COMPOUND NOUNS IN COMPUTER SOFTWARE TECHNICAL TERMS

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Abstract. Makalah ini membahas studi morfologis tentang proses pembentukan nomina majemuk dalam peristilahan teknis piranti lunak komputer. Fokus penelitian adalah proses pembentukan kata majemuk dan jenis makna dari kata majemuk bentukan tersebut. Penelitian deskriptif kualitatif ini menggunakan 40 data berupa nomina majemuk dari kamus komputer dan *Internet data software appendix* dalam *Windows*. Studi menemukan empat tipa pembentukan nomina majemuk: nomina+nomina (28), adjektiva+nomina (5), verba+nomina (5) dan preposisi+nomina (2). Jenis makna yang terbentuk dari pemajemukan tersebut adalah nomina majemuk berinti (headed compound nouns, 15 data) dan nomina majemuk takberinti (headless compound nouns, 25 data).

Keywords: compound noun, headed/headless compound noun, computer technical terms

INTRODUCTION

Morphology is a relevant discipline to deal with the increase of new words in a language as a result of rapid development of science and technology, because many new terms in various fields of technology have been invented to express the new concepts and ideas in the fields. Many of the new terms are formed by combining two or more existing words to create new meaning. Such a formation process is known as compounding. Compounding is a joining of two separate words to produce a single form (Yule, 2006:54), for example: bookcase, doorknob, fingerprint, sunburn, textbook, wallpaper, wastebasket and waterbed. Of these terms, formation of compound nouns seems to be the dominant process. It is predictable because new concepts and ideas are normally expressed in the form of nouns.

Compounding has become one important instrument of forming new words, especially in the attempt to catch up with the development of science and technology. The need here is to find or invent new words that can express new concepts and ideas in many areas of science and technology. The increase

of various paper and electronic dictionaries of technical terms in different disciplines has shown the effort to meet the need.

A compound noun is a noun that is made with two or more words. Each compound noun acts as a single unit and can be modified by adjectives and other nouns. Nordquist (http://grammar.about.com/od/c/g/compnount erm.htm: 20/10/2013) explains the compound noun structure is extremely varied in the types of meaning relations it can indicate. It can be used to indicate what someone does (language teacher), what something is for (waste-paper basket, grindstone), what the qualities of something are (whiteboard), how something works (immersion heater), when something happens (night frost), where something is (doormat), what something is made of (woodpile). Also, compound nouns may be written in three ways: Open or spaced that is when there is space between words (tennis shoe); Hyphenated that is when there is hyphen between words (six-pack), and Closed or solid that is when there is no space or hyphen between words (**bedroom**).

According to Carstairs-McCarthy (2002:62) that compound noun really comes

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into its own as a word forming process in English. Cultural and technical change produces more novel artefacts than novel activities or novel properties. Examples can be found with each of the other main word classes supplying the left-hand element:

- 1. verb-noun (VN): swearword, drophammer, playtime
- 2. noun–noun (NN): hairnet, mosquito net, butterfly net, hair restorer
- 3. adjective–noun (AN): blackboard, greenstone, faintheart
- 4. preposition—noun (PN): *in-group, outpost, overcoat*

English compound has two kinds of compounds: Headed compounds (endocentric) and headless compounds (exocentric). Spencer (2004: 1264) statements, they are double-headed. At the same time, Spencer lists these in a discussion of exocentric compounding, suggesting that *exocentricity* arises when it is difficult to take a decision on headedness.

Headed compounds are a type of compound in which one member functions as the head and the other as its modifier, attributing a property to the head. According to Andrew Carstairs-McCarthy (2002:65) headed compounds would be regarded as having an internal 'centre'; and, sure enough, they are sometimes called endocentric. A compound can be classified as endocentric if the compound has the same grammatical function as the head member (typically the right-hand element is the head of the construction). For example: the English compound steamboat as compared with boat is a modified, expanded version of boat with its range of usage restricted, so that steamboat will be found in basically the same semantics contexts as the noun boat. The compound also retains the primary syntactic features of boat, since both are nouns. Hence, a *steamboat* is a particular type of *boat*, where the class of steamboats is a subclass of the class of boats

