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# Homonymy within English Marine Engineering Terminology

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**Abstract**. The scientific and technical vocabulary is characterized by linguists as objective, clear and without ambiguity. That means the use of words with only one meaning that can be easily understood and recognized by the scientists or people working in a certain technical field. We try to emphasize the existence of homonymy within English marine engineering terminology and the extension of it as a non-characteristic of the marine engineering terminology.

#### 1. Introduction

The technical and scientific vocabulary or terminology is considered by many linguists and by some semanticists to be extra-linguistic, so that it should be semantically not interesting as field of research. The defining features of scientific and technical literature are the clarity, objectivity and informative value. However, there is no clear separation between general vocabulary and terminology in reality; the boundaries were created by specialists in order to draw some characteristics for each segment of vocabulary. Lately, the semantic phenomena have been researched for a variety of terminologies so that there are scientific works debating the specific vocabulary of economics, medicine, law, geography, philosophy, linguistics and other fields. In our opinion terminology, generally speaking, is a very resourceful area for linguists, mainly if their research is connected to teaching English in a certain field of terminology. The marine engineering terminology has been chosen in this particular research because it offers much in the terms of analysing and classifying words and relation to one another.

#### 2. Review of related literature

In semantics there are several types of meaning relations among which can be mentioned: antonymy, holonymy, homonymy, hypernymy, hyponymy, meronymy, polysemy, synomymy and troponimy. At the beginning of the century the research papers have been mainly based on emphasizing the differences and similitude between polysemy and homonymy due to the fact that not always the distinction can be made clear. The relations between the senses are metaphorical or metonymic (part-for-whole). Polysemy is characterized as the phenomenon whereby a single word form is associated with two or several related senses. Polysemy is discussed in contrast with monosemy, where one-word form is associated with a single meaning, and with homonymy, where a single word form is associated with two or several meanings which are not related. While in Romanian there is one compact group of homonyms, in English the term includes two subtypes: homographs (words spelled the same as each other but pronounced differently) and homophones (words spelled differently but pronounced the same).

According to the great number of research papers homonymy is a frequent linguistic phenomenon in terminology. A technical field is considered to have a closed terminology and any term borrowed from another domain can be considered as being a homonym in the new terminology if the borrowing acquires one or more new meanings. An example is the word "bush" given by Oxford Dictionary online as having two unrelated meanings; the first one known by any English speaker and the second with other two meanings used in engineering, 2.1 in mechanics and 2.2 in electricity.

"1 A shrub or clump of shrubs with stems of moderate length.;

- 2.1 A metal lining for a round hole, especially one in which an axle revolves.
- 2.2 A sleeve that protects an electric cable where it passes through a panel." [1]

Besides the subtypes mentioned above according to spelling and pronunciation, homonyms are subdivided into subsequent types "absolute homonymy" and "partial homonymy" [2] and according to Mammadova the criteria for absolute homonyms are:

- "1. their forms must be unrelated in meaning.
  - 2. all their forms must be identical
- 3.Identical forms must be syntactically equivalent." [3]

#### 3. Study

The relation based on meaning relating words from the maritime terminology is analyzed and classified in this paper. Marine engineering terminology comprises several subcategories which have been considered when the material for the research was gathered. These subcategories are somehow "closed" specialties taken into consideration: navigation, ship construction, electrical engineering, mechanical engineering, automation, communication etc. The terms were selected mainly from marine engineering coursebooks and dictionaries targeting mainly the mechanic and electrical terminology.

The corpus of homonyms can be divided into several categories taking into consideration the spelling and pronunciation, the homonymy between words (general vocabulary) and terms (a certain close terminology) or between terms (different specialties).

#### 3.1 Homophones

A homophone is a word that is pronounced the same as another word. The meaning of the two words is different. The homophones selected from the maritime terminology can be divided into two categories according to the criterion of one word of the pair usage, within the maritime terminology or generally. There are terms that can be very well known on shore as well, but they are also used frequently on-board ships.

