



Joint UNESCO and ITU
Global Symposium on Promoting the Multilingual Internet



UNESCO Guidelines for Terminology Policies

Formulating and implementing terminology policy in language communities

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C O N T E N T



content items: smallest identifiable units of content

note: in different environments content items may further decomposed into smaller units

types of content 1:

- **structured** (e.g. databases)
- unstructured (e.g. free text)

types of content 2: (from a technical point of view)

- text (textual data)
- graph (graphical/visual data)
- sound (audio data)
- multimedia (incl. video)

→ totally insufficient from a semantic point of view



SPL text and knowledge representation

(2) only SPL:

→ terms, graphical, representations, ...

+ extra-textual knowledge context

→ understandable by expert

INDIVIDUAL FACIAL FRACTURES

Mandible

fracture

mandible

Deranged Occlusion

patient

teeth

dentures

displaced fracture

dental occlusion

normal state

mandible

state of balance

elevator muscles

(pterygomasseteric sling)
(mylohyoids).

depressor muscles (digastrics and mylohyoids).

fracture

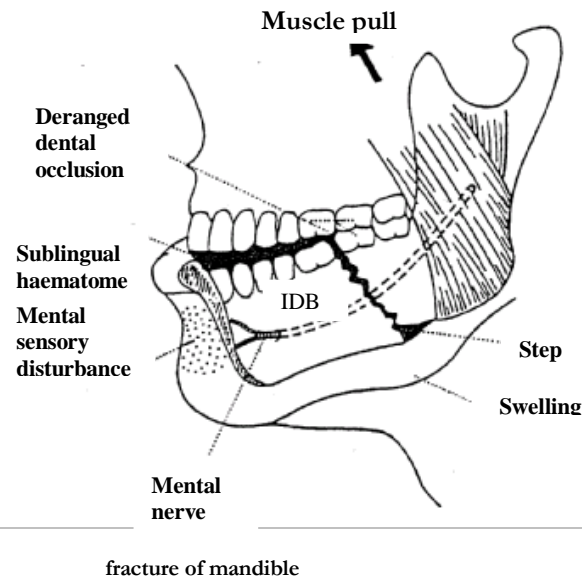
mandible

displaced

segments,
group of muscles

balance

disrupted





TERMINOLOGIES



comprise sets of terms with their specialized meanings (concepts) used in particular SPLs of specific domains

“CFCs are non-flammable, non-toxic, and unreactive synthetic compounds which have been used since the 1930s as working fluids in refrigerators and propellants for aerosol sprays. They have now been shown to be harmful to the earth’s ozone layer, as well as being major contributors to the greenhouse effect [...]. CFC molecules which have been released into the environment are broken down by the sun’s ultraviolet radiation in the upper atmosphere, forming chlorine which reacts with ozone.” *(B. Antia)*



C O N T E N T



specialized content: data representing information/knowledge

types of structured content:

- linguistic entities (GPL – incl. collocations, ...)
- terminological units (SPL – incl. phraseology, ...)
- indexing and retrieval terms (documentation languages)
- metadata, data categories (data element concepts)
- data elements, attributes, properties, etc.
- proper names
- eCataloguing & eClassification & product identification
- ontology items & taxonomies, nomenclatures, ...
- *many kinds of non-verbal content*



Structured content 1



5km



Way to the airport - turn right in 5 km



Way to the train station - down to the right



E, 9^d

ZONE = verbal

red ring = (morphology) prohibition sign

30 = micro-proposition: max speed 30km/h

→ variable message sign boards



ISO/TC 37



- o Old title:
Terminology and other language resources
- o Old scope:
Standardization of principles, methods and applications relating to terminology and other language resources
- o **New title:**
Terminology and other language and content resources
- o **New scope:**
Standardization of principles, methods and applications relating to terminology and other language and content resources in the contexts of multilingual communication and cultural diversity



Terminology Policies



- 0 Language under the impact of globalization
- 1 Definition of basic concepts
- 2 Language planning and terminology planning
- 3 Formulating and implementing a terminology policy
- 4 Process of implementing a terminology policy
- 5 Summary (incl. recommendations)



Political positions



United Nations:

- o *Universal Declaration of Human Rights*
- o *Covenant on Economic, Social and Cultural Rights*

Europe:

- o *European Charter for Regional or Minority Languages (1992)*

UNESCO:

- o 1998-1999: *Initiative B@bel*
- o 2003: *Recommendation on the promotion and use of multilingualism and universal access to Cyberspace*



UNDERDEVELOPED TERMINOLOGY I



People whose mother-tongue is not (or not sufficiently) developed from the point of view of terminology and special purpose languages (SPL) or who are denied the use of their mother-tongue in education and training, for accessing information, or interacting in their work places

➔ *tend to be or feel **disadvantaged**.*



UNDERDEVELOPED TERMINOLOGY II



In most cases limitation in the use of a language to folklore or to the family sphere means that such a language can hardly support professional communication.