Headless compounds (exocentric) is a term used to refer to a particular type of compounds that lack a head. Often these compounds refer to pejorative properties of human beings. An exocentric compound, by contrast, is one which is not a hyponym of one of its elements, and thus appears to lack a head or perhaps to have a head (or 'centre') external to the compound itself. The first person to extend the notion of exocentricity from syntax to the morphological form of compounds was Bloomfield (1933: 236). Bloomfield himself links the term 'exocentric compound' with the earlier Sanskrit term bahuvrihi, thus establishing the equivalent use of the two terms in the subsequent technical literature. This is unfortunate. First, the original Sanskrit i compounds were adjectives not nouns. Examples are bahuvrīhi- itself, literally 'much rice' but meaning having much rice', or gatāyus- 'departed life = dead' (Gonda 1966: 83). Second, as will be shown, bahuvrihis represent a very small proportion of those compounds which may be termed exocentric. According to Andrew Carstairs-McCarthy (2002:65) headless compounds is not determined by any element inside them. This has led some grammarians to call them exocentric In this thesis the writer shall consider some of the different kinds of exocentric compound in English, and suggest that some of them are not exocentric at all. For examples: red-cap (in Britain 'military policeman', in the US 'railway porter'), redeve (several meanings, including 'cheap whiskey'), hatchback ('car whose boot and rear window form a single opening door'), paperback ('book in soft binding'), skinhead ('person — usually of a particular social type — with a shaven head') (2004:6-7).

There has been a study of compound word by ZaenalArifin (2009). The study focuses on the study compound words in *Kangguru Radio English Magazine*, and tried analyze the bases of the compound words and their meanings, and the meaning of the

compound words that are derived from the base words. The study used morphological theory in word formation or compounding on noun, verb, adjective and adverb that found in *Kangguru Radio English Magazine*.

One particular area of technology that shows great increase of technical vocabulary is computer. A number of technical terms about computer software, computer processing system and relevant activities that computer technology can do have been added to the vocabulary of language. And many of these terms are particularly formed by compounding. Many software or applications for software have been available in internet, beginning from freeware and software that requires paying license. The names of many of these programs are in the forms of compounds, meaning that the names are made from combinaton of two words with each word has its own meaning.

There has been a study of technical terms by Alia Ni'am (2011) focusing on the semantic change on nouns used as technical terms in Computer Science. The study focuses on the study of semantic change on computer technical term of single nouns, and tried to identify the types of meaning changes from the general or common words into technical words. However, there have been no studies that focus on the computer technical terms in the form of compound nouns. Therefore, the focus of the study is the formation and meaning of the compound nouns for computer software technical terms.

The present study deals with compound nouns used in computer software technical terms. In this study, the writer will focus on the formation of the compound nouns and the meaning, particularly the computer program names. The questions to be answered in the study are: (1) What are the formation of compound nounsused incomputer software terms? (2) What are the lexical categories and meanings of the bases of the compound nouns

used in computer software terms? (3) What are the meanings of the compound nouns used in the computer software terms? The finding of this study is expected to give valuable contribution theoretically and practically. Theoretically, this study will deepen our understanding and knowledge about morphological study especially on English compound words and semantics theory for the meaning found in Business computer software. Practically, this study will be useful for adding more vocabulary in specific areas such as computer software.

METHOD

The design of the study is descriptive qualitative, in that it concerns with collecting data in attempt to describe a subject as accurately as possible and to answer the questions, that is to identify the construction and compounds words in computer software. The qualitative method, the design evolves during the research, it can be adjusted or changed as it progress (SamyTayie: 2005:86). The data involves forty (40) compound nouns obtained from computer term dictionary and e-book (Microsoft Computer Dictionary (fifth edition)) from the software compatible windows operating system.

RESULT AND DISCUSSION

The study found four types of compound noun formation: noun + noun, adjective + noun, verb + noun and preposition + noun combinations.