- 3.1.1. One word is part of general vocabulary and one word is also used within the maritime terminology.
- 1. **berth** a place where a ship can park
  - **birth** the time a baby is delivered
- 2. **bore** the measurement of the width of the inside of a pipe
  - boar a wild pig
- 3. **sealing** setting, fastening
  - ceiling top of a room
- 4. **censor** someone whose job is to examine and remove offensive parts from books, films **sensor** a piece of equipment used for discovery the presence of light, heat, movement
- 5. **chord** a straight line joining two points on a curve
  - **cored** something with a core or main part
- 6. **ferry** boat
  - fairy elflike creature with wings
- 7. **hole** opening
  - whole entire
- 8. **phase** type of current
  - **faze** impact
- 9. **pale** not bright
  - pail bucket
- 10. **steel** alloy

steal – swipe

11. tow - pull along

toe - foot appendage

12. warn – caution

worn – used

13. **primer** – the first layer of paint on metal or wood

**Primmer** – Prime Minister

14. vice – a tool that holds an object very firmly

vise (American) – a bad habit

15. **board** – on ship

**bored** – not interested

16. leak – small hole that lets liquid flow

**leek** – a vegetable

17. **symbol** – a picture or shape with a particular meaning

**cymbal** – musical instrument

18. **mustered** – (past) to gather on ship

**mustard** – a type of spice

19. hose – long rubber, plastic etc. tube used to extinguish fire on board

**hoes** – (pl.) garden tool with long handle

20. **naval** - relating to the navy or used by the navy

**navel** – belly button

- 3.1.2. Both words are used within maritime terminology.
- 1. Crews (pl.) people working on a ship

Cruise—a holiday on a large ship

2. **hall** – passageway

haul – tow

- 3.1.3. A group of three homophones with one used in the maritime terminology.
- 1. oar boat paddle

**or** – otherwise

**ore** – mineral

#### 3.2. Homographs

A **homograph** is a word that has the same written form as another word a different meaning. However, some dictionaries specify that the words must sound different, or even have different origins. If the meanings may be distinguished by different pronunciations, the words are also called heteronyms. Homographs can be considered as a separate category because the last characteristic for the absolute homonymy is not fulfilled and they do not have the same syntactical function. The following are considered, in our opinion, to be homographs used in the maritime terminology.

- 1. **axes** the plural of axis / the plural of ax or axe
- 2. **bow** the front of a boat / to bend at the waist / a pair of tied loops
- 3. row -to propel a boat forward using oars /a line / a fight
- 4. watch a period of time on duty / portable instrument for measuring time
- 5. **live** electrical equipment on / to exist
- 6. **lighter** –a large, open, low boat used for loading and unloading ships / object that produces a flame
- 7. **light** natural or artificial energy / not heavy / v. start to burn
- 8. **sink** to go down below the water surface/ basin for washing

#### 3.3. Homonyms

There are about 230 homonyms according to some linguists, but the number can vary great according to the applied criteria. There is also a great number of homonyms within the maritime terminology as we could find out during this study, however, not all the terms could be included in this research. About a half of the homonyms found are included in the following classes. The classification is based on criteria mentioned above of absolute and partial homonyms.

#### 3.3.1. Absolute homonyms.

 $\operatorname{arc} \sim 1$  (el) a flash of light formed by the flow of electricity between two points; 2 part of a curved line or circle

**armature** ~ 1 (el) the part of a motor or generator that turns around to produce electricity; 2 frame

back axle ~ 1 (mech) a rear shaft; 2 (nav.) aft deck

**blast** ~ 1 a sudden strong movement of wind, 2 a sudden loud noise; 3 ventilator

**blow pipe** ~ 1 air duct; 2 welding apparatus

**body** ~ 1 the physical structure of a person; 2 the part of the ship that stays in water

**beam**  $\sim 1$  a long heavy piece of metal used in building ships; 2 (el) a line of light; 3 the widest part of the ship; 4 a wide smile