*Similarly, a language that lags behind in its terminology for a given domain risks losing the ability to communicate in that subject in its language over time. → **domain loss***



PURPOSE OF THE GUIDELINES



decision makers (*in different positions at various levels for a variety of purposes*)

→ to design, plan and implement a terminology policy in/for defined user communities

terminology planning

- o national, regional, language community, local community, institutional or organizational level
- o in professional fields such as chemistry, biology, physics, medicine, etc.
- o in virtually all standardization and harmonization activities
- o in legislation (always replete with terminological definitions)

terminology policy or strategy: *highly complex*

- o demographic factors
- o cultural, ethno-linguistic and geo-linguistic factors
- o socio-psychological factors



TERMINOLOGY PLANNING ACTIVITIES



- o *at the national, regional or local level;*
- o *in intergovernmental organizations (IGOs);*
- o *in non-governmental organizations (NGOs),*
- o *in large institutions and organizations*
(including in multinational enterprises)

They manifest themselves:

- o *in language communities*
e.g. for developing special purpose languages (SPL)
- o *in individual domains*
e.g. to foster research and development
- o *in new applications*
e.g. eBusiness, mobile telephony, eLearning, eHealth, eGovernment and many other so-called "e"-activities



0 Language + globalization



- o Language more than just an instrument for the transfer of information
- o Cultural dimensions: language is closely linked to the identity of communities and individuals
 - *people at times become emotional over language issues*
- o *Language also has an eminent economic dimension → localization*



1 Basic concepts I



general-purpose language (GPL - or everyday language)

special purpose language (SPL - or specialized language)

- o domain (i.e. subject-field or professional) communication
- o representation of specialized (i.e. subject-field related or domain) knowledge
- o access to specialized (i.e. subject-field related or domain) information

specialized languages: SPLs of the various domain communities, which are engaged in a subject-field or other kind of expertise

linguistic norm: set of language conventions, which is considered to be the shared linguistic standard of a language community



1 Basic concepts II



terminology science: subject field that investigates terminologies

terminological tools: e.g. *terminology management systems* (TMSs) → *terminology database* (TDB)

terminology market: users and providers of terminological products and services

terminology products: SPL dictionaries, glossaries, terminology databases, etc.

terminology services: terminology consultancy and training services, terminology information and documentation, outsourcing of terminological tasks, information services, etc.



2.1 Language planning



Gadellii (1999):

"Society is developing and language has to adjust to reality. Political decisions are taken and this may mean that new communities are created which may lack a common means of communication. In cases such as these, language planning is desirable and indeed necessary".

Cooper (1989):

"Language planning refers to deliberate efforts to influence the behaviour of others with respect to the acquisition, structure, or functional allocation of their language codes".

→ increasing use of human language technologies (HTLs)



