

A Cognitive Approach to Synonymy in Terminology

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Terminology as an autonomous subject field

- Terminology is not linguistics
 - Researchers : **experts** in different subject fields
 - Aim: **unambiguous transfer** of special knowledge
 - Terminological work: unifying concepts, **standardising terms**
 - Object of study: **concept**

General Theory of Terminology (Wüster, 1979)

- Specialized concepts are **universal, objective, clear-cut, subject specific**
- They occupy a **specific position** within a conceptual structure and maintain **logical or ontological relations** with other concepts
- They are represented by **terms** or other symbols, which are not linguistic units

Terminology turns towards description

- Special language is a **specific language register**
 - Social and communicative constraints
- Terms are **linguistic signs**
 - Specific pragmatic and semantic values
- Any word in a specific context can become a term
- Concept vs. meaning

The issue of synonymy in Terminology

- The univocity ideal: variation was avoided
- Synonymy appears in specialized texts and therefore must be described
- Onomasiological approach: **Denominative variation**

TYPES	EXAMPLES
term and artificial form	<i>ostra rizada [pacific oyster] / Crassostrea gigas</i>
term and acronym	<i>hidrocarburos aromáticos policíclicos / HAPs [polycyclic aromatic hydrocarbons]</i>
spelling change	<i>productor / produtor [producer]</i>
reduction	<i>station / station expérimentale</i>
lexical change	<i>productor [producer] / mariscador [shellfisher]</i>
	<i>zone de production [production area] / zone de récolte [harvesting area]</i>
	<i>producto mariño [sea product] / producto da pesca [fishing product]</i>

Denominative variation with cognitive consequences

- The concept is represented from different angles

± information	<i>station</i> <i>station expérimentale</i>
# abstraction level	<i>productor</i> [producer] <i>mariscador</i> [shellfisher]
# facets	<i>producto mariño</i> [sea product] <i>producto da pesca</i> [fishing product]
# viewpoints	zone de <i>production</i> [production area] zone de <i>récolte</i> [harvesting area]

Is there a cognitive motivation behind?

Challenges of Terminology

- Concept-term relation
- Denominative variation with cognitive consequences

Concept-term relation

- **Terms are motivated** by the concept
 - Purpose of term creation is to identify the concept quickly and efficiently
 - Multiword terms & special meanings attached to general words

TERM	DEFINITION
<i>public maritime domain</i>	<i>Seas or ocean areas owned by the state as opposed to individuals or corporations</i>
<i>mouse</i>	<i>1. Small rodent 2. [computing] A small hand-held device which is moved over a flat surface to produce a corresponding movement of a pointer on a monitor screen [...]</i>

- Concept and meaning are **distinct**

Cognitive reasons for denominative variation

- Denominative variation: result of a **multiple motivation**
- Specialized concepts are cultural, temporal, flexible
 - Their intracategorical and intercategory structure can vary according to functional and contextual factors

CONCEPT DEFINITION	DENOMINATIVE VARIANTS	FACETS
Place where several physicochemical parameters of water are measured to monitor qualitative variations in time	<i>point de suivi</i>	aim
	<i>point de prélèvement</i>	action
	<i>point pérenne</i>	morphology
	<i>station</i>	aim

Cognitive factors related to denominative variation

- Cognitive motivation behind denominative variation
- Cognitive structuring factors that have an effect on lexical choice
 - Subject field → perspective
 - Intention → point of view
 - Idealized Cognitive Model (ICM)

Subject field and perspective

- Specialized concepts cannot be attributed to a single subject field
- Presence of **different subject fields** (perspectives) on texts of shellfish farming → effect on denomination

CONCEPT	SUBJECT FIELD	
	ECONOMY	BIOLOGY
activity of shellfish farming	<i>producción</i> [production]	<i>cultivo</i> [breeding]
establishment where hiring and first sale of fish products is carried out	<i>lonxa de contratación</i> [hiring market]	<i>lonxa pesqueira</i> [fish market]

Intention and point of view

- The intention results in the manifestation of different points of view on the same concept

THE OUTPUT OF THE ACTIVITY OF SHELLFISHING

management of fishing resources	recurso pesqueiro <i>ressource halieutique</i> <i>stock halieutique</i>	“En materia de conservación e mellora dos recursos pesqueiros destacan as normas destinadas á regulamentación da actividade pesqueira e das artes e aparellos permisibles en Galicia.”
conservation of natural resources	<i>especie obxecto de captura</i> espèce exploitée	“Dans tous les cas la perturbation d’une catégorie espèces se répercute sur ses prédateurs ou sa nourriture et peut atteindre la dynamique des espèces exploitées. ”
marketing of fishing products	<i>producto do mar</i> produit de la pêche	“L’article 4 du règlement (CE) no 104/2000 subordonne la vente au détail de certains produits de la pêche au respect d’un certain nombre de conditions visant à informer le consommateur.”
human consumption	alimento do mar <i>recursos alimentarios do mar</i>	“Normalmente utilízase unha estratexia conservadora para calcular a taxa de consumo individual , utilizando para iso datos correspondentes a un consumidor medio ou alto de alimentos do mar. ”

Idealised Cognitive Models (ICM)

- Each concept is structured intracategorially and intercategoryally within an ICM

PERSON IN THE SHELLFISHING INDUSTRY

PRODUCTION-ICM [Activity of producing something for sale]	Productor <i>[producer]</i>	"Funding for the Producers' Organisation is granted for a period of three years after its approval [...]. The amount is limited to 3% of the value of the production sold by the O.P.P. This value is calculated on the basis of the average production that each producer affiliated to the O.P.P has sold "
SHELLFISHING- ICM [Catching or breeding shellfish on shellfish banks]	Mariscador <i>[shellfisher]</i>	"Any shellfisher who wishes to engage professionally in the shellfishing industry has to join a Fishers' Association with the license to carry out shellfishing on shellfish banks ."
DISTRIBUTION- ICM [harvesting and storing shellfish for further delivery]	Recolector <i>[harvester]</i>	"In order to identify correctly the product removed from the production areas, every batch containing the product has to include a registration document [...] This document will be issued by the designated authority upon the harvester's request"

Conclusions

- Cognitivist principles of concept structuring and naming can be applied in Terminology
 - Concept-term relation → motivation principle
 - Cognitive reasons for denominative variation
- First results of a cognitive approach of denominative variation in special language

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¡Thanks!

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