**bold** ~ 1 steep; 2 not hydrodynamic

**bolt** ~ 1 a screw with a flat head; 2 lightning

**bore** ~ 1 to bother someone; 2 to make a deep hole in a hard surface (boring)

**bow** ~ 1 the front part of a ship; 2 weapon used for shooting arrows

**breaker**  $\sim 1$  a large wave with a white top; 2 a ship to break ice; 3 (el) a piece of equipment that stops an electric current reaching a machine

**bridge** ~ 1 an electric circuit with two branches across which a detector or load is connected, used to measure resistance or other property by equalizing the potential across the two ends of a detector, or to rectify an alternating voltage or current. 2 the raised part of a ship from which the officers control it; 3 a structure built over a river [4]

**canal** ~ 1 manmade channel; 2 grooves

carrier ~ 1 clamp; 2 a ship used to move certain cargo

cascade ~ 1 a steep waterfall; 2 (el) fixed blades grate on the stator

 ${\bf counter} \sim 1$  a place where you pay or you are served in a shop; 2 a piece of electrical equipment that counts something

**course** ~ 1 part of a marine boiler; 2 the planned direction taken by a ship to reach a place

**cut out** ~ 1 the shape of an object that has been cut out on paper, wood etc.; 2 (mech.) a piece of equipment that stops a machine

damp ~ 1 make something less strong (dampen); 2 slightly wet

**dead end** ~ 1 (el) part of electrical equipment with no power; 2 street with no way out

**draft** ~ 1 a piece of plan that is not final plan; 2 measurements of a ship; 3 air provided for combustion

earth  $\sim 1$  the planet we live on; 2 soil; 3 (el) a wire that makes a piece of electrical equipment safe by connecting it with the ground

even ~ 1 constant; 2 equal; 3 odd number

**face** ~ 1 to finish; 2 put material on the outer side of a building; 3 to grind; 2 to fight a storm // 1 front of your head; 2 surface; 3 outside part of an object

**fall** ~ 1 low tide; 2 reduction

**falling out** ~ splaying; (el) getting out of synchronism

**field** ~1 subject; 2 practical work; 3 (el) excitation

**fine** ~ 1 delicate; 2 acceptable; 3 narrow

**flap** ~ 1 swiveling; 2 thin, flat piece of clothing; 3. valve

**flash** ~ 1 flow of water; 2 bright light; 3 bright colour; 4 glimpse; 5 spark; 6 explosion

**flat** ~ 1 smooth surface; 2 not very deep; 3 (el) dead battery

**flier** ~ 1 flywheel; 2 fast ship

**flow** ~ n.1current; 2 regular movement of the sea towards land; 3 chart; 4 displacement

fly ~1 insect; 2 trousers; 3 rocking lever; 4 fan baffle

**foot**  $\sim$ 1 unit for measuring length  $\sim$  0,305 m; 2 bottom part of something; 3 edge of a sail (ship)

found ~1 to start something; 2 to melt metal and pour it into mould

**frame**  $\sim 1$  ribs of a ship, 2 beam

**funnel** ~1 metal chimney of a ship; (nav.) sleeve of a mast; a thin tube with a wide top used for pouring liquids

gang ~1 crew; 2 tools

#### 3.3.2. Partial homonyms.

**output**  $\sim 1$  (el) the amount of electricity produced by a generator; 2 (mech.) the amount of work produced by a machine; 3 (comp) the information produced by a computer

additional charge ~ 1 (el) admission after dead point; 2 further charging

**adjusting clip** ~ (el) 1 fastening plate; 2 adjustable fastener

**admission potential** = 1 (el) entrance voltage; 2 admission pressure (turbine)

**alternating** ~1 (el) alternating current; 2 alternant

bleed ~ (mech) to remove air or liquid from a system; (med) to lose blood

box ~ 1 case; 2 bushing, 3 bearing

**break down** ~ 1 stop working, 2 (el) total current failure

**bulb** ~ 1 a root shaped like a ball; 2 (el) the glass part of an electric bulb

case ~ 1 a situation that exists 2 a large box 3 a special box used to protect something