2.2 Terminology planning

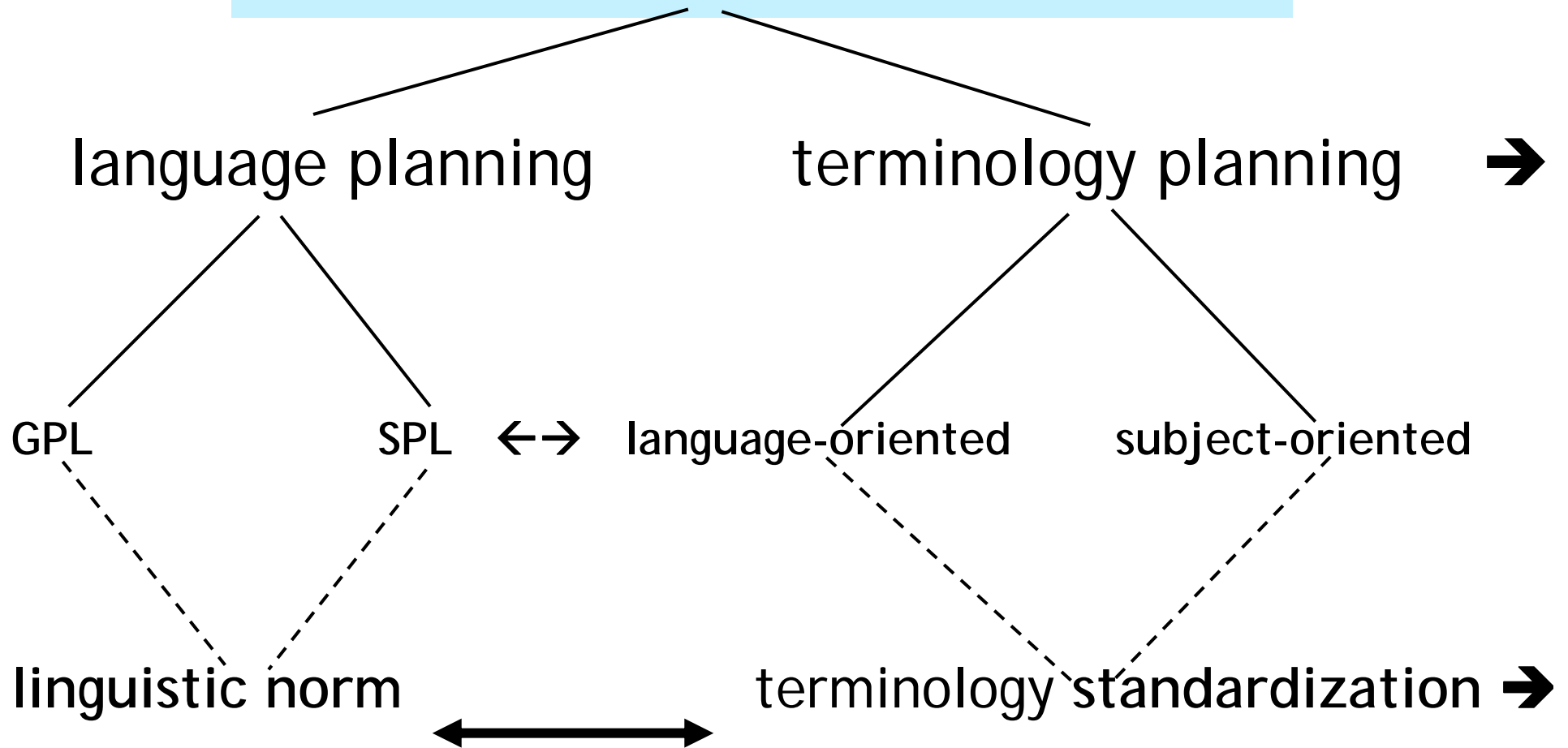


- o relies on the existence of linguistic norms and a certain grammatical and orthographical stability in the written language
- o consciously and systematically develops language according to the needs and requirements of domain communication

➔ *vast number of new technical terms every day in hundreds of languages*



COMMUNICATION PLANNING →





TERMINOLOGY DEVELOPMENT



- o is a natural, unavoidable phenomenon, but
- o can be a goal-driven initiative as part of language development

→ *fostering socio-economic transformation*

Terminology strategies/policies

→ **tool for innovation policy**

- o science and technology
- o education, research, etc.
- o information and knowledge



TERM FORMATION



different types of *designations*: terms and other

- o *mono-word terms* and *multiword terms*
 - *term formation depends on the functional role of designations in domain communication*
 - *difficult to distinguish words from terms, terms from non-terms, or names from terms*
- o *other alpha-numeric and non-linguistic designations*

interaction between domain languages and general language is very dynamic:

- o *De-terminologization*: specialized terms are incorporated into general language as widely known words;
- o *Terminologization*: common words become (part of) terms