1. Noun+Noun

There are twenty eight (28) data that are formed in this combination. This combination divided two types based on exocentricity, i.e. headed and headless.

a. Headed Noun + Noun Combination

The analysis found eleven (11) compound nouns belong to this category, including *Adobe reader*, *iTunes*, *Internet*

Explorer, Jetaudio, Microsoft Office, Microsoft Word, Microsoft Project, Net Meter, ProjectcReader, Android Studio, and Microsoft Publisher. The analysis of some data is presented below for illustration.

(1) Adobe (noun)+Reader (noun) $\rightarrow Adobe$ Reader (noun)

This compound noun has two bases: *Adobe* and *Reader*. The meanings of the bases are:

Adobe (n): 'An American multinational specification of computer software company head-quartered in San Jose, California, United Macinton States. The company has historically a Portal focused upon the creation of multimedia can be ward creativity software products, with a more-recent foray towards rich Internet(2) Internet application software development.'

Reader (n): '(1) A person who reads a book, magazine, newspaper, etc. (2) A machine that is used for reading text or information that is stored on film, tape, etc. (3) A book that is used to learn how to read or to practice reading in your own language or in a foreign language.'

The combination of the two words create a new meaning:

Adobe Reader (n): 'A program from Adobe Systems, Inc., that converts a fully formatted document created on a Windows, Macintosh, MS-DOS, or UNIX platform into a Portable Document Format (PDF) file that can be viewed on several different platforms. Acrobat enables users to send documents that contain distinctive typefaces, color, graphics, and photographs electronically to recipients, regardless of the application used to create the originals. Recipients need the Acrobat Reader, which is available free, to view the files. Depending on version and platform, it also includes tools such as Distiller (which creates PDF files from PostScript files), Exchange (which is used for links, annotations, and security-related matters), and PDF Writer (which creates

PDF files from files created with business software).'

The compound noun Adobe Reader refers to a kind of computer program produced by a company called Adobe, Inc. Here, the second meaning of the word *Reader* is used. Thus the combination of the two bases creates a new meaning, a specific software produced by Adobe company whose specification is for converting a fully formatted document created on a Windows, Macintosh, MS-DOS, or UNIX platform into a Portable Document Format (PDF) file that can be viewed on several different platforms.

Internet (noun)+Explorer (noun) →
InternetExplorer (noun)

This compound noun has two bases: *Internet* and *Explorer*. The meanings of the bases are:

Internet (n): 'A global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.'

Explorer (n): 'A person who explores an unfamiliar area; an adventurer'

The combination of two words creates a new meaning:

Internet Explorer (n): 'a series of graphical web browsers developed by Microsoft and included as part of the Microsoft Windows line of operating systems, starting in 1995. It was first released as part of the add-on package Plus! for Windows 95 that year. Later versions were available downloads, or in service packs, and included in the OEM service releases of Windows 95 and later versions of Windows. Internet Explorer is one of the most widely used web browsers, attaining a peak of about 95% usage share during 2002 and 2003. Versions of Internet Explorer for other operating systems have also been produced, including an Xbox 360 version called

Internet Explorer for Xbox and an embedded OEM version called Pocket Explorer, later rebranded Internet Explorer Mobile, which is currently based on Internet Explorer 9 and made for Windows Phone, Windows CE, and previously, based on Internet Explorer 7 for Windows Mobile. It remains in development alongside the desktop versions. Internet Explorer for Mac and Internet Explorer for UNIX (Solaris and HP-UX) have been discontinued.'

This compound noun *InternetExplorer* refers to kind computer software program product by Microsoft. Here, the second meaning of the word *Explorer* is used. Thus the combination of the two bases creates a new meaning, a specific software product produced by Microsoft whose specification is for graphical web browsers.

b. Headless Noun + Noun Combination

There are seventeen (17) compound nouns belong to this category: Billquick, Camfrog, Earmaster, Firefox, Format Factory, Goldwave, Handbrake, Paintshop, Onenote, Photoshop, Photoline, iCloud, Powerpoint, Pro Tool, Thunderbird, Lightroom, and Apple Safari. The analysis of the data is illustrated below.