**channel** ~ 1 an area of water that connects two larger areas of water; 2 a long deep line cut into a surface/ groove

**conduit** ~1a pipe through which water or gas pass; 2 (el) a passage through which electric wires pass

**contact** ~ 1 communication with a person; 2 (el) an electrical part that completes a circuit when it touches another part

**crossbar** ~ 1 diagonal crossing; 2 (el) counter plug

**dead** ~ 1 (el) not working; 2 not alive; 3 adv. completely

 $dig \sim n.1$  impact // v.1 to seize; 2 to make a hole in the ground

**disperse** ~ 1 people that are made to go away; 2 to decompose light

**distributing line** ~1 supply conduit; 2 (el) portable conduit

distribution chest / box ~ 1 supply chamber; (el) 1 supply case / 2 cable connection box

**drive** ~ n. 1 the power from an engine that makes a vehicle move 2 a piece of equipment in a computer that is used to get information from a disk; 3 propulsion; 4 actuation // v. 1 provide power for a vehicle, 2 to make a vehicle move

**drop** ~1 make smth. fall; 2 let something fall; 3 fall; 4 become less; 5 not include; 6 slope downwards; 7 stop doing something // 1 a small amount of liquid that falls in a round shape; 2 reduction; 3 distance to ground; 4 fall; 5 delivery;

duct ~1 a pipe through which air, water or gas pass; 2 (el) a cable

end plate ~ 1 forward cover; 2 (el) extreme plate

**engage** ~ to employ someone; 2 move part of a machine so that it fits into another; 3 to couple; 4 to connect

**envelope** ~ 1 cover for a letter; 2 layer that surrounds something

**exhaust**  $\sim 1$  make someone extremely tired; 2 to evacuate; 3 to scavenge // 1 a pipe of a machine that waste gasses through; 2 the gas produced when an engine is working

**fast** ~ v. fix a boat// n. cable to fix a ship// 3 adv. 1 strong; 2 quickly

**fasten** ~1 to fix; 2 to hold tight; 3 to attach; 4 to strengthen

**fastener** ~1 something used to keep a door, window, etc., firmly shut; 2 something used to join things together

fault ~1 something wrong with a machine, system; 2 crack; 3 error; 4 (el) short circuit

**feeder** ~1 something that provides supplies; (el) distributor; 3 piece of equipment that supplies something to a machine

**figure** ~ 1 to draw; 2 to calculate // 1 number; 2 geometric shape; 3 edge; 4 diagram; 5 drawing; 6 coefficient

 $fin \sim 1$  stabilizer; 2 edge

**fine** ~ n. penalty; II adv.1 delicate; 2 acceptable; 3 narrow

finger ~1 part of the hand; 2 bolt

fitting ~1 mounting; 2. installation; 3. lamp

**fit** ~1 to be the right size, 2 to adjust, 3 to put a piece of equipment into a place, // 1 adjustment; 2 mounting; 3 equipment

fixture ~1 fastener; 2 shackles; 3 fitting

**flash**~ 1 flow of water; 2 bright light; 3 bright colour; 4 glimpse; 5 spark; 6 explosion; //adv. prompt

**flashing** ~1 distillation, 2 instant evaporation; (el) 1 arc release; 2 lighting

**flat** ~ n. 1 apartment; 2 empty tyre; 3 low level of land; 4 face; 5 planar; 6 schedule; 7 without inflexion // adj. 1 smooth surface; 2 not very deep; 3 (el) dead battery;

