FIT RECOMMENDATION INTO TABLE BELOW

Definiendum	“Definitior”	Definiens	
		Genus	Distinguishing characteristics

How many fit in?

c). How do we interpret our findings?

1. Do we say definitions that do not fit the recommendations are non-definitions? Should they be called by some other name or rewritten to become definitions?
2. What percentage of what authors consider definitions would as a result have to be dismissed as non-definitions?
3. What would this say of terminology/terminography? A field that is completely detached from reality?

d) The following view by Sager (1990) makes sense:

‘Traditionally the theoretical position concerning definitions was that the proper way of defining was given by the classical pattern of ‘genus et differentiae’. In fact, very few definitions have ever followed this pattern. A more relevant theory of terminology will have to admit the full range of definitions currently being used both in lexicography and terminology’.

IV A way out: a universal matrix for definition in terminology

a) What does this mean? Converting the label “types of definition” to “facets or aspects of definition” and “formal methods of definition”

b) How?

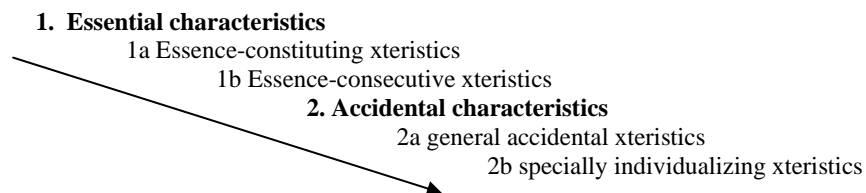
Definiendum = Definiens

- (1) Taxonomical information (genus proximum)
- (2) Categorial/type information (e.g. sub-types)
- (3) Genetic-causal information (how it comes about)
- (4) Essential material properties
- (5) Other material properties
- (6) Functional information (what used for)
- (7) Dimension (e.g. weight, speed, length)
- (8) Word explanation
- (9...)

(1) – (9...) therefore become the kinds of information a definition in terminology may contain. Several other so-called types of definition can then be properly assigned a label such as “form” or “method of formation”.

c) **Exercise:** Which facet(s) to include in a definition? Assuming you have data for facets (2), (4), (5), (6), (7), (8), and you are asked to write a one-sentence definition making use of only three of these facets. Which would you choose? Why?

d) In answering the above question, it is tempting to classify the facets into types of characteristics: (1) – (4) as intrinsic/essential, and (5) – (8) as non-intrinsic. This being the case, it would make sense in the exercise above to first choose all the available intrinsic facets (i.e. 2, 4,) before settling for any of the given non-intrinsic facets 5- 8). In doing this, we would be descending the following cline of characteristics



(cf. Dahlberg 1995)

Following Dahlberg, if we take a human being as referent, an example of...

1a would be: to have a living body, to have a soul, to have a divine spirit – these being according to her the necessary and sufficient conditions.

1b would be: (from having a living body) metabolism & reproduction; (from having a soul) feeling; (from having a divine spirit) creativity, free-will power, etc.

2a would be: Sex (male, female), height (tall, average, short), etc.
 2b would be: date of birth, domicile, name of parents, etc.

Now, looking at medical definition 1 (*Influenza (flu) is a viral infection that causes a fever, runny nose, cough, headache, a feeling of illness (malaise), and inflammation of the lining of the nose and airways*):

- 1a. would be: viral infection (the essence of the definiendum)
- 1b. would be: causation of range of discomfort types
- 2a. would be: flu (synonym), and specific discomforts: fever, runny nose, cough, headache, etc.
- 2b: no example

e) As tempting as the recommendation on choice of facets implied in d) above is, its specific details cannot always be sustained. Why?

(i) As seen in medical definition 6 (*Somatoform disorders is a relatively new term for what many people refer to as psychosomatic disorder. ...*), facet (8) on linguistic information is what may make many readers even understand any other facet. Imagine the problems of the translator in whose text somatoform disorders and psychosomatic disorders occur! Indeed, the purpose, perspective, or user may determine which facets are included/are of great importance.

(ii) Entailed terms/Defining vocabulary: An entailed term is a term which appears in the definition of another term, and is itself defined elsewhere in the dictionary. It is not part of the defining vocabulary, that is, those terms that can be taken to be axiomatic and unnecessary to define. In corpus-driven compilations, the need to avoid using terms appearing in a facet information, but which are not part of the chosen conceptual system, may affect the inclusion of specific facets.

f) Exercises:

(i) You have a guest from Planet Pluto where the beings there have never heard of the word 'definition'. Define in one-sentence for your guest what definition is, using as many facets as possible.

How many facets do you have?