(3) Bill (noun)+Quick (noun)→Billquick (noun)

This compound has two bases: *bill* and *quick*. The meanings of the bases are:

bill (n): '(1) an amount of money owed for goods supplied or services rendered, set out in a printed or written statement of charges. (2) a draft of a proposed law presented to parliament for discussion', quick (adj): '(1) moving fast or doing something in a short time.(2) (of a person) prompt to understand, think, or learn; intelligent.'

The two bases form a new meaning:

Billquick: 'A time tracking, project management and billing software for Architects, Engineers, Accountants, Consultants and other service professionals.

The compound noun *billquick* refers to a kind of computer program. Here, the general meanings of the bases are specialized into a specific kind of software product.

(4) Cam (noun)+Frog (noun) \rightarrow Camfrog (noun)

This compound has two bases: *Cam* and *Frog*. The meaning has two bases are:

Cam (n): '(1) A projection on a rotating part in machinery, designed to make sliding contact with another part while rotating and to impart reciprocal or variable motion to it; Abbreviation to Camera: (1) computer-aided manufacturing, (2) computer-aided manufacturing.'

Frog (n): 'A tailless amphibian with a short squat body, moist smooth skin, and very long hind legs for leaping.'

The combination of two words create a new meaning:

Camfrog (n): 'A video chat client created by Camshare LLC first launched in 2003.

The compound noun *Camfrog* refers to kinds of computer software program created by Camshare LLC. Here, the general meanings of the bases are specialized into a specific kind of software product.

2 Adjective + Noun

There are five (5) data that belong to this group. This combination is also divided into two types of exocentricity:headed and headless.

a. Headed Adjective + Noun Combination

There are two (2) compound nouns belong to this category: *Open Office* and *Smartdraw*.

(5) Open (adjective) + Office (noun) → Open Office (noun)

This compound noun has two bases: *Open* and *Office*. The meanings of two bases are:

Open (adj): '(1) Allowing access, passage, or a view through an empty space; not closed or blocked up. (2) Exposed to the air or to view; not covered.

Office (n): '(1) A room, set of rooms, or building used as a place for commercial, professional, or bureaucratic work. (2) A position of authority, trust, or service, typically one of a public nature. (3) A service or kindness done for another person or group of people.

The combination of two compounds creates a new meaning:

Open Office (n): 'An open-source office suite. It was an open-sourced version of the earlier StarOffice, which Microsystems acquired in 1999 for internal use. Sun open-sourced the software in July 2000 as a competitor to Microsoft Office, releasing version 1.0 on 1 May 2002. The project was closed by Oracle Corporation, the then-owner of Sun, in April 2011. Active successor projects include Apache OpenOffice, LibreOffice and NeoOffice. OpenOffice.org's default file format was the OpenDocument Format (ODF), an ISO/IEC standard, which originated with OpenOffice.org. It could also read a wide variety of other file formats, with particular attention to those from Microsoft Office. OpenOffice.org contained a word processor (Writer), a spreadsheet (Calc), a presentation application (Impress), a drawing application (Draw), a formula editor (Math), and a database management application (Base). OpenOffice.org was primarily developed for Linux, Microsoft Windows and Solaris, and later for OS X, with ports to other operating systems.'

This compound noun Open Office refers to computer software of program developed by OpenOffice.org. Here, the second meaning of the word Office is used. Thus the combination of the two bases creates a new meaning, a specific software product produced by OpenOffice.org whose specification for an open-source office suite. It was primarily developed for Linux, Microsoft Windows and Solaris, and later for OS X, with ports to other operating systems.

(6) Smart (adjective)+Draw (noun) → Smartdraw (noun)

This compound noun has two bases; *Smart* and *Draw*. The meaning has two bases are:

Smart (adj): '(1) Having or showing a quick-witted intelligence. (2) (Of a person) clean, neat, and well-dressed.

Draw (*n*): 'A person or thing that is very attractive or interesting.

The combination of two words create a new meaning:

Smartdraw (n): 'A visual processor developed by SmarDraw, LLC used to create flowcharts, organization charts, mind maps, project charts, and other visuals. It is built exclusively for Windows operating systems and works with Windows 7, Vista, XP, and 2000. Since version 7, it uses Microsoft's Fluent User Interface in conjunction with automated panels specific to each type of diagram. It integrates with Microsoft Word, Excel, PowerPoint and Microsoft Project; it can export diagrams to common image formats and PDF format.'