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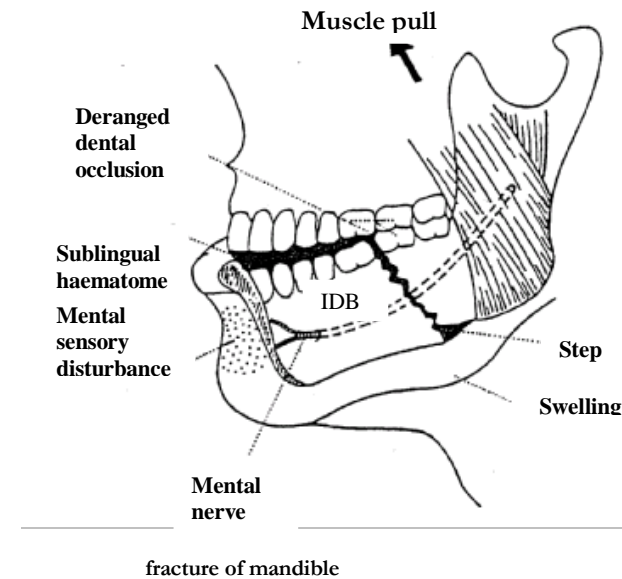
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INDIVIDUAL FACIAL FRACTURES

Mandible

	fracture	mandible
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(pterygomasseteric sling)	depressor muscles (digastrics and mylohyoids).	mandible
	fracture	displaced balance
	segments, group of muscles	
disrupted		





TERM FORMATION PRINCIPLES



- o *Transparency* (vs. opacity)
 - o *Consistency*
 - o *Appropriateness*
 - o *Conciseness* (linguistic economy)
 - o *Derivability*
 - o *Linguistic correctness*
 - o *Preference for native language*
(except in domains or languages where traditions exist, for instance the use of Latin forms in some disciplines)
- competing/contradicting principles



TERM-FORMATION METHODS



- *Creating new forms*
 - Derivation
 - Compounding
 - Abbreviated forms
- *Using existing forms*
 - Conversion (part-of-speech)
 - Terminologization
(assigning new, frequently analogous or metaphoric meanings, to existing terms in more or less related fields or GPL words)
 - Semantic Transfer within a special language
 - Trans-disciplinary borrowing (metaphors)
- *Translingual borrowing*
 - Direct loan
 - Loan translation



DESCRIPTIVE vs. PRESCRIPTIVE?



Semiotic principles serve as guidelines on how to apply the term-formation methods.

Some of the principles compete with/contradict each other resulting in crucial trade-offs in each particular case (e.g. transparency vs. conciseness of terms).

This and more details can be found in ISO 704 and other pertinent International Standards.



3 formulating and implementing a terminology policy



3.1 Formulating a terminology policy

- develop language as a means of domain communication
- develop the SPLs of certain subject fields
- in most cases: a combination of these two

3.2 Implementing a terminology policy

→ embedded in other national policies

3.3 Institution and capacity building

→ infrastructures: human capacity building & institution building

3.4 The role of national terminology institutions

- centralized or decentralized
- collaborate with private industry
- providing terminological services

3.5 Private initiatives

- industry, consultancy firms or non-profit NGOs



4 process of implementing a terminology policy



4 Phases:

- 4.1 Preparation for the terminology policy
- 4.2 Formulation of the terminology policy
- 4.3 Implementation of the terminology policy
- 4.4 Sustaining the terminology infrastructure

➔ *not necessarily sequential, but overlapping*



PHASE I: PREPARATION



- *assessment of the language and terminology environment and existing legislation*
- *awareness creation and efforts to obtain official recognition*
- *recommendation of methodology and available or conceivable procedures*
- *preparation of preliminary documents*
- *organization of a national consultation process*



PHASE II: FORMULATION



- *drafting the terminology policy proposal*
- *drafting a plan for the co-ordination of the terminology policy with other strategic planning policies*
- *preparation of a plan for implementation*
- *submission of the (draft) final policy (document and implementation plan)*
- *official approval of the final policy (document and implementation plan)*



PHASE III: IMPLEMENTATION



- *overall management of the implementation*
- *planning and operational and organizational management of the implementation*
- *planning and organization of publicity and promotional activities*

PHASE IV: SUSTAINED OPERATION & ADAPTATION MECHANISM



Recommendations:



- 1) *Invest in thorough preparation*
- 2) *Learn from experiences of other countries*
- 3) *Include stakeholders*
- 4) *Introduce collaborative work methods*
- 5) *Start capacity building as early as possible*
- 6) *Create awareness in the whole language community*

*Duly considering state-of-the art in research, management, ICT technology, stakeholders' psychology, etc. → **be realistic!***



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