(ii) Refer to the medical definitions in III.b above. Enter in the Table below the facet numbers found in each of the definitions

Definition	Which facets are used? Identify by abbreviation
1. <i>Influenza (flu) is a viral infection that causes a fever, runny nose, cough, headache, a feeling of illness (malaise), and inflammation of the lining of the nose and airways</i>	
2. <i>Somatoform disorders is a relatively new term for what many people refer to as psychosomatic disorder. In somatoform disorders, either the physical symptoms or their severity and duration can't be explained by any underlying physical disease. Somatoform disorders include somatization disorder, conversion disorder, and hypochondriasis.</i>	
3. <i>An intracranial hemorrhage is bleeding inside the skull.</i>	
4. <i>The term psychosomatic disorder has no precise definition. Most often, the term is applied to physical disorders thought to be caused by psychologic factors. However, no physical disorder is caused exclusively by psychologic factors. Rather, a physical disorder has a necessary biologic component – a factor essential for the disease to occur.</i>	
5. <i>Paraneoplastic syndromes are the remote effects of cancer (most commonly lung and ovarian cancer) on many different functions of the body, often those of the nervous system.</i>	
6. <i>Shy-Drager syndrome is a disorder of unknown cause in which many parts of the nervous system degenerate.</i>	

g) But do we really have to choose facets when the definition is expected to be useful for several groups? Do we have other fields (e.g. Notes) in which other definitional facets can be placed?
Consider the following opinion on “views” and the implications it might have when we decide to choose a few facets:

“For instance, in manufacturing engineering, a component can be viewed in terms of its position in a functional hierarchy, its material properties, its location in a manufacturing sequence, its partitive relationships, its position on a cost structure. (Only a system of representation that would enable the user to view these relationships simultaneously or within a short temporal sequence is capable of providing even a semi-adequate representation of these complex relationships” (Wright 1997)

KEYWORDS: PRAGMATISM, FLEXIBILITY, ADAPTATION

V. Definitions: a “lawless” and “intractable” realm in terminology?

Is this what our reluctance to recommend means? There are a few things we can agree upon.

a) Functions:

- (i) fixation of a concept (typically during first concept – term assignment)
- (ii) explanation of a concept
- (iii) relating concepts (either for differentiation or similarity)

For terminography in African languages in SA, (i) & (ii) particularly important. (iii) is also important, but a consequence of basing any terminographical project on the development of a conceptual system for selected terms.

b) Best practices:

(i) Don'ts – if you can help it

- circularity: using a concept (C1) while defining another (C2), when the definition of C2 involves use of C1

textile: a type of **fabric** that is woven

fabric: a type of **textile** (cf. ISO 1995)

- tautology: using several parts of the definiendum in the definiens

uniform movement: movement that occurs uniformly
(cf. ISO 1995)

- negation: defining by specifying what is absent

health is not merely the absence of disease or infirmity (Note WHO's definition, which is acceptable: “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity)

- incompleteness: insufficient statement of characteristics

Influenza is a viral infection (no differentiating characteristics?
There are so many viral infections)

- multiple definitions: explaining more than one term in a definition

(ii) Do's (when possible)

- Mind your defining vocabulary/entailed terms: develop a concept system

- Mind definitional views: develop a concept system (cf.

Wright above)

- Front the definiendum

- Use a “definitor” or link to equate definiendum to definiens

X **is a** Y

X **includes** A + B

- Have your definition verified by several subject experts: if you are working with corpora and have developed a conceptual system, you may come up with solutions they disagree with. You may in fact be right, and they wrong. Show them your documentation.

VI Getting corpus-based definitional data in Source Language for a Bilingual Project

A corpus is a body of texts in electronic format that have been collected in a structured manner so as to be representative of the particular discourse one wishes to study. Relevant parameters could include: levels of sophistication of targeted readers of collected texts, genres and so on. If people define while writing, it means texts can be sources of definitions.

Exercise:

Download from the Internet five texts in English dealing with neurons (sometimes spelt neurones). Ensure that the texts reflect at least one criterion: different levels of difficulty/sophistication.

- Use the “Find” functionality of your word processor to search for the following “probes”:

- | | |
|--------------------|--|
| a) is a | (How many times does this probe give you definitional material for the facet “taxonomy”?) |
| b) type of | (How many times does this probe give you definitional material for the facet “category/type”?) |
| kind of | ---- ditto ---- |
| c) transmit | (How many times does this probe give you definitional material for the facet “function”?) |
| conduct | ---- ditto ---- |
| send | ---- ditto ---- |

Can you think of more probes for the above facets and for others?

VII Conclusion: With this presentation, you should

- no longer be too confused by the very many types of definition
- become more critical of what you read about definitions
- be able to identify and describe parts of a definition
- know what a definition does
- be able to write definitions for various purposes when given the raw material
- be able to automatically identify candidate definitional material in texts in electronic format.

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