This compound noun *Smartdraw* refers to kind of computer software program developed by SmartDraw, LLC. Here, the second meaning of the word *Draw* is used. Thus the combination of the two bases creates a new meaning, a specific software product produced by SmartDraw, LLC whose specification for A visual processor used to

create flowcharts, organization charts, mind maps, project charts, and other visuals. It integrates with Microsoft Word, Excel, PowerPoint and Microsoft Project; it can export diagrams to common image formats and PDF format.

2. Headless Adjective + Noun Combination

There are three (3) compound nouns belong to this category: *Quick Time, Real Player*, and *Bluestack*.

(7) Quick (adjective) +Time (noun) → Quick Time (noun)

This compound noun has two bases: *Quick* and *Time*. The meaning has two bases are:

Quick (adj): '(1) Moving fast or doing something in a short time. (2) (Of a person) prompt to understand, think, or learn; intelligent.'

Time (n): '(1) The indefinite continued progress of existence and events in the past, present, and future regarded as a whole. (2) A point of time as measured in hours and minutes past midnight or noon. (3) An instance of something happening or being done; an occasion. (4) (Following a number) expressing multiplication. (5) The rhythmic pattern of a piece of music, as expressed by a time signature.'

The combination of two words create a new meaning:

Ouick (n): 'An extensible Time multimedia framework developed by Apple Inc., capable of handling various formats of digital video, picture, sound, panoramic images, and interactivity. The classic version of QuickTime is available for Windows XP and later, as well as Mac OS X Leopard and later operating systems. A more recent version, QuickTime X, is currently available on Mac OS X Snow Leopard and newer.'

This compound noun *QuickTime* refers to kinds of computer software program developed by Apple Inc,. Here, the general

meanings of the bases are specialized into a specific kind of software product.

(8) Real (adjective)+Player (noun)→Real Player (noun)

This compound noun has two bases: *Real* and *Player*. The meaning has two bases are:

Real (adj): '(1) Actually existing as a thing or occurring in fact; not imagined or supposed. (2)(Of a substance or thing) not imitation or artificial; genuine. (3) Complete; utter (used for emphasis). (4) Adjusted for changes in the value of money; assessed by purchasing power. (5) (Of a number or quantity) having no imaginary part. (6) (Of an image) of a kind in which the light that forms it actually passes through it; not virtual. Player (n): '(1) A person taking part in a sport or game. (2)A person who plays a musical instrument. (3) An actor.'

The combination of two words create a new meaning:

Real Player (n): 'a cross-platform product created software RealNetworks primarily used for the playing of recorded media. The media player is compatible with numerous formats within the multimedia realm, including MP3, MPEG-4, QuickTime, Windows Media, and multiple versions of the proprietary RealAudio RealVideo formats. RealPlayer is also available for other operating systems (OS) and Linux, Unix, Palm OS, Windows Mobile and Symbian versions have been released. The software is powered by an underlying open source media engine called Helix.

This compound noun *Real Player* refers to kinds of computer software program product created by RealNetworks primarily used for the playing of recorded media. Here, the general meanings of the bases are specialized into a specific kind of software product.

3 Verb + Noun

There are five (5) data that belong to this group, which are also divided into two types of exocentricity: headed and headless.

a. Headed Verb + Noun Combination

There are two (2) compound nouns that belong to this category: *Split Cam* and *Cheat Engine*.

(9) Split (verb)+Cam (noun)→Split Cam (noun)

This compound noun has two bases: *Split* and *Cam*. The meaning has two bases are:

Split (v): '(1) Break or cause to break forcibly into parts, esp. into halves or along the grain. (2) (With reference to a group of people) divide into two or more groups. (3) Betray the secrets of or inform on someone.'

Cam (n): '(1) A projection on a rotating part in machinery, designed to make sliding contact with another part while rotating and to impart reciprocal or variable motion to it; Abbreviation to Camera: (1) computer-aided manufacturing. (2) computer-aided manufacturing.'