**flatten** ~1 to plane; 2 to even

**flexible** ~ 1 (el) cord; 2 flexible; 3 elastic

**float**  $\sim$  n. 1 a small light object for fishing; 2 flotation gauge // 1 to stay on the surface of a liquid, 2 to move through the air; 3 glide (a ship); 4 to launch a ship; 5 refloat

**flow**  $\sim$  n.1current; 2 regular movement of the sea towards land; 3 chart; 4 displacement // v. 1 to fill; 2 to flood; 3 to move steady

**flute** ~ 1corrugated shaft;2 chamfer; 3 notch // to groove

**force** ~ v. 1 push; 2 press, 3 accelerate // n.1 violence; 2 physical power; 3 gravity; 4 unit for measuring the force of wind

fracture ~1 to rupture; 2 to break; 3 to crack; 4 to crash// 1 rupture; 2 break; 3 crack; 4 crash

**frame** ~ n. 1 border; 2 structure; 3 body; 4 stand; 5 ribs of a ship, 6 beam

**free** ~ v. 1 release; 2 make available; 3 disconnect // adj. 1 no cost; 2 not held; 3 not busy; 4 (tech) substance not combined with other // suffix for adj. and adv.

**freezing** ~ 1. seizure; 2. chilling, 3 solidification

**fuse** ~ (el) short, thin piece of wire inside electrical equipment // to melt

**gang**  $\sim$  v. to couple // n.1 crew; 2 tools

gate ~1 entrance; 2 shutter; 3 part of a fence; 4 place where you leave in an airport

**gauge** ~1 to measure using an instrument; 2 to judge how people feel, 3 to standardize; 4 to calibrate // thickness unit (USA) // 1 level indicator; 2 instrument measuring the amount of temperature/ pressure etc.; 3 dial

**gear** ~ v.to drive (a mechanism) // n. 1 machinery for changing speed; 2 set of equipment used for a type of activity; 3 a piece of machinery that performs a particular job; 4 interconnecting wheel; 5 pinion; 6 driving mechanism

**glowing** ~ v. (el) 1 making incandescent; 2 heating // adj. 1 incandescent; 2 light; 3 shining **grade** ~1 to say the quality of something; to give a mark (AmE); a grade // n 1 level of job/rank; 2 gradient (AmE); 3 level of quality

**grate** ~ v. to break something into small pieces // n. 1 metal bars used in a fireplace; 2 grid, 3 network

**greaser** ~1 person oiling mechanisms on a ship; 2 mechanism for oiling **gripping jaw device** ~1 piece of equipment used in mechanics; 2 (el) strap **grounding** ~ 1 (el) earthing; 2 getting a ship on ground [5]

The classification of perfect homonyms can be further refined into other categories according to the number of meanings that are totally unrelated, and from the corpus of data there can be identified two, three or four meanings, in comparison to partial homonyms where up to seven meanings can be found although some of them are duplicate meanings for specific terminologies.

Another sub-classification could take into consideration homonyms either absolute or partial coexisting in the same field of activity as maritime industry or maritime engineering. However, from the words and phrases gathered, there are not too many such types of homonyms.

The division can go on with the distinction between words and phrases. From this point of view for absolute homonyms there are four phrases out of forty words, meaning 10% while for partial homonyms, there are eight phrases from a total of sixty-two words, that is about 13%.

The syntactic function of the words discussed can be another criterion of classification. Most of the homonyms from the maritime terminology are nouns due to the fact that the terminologies differ from the general vocabulary especially by the use of different objects and materials. There are also verbs and adjectives that complete the classification, although in a small number.

#### 4. Conclusions

The analysis of the recurrence of the homonyms within English maritime terminology and mainly from the marine engineering specialty emphasized the fact that there is a great number of homonyms for a technical close specialty. Most homonyms are partial ones, although the ratio of absolute and partial homonyms is 2/3. There are about 60 partial homonyms and 40 absolute homonyms. However, homographs are not very well represented, the total number of these words is only 8. As opposed to the reduced number of homographs, there are 23 homophones that could be found within the terminology.

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