The combination of two words create a new meaning:

Split Cam (noun): 'A freeware program developed by Split Video Capture Driver for webcam features extending. Its webcam software offers cool webcam effects for having more positive emotions during video calls with friends. Additionally it is the easiest way to split webcam video stream.

This compound noun *Split Cam* refers to kind of computer software program developed by Split Video Capture Driver. Here, the second meaning of the word *Cam* is used. Thus the combination of the two bases creates a new meaning, a specific software product produced by Split Video Capture Driver whose specification for webcam features extending.

(10) Cheat (verb) + Engine (noun) \rightarrow Cheat Engine (noun)

This compound has two bases: *Cheat* and *Engine*. The meaning has two bases are:

Cheat (v): '(1) Act dishonestly or unfairly in order to gain an advantage, esp. in a game or examination. (2) Avoid (something undesirable) by luck or skill. Engine (n): '(1) An machine with moving parts that converts power into motion. (2) A thing that is the agent or instrument of a particular process. (3) A railroad locomotive.

The combination of two words create a new meaning:

Cheat Engine (n): 'An open source memory scanner/hex editor/debugger created by Eric Heijnen ("Dark Byte") for the Windows operating system. Cheat Engine is mostly used for cheating in computer games, and is sometimes modified and recompiled to evade detection. This program resembles L. Spiro's "Memory Hacking Software", TSearch, and ArtMoney. It searches for values input by the user with a wide variety of options that allow the user to find and sort through the computer's memory. Cheat Engine can also create standalone trainers that can operate independently of Cheat Engine. Cheat Engine's latest version is 6.3.

This compound noun CheatEngine refers to of computer kinds software program resembles L. Spiro's "Memory Hacking Software", TSearch, and ArtMoney. Here, the second meaning of the word Engine is used. Thus the combination of the two bases creates a new meaning, a specific software product ceated by Eric Heijnen ("Dark Byte") whose specification for An open source memory scanner/hex editor/debugger for the Windows operating system. Cheat Engine is mostly used for cheating in computer games, and is sometimes modified and recompiled to evade detection.

b. Headless Verb + Noun Combination

There are three (3) compound nouns belonging to this category: Flash Player, Dropbox, Google Chrome.

(11) Flash (verb)+Player (noun) \rightarrow Flash Player (noun)

This compound noun has two bases: *Flash* and *Player*. The meaning has two bases are:

Flash (v): '(1) (Of a light or something that reflects light) shine in a bright but brief, sudden, or intermittent way. (2) Display (an image, words, or information) suddenly on a television or computer screen or electronic sign, typically briefly or repeatedly. (3) Move or pass very quickly.'

Player (n): '(1) A person taking part in a sport or game. (2)A person who plays a musical instrument. (3) An actor.'

The combination of two words create a new meaning:

Flash Player (n): 'A freeware software for viewing multimedia, executing rich Internet applications, and streaming video and audio, content created on the Adobe Flash platform, developed by Adobe System and Microsoft Corporation. Flash Player can run from a web browser (as a browser plug-in) or on supported mobile devices, but there also exist versions running directly on an operating system intended both for regular users and content developers, denoted with the **Projector** Standalone) and Debugger name suffixes, respectively. Flash Player runs SWF files that can be created by the Adobe Flash Professional authoring tool, by Adobe Flex or by a number of other Macromedia and third party tools. Flash Player was created by Macromedia and now developed and distributed by Adobe Systems after its acquisition. Flash Player supports vector raster

graphics, 3D graphics, an embedded scripting language called ActionScript executed in ActionScript Machine, and streaming of video and audio. ActionScript is based ECMAScript, and supports objectoriented code, and may be compared to JavaScript. Flash Player has a wide user base, with over 90% penetration on internet connected personal computers, and is a common format for games, animations, and GUIs embedded into pages. Adobe Systems, developer of Adobe Flash Player, states that more than 400 million of total more than 1 billion connected desktops update to the new version of Flash Player within six weeks of release. Flash Player can be downloaded for free and its plug-in version is available for recent versions of web browsers (such as Internet Explorer, Mozilla Firefox, Google Chrome, Opera and Safari) on selected platforms. Google Chrome distribution comes bundled with the sandboxed Adobe Flash plug-in and will continue to support the plug-in in Windows 8 Metro mode. Each version of Adobe Flash Player is backwards-compatible.

This compound noun *Flash Player* refers to kinds of computer software program developed by Adobe System and Microsoft Corporation. Here, the general meanings of the bases are specialized into a specific kind of software product.

(12) Drop (verb)+Box (noun) $\rightarrow Dropbox$ (noun)

This compound noun has two bases: *Drop* and *Box*. The meaning has two bases are:

Drop (v): '(1) Let or make (something) fall vertically. (2) Fall vertically. (3) Make or become lower, weaker, or less. (4) Abandon or discontinue (a course of action or study). (5) Set down or unload (a passenger or goods), esp. on the way

to somewhere else. (6) (in sports) fail to win (a point, game, or match).'

Box (n): '(1) a container with a flat base and sides, typically square or rectangular and having a lid. (2) An area or space enclosed within straight lines, in particular. (3) A small structure or building for a specific purpose, in particular. (4) A protective casing for a piece of a mechanism. (5) A mailbox at a post office, newspaper office, or other facility where a person may arrange to receive correspondence.'

The combination of two words create a new meaning:

Dropbox (n): 'A file hosting service Dropbox, Inc., operated by headquartered San in Francisco. California, that offers cloud storage, file synchronization, and client software. Dropbox allows users to create a special folder on each of their computers, which Dropbox then synchronizes so that it appears to be the same folder (with the same contents) regardless of which computer is used to view it. Files placed in this folder also are accessible through a website and mobile phone applications. Dropbox provides client software for Microsoft Windows, Mac OS X, Linux, Android, iOS, BlackBerry OS and web browsers.'

This compound noun *Dropbox* refers to kinds of computer software program that a file hosting service operated by company called Dropbox, Inc. Here, the general meanings of the bases are specialized into a specific kind of software product.

4 Preposition + Noun

There are two (2) data that belong to this group: *Outlook*, (40) *After Dark*. Both are headless type of compound.

(13) Out (preposition)+Look (noun) → Outlook (noun)

This compound noun has two bases: Out and

Look. The meaning has two bases are:

Out (prep): 'Through to the outside.'

Look (n): '(1) An act of directing one's gaze in order to see someone or something. (2) The appearance of someone or something, esp. as expressing a particular quality.'

The combination of two word create a new meaning:

Outlook (n): 'a personal information manager from Microsoft, available as a part of the Microsoft Office suite. The current versions are Microsoft Office Outlook 2013 for Windows and Microsoft Office Outlook 2011 for Mac. Although often used mainly as an email application, it also includes a calendar, task manager, contact manager, note taking, journal, and web browsing.'

This compound noun *Outlook* refers to kinds of computer software program developed by Microsoft. Here, the general meanings of the bases are specialized into a specific kind of software product.

(14) After (preposition)+Dark (noun)→AfterDark (noun)

This compound noun has two bases: *After* and *Dark*. The meaning has two bases are:

After (prep): '(1) During the period of time following (an event). (2) Behind. (3) In pursuit or quest of. (4) Next to and following in order or importance. (5) In allusion to (someone or something with the same or a related name). (6) Concerning or about.'

Dark (n): '(1) The absence of light in a place. (2) A dark color or shade, esp. in a painting.'

The combination of two words create a new meaning:

After Dark (n): 'A series of computer screensaver software introduced in 1989 by Berkeley Systems for the Apple Macintosh, and for Microsoft Windows.

This compound noun AfterDark refers to

kinds of computer software program that a series of computer screensaver developed by Berkeley System. Here, the general meanings of the bases are specialized into a specific kind of software product.

CONCLUSION

This study found four combinations of compound nouns in computer software terms: Noun + Noun combination (*jetaudio*, *Firefox*), Adjective + Noun combination (*OpenOffice*, *QuickTime*), Verb + Noun combination (*CheatEngine*, *GoogleChrome*), and Preposition + Noun combination (*Outlook*). The combination may form headed or headless compounds, and the meanings may refer to specific kinds of software products.

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