

A Historical Study of Nouns with the Same Form for Singular and Plural

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Introduction

Number is a grammatical category and is systematized and expressed by means of inflection. The difference between the singular (sg.) and the plural (pl.) is represented by the difference in the form of the noun, e.g. *book/books* ⁽¹⁾. However, as Aronoff and Fudeman mentions below, such a grammatical number is not accepted in Japanese and the concept of attaching the ending *-(e)s* or a zero plural (\emptyset -plural or \emptyset pl) ⁽²⁾ to the base for forming plural is beyond the realm of possibility. “In Japanese, where *sakana* means both ‘fish (sg.)’ and ‘fish (pl.)’, we cannot posit a zero plural (**sakana- \emptyset*) because nowhere in the language does \emptyset PL contrast with a non-zero allomorph” (Aronoff & Fudeman 2005: §1.52).

1. Some Irregular Plural Nouns in Present-Day English

The common plural forms of noun in Present-day English (PDE) can be analyzed as the composition of a semantic root and a plural morpheme realized as {z}, such as *dogs* (*dog* + *-s* /z/), *books* (*book* + *-s* /s/) and *houses* (*house* + *-s* /ɪz/) ⁽³⁾. The plural is called a regular plural and normally predictable both in pronunciation and spelling. In addition to this, there are a few irregular plurals that have survived since Old English (OE) but they cannot be predicted from the singular (Quirk *et al.* 1985: §5.79).

Some irregular forms are analysed in the same way as above, such as *oxen* (*ox* + *-en*), but many forms, such as *teeth*, *sheep*, *criteria*, and *trousers*, are not. The plural form *teeth* corresponds to the singular *tooth*. The vowels /i:/ <ee> of the plural *teeth* and /u:/ <oo> of the singular *tooth* show a feature of minimal contrast. This means of creating plural forms makes use of the deference of vowels, which is called mutation, and *men* and *mice* are other examples. In the case of *sheep*, the plural is identical with the singular. It is exactly true but how should we analyze this case? We can consider that a kind of noun, such as *sheep* and *fish*, has a zero plural because it can be expressed as *one sheep*, *one fish*, *two sheep* and *two fish*, but it cannot be *two *sheeps*, *two *fishes* like *one dog* and *two dogs*. The zero plural like *sheep* and *fish* is an allomorph of the plural {z}.

When native speakers of English hear and read *two deer* or *two fish*, they may recall two individual creatures of the same kind called *deer* or *fish*. Grammatical plural forms of *deer* and *fish* are *deer* and *fish* but the referents are more than one creature respectively.

Criteria is the major plural form of *criterion*, whereas another plural *criteria*, which first appeared in the second half of the 18th century (OED: 1788), is also used less commonly. The plural form by means of using the contrastive pair of *-ria* and *-rion* is not common in English. These two forms were directly borrowed from Greek into English in the early 17th century (OED: 1622). English, as it is widely known, has many borrowed nouns, but in general the majority of them have historically formed their plural in conformity to the ways of the general English plural formation.

2. Some Features of Nouns with a Zero Plural in Present-Day English

Zero plural nouns have the same form in both the singular and the plural as in (1a) and (1b). This type of plural can be understood by using the form of a verb, an indefinite article *a/an*, or a numeral that occurs as a lead.

- (1) a. A *sheep* has escaped. (sg.)
b. Two *sheep* have escaped. (pl.) (Huddleston & Pullum 2002: p.1588)

According to Quirk *et al.* (1985: §5.6), nouns with a zero plural are classified into four types: (I) animal names, *e.g. sheep*, (II) nationality nouns, *e.g. Japanese*, (III) quantitative nouns, *e.g. thousand*, and (IV) nouns with equivocal number, *e.g. means*. We are going to discuss (I) exclusively here.

The plural expressions vary for each animal name and are grouped into the following five classes (Quirk *et al.* 1985: §5.87):

- (i) Always Regular plural, *e.g. bird, cow, eagle, hen, hawk, monkey, rabbit*
- (ii) Usually regular plural, *e.g. elk, crab, duck* (zero only with the wild bird)
- (iii) Both regular and zero plurals, *e.g. antelope, reindeer, fish, flounder, herring, shrimp, woodcock*
- (iv) Usually zero plural, *e.g. bison, grouse, quail, salmon, swine* (*cf* the normal word *pig* which always has regular plural)
- (v) Always zero plural, *e.g. sheep, deer, cod*

Duck in (ii) has two plurals, *i.e.* (a) a zero plural and (b) a regular plural or *-s*. *Duck* in (2a) refers to in the mass as game, *i.e.* the wild birds, on the one hand and in (2b) *ducks* denotes different individuals or species on the other. *Duck* as in (2c), which is used as an uncountable noun, also refers to the meat of a duck when it is cooked and eaten.

- (2) a. *Have you ever shot duck?* (Quirk *et al.*)
 b. *Can you see the ducks on the pond?* (Quirk *et al.*)
 c. *The chef prepared duck with artichokes and oxtail fondue.* (BBC)

As mentioned above, the usage of animal names in zero plural is complicated and differs individually.

3. A Zero Plural in Old English

Some of the strong neuter nouns had no ending in nominative and accusative plural, e.g. *hors/hors* “horse/horses”, *word/word* “word/words”, *etc.* in OE. In addition to these, there were some nouns that belonged to other strong declensions with a zero plural: *wine* “friends” (i- declension, masculine; also *winas*), *scrūd* “garments” (monosyllabic declension, neuter), *hælep* “men, heroes” (þ- declension, masculine; also *hæleþas*), *mæg(e)þ* “women” (þ- declension, feminine), *brōþor* “brothers” (r- declension, masculine; also *brōþru*), *mōdor* “mothers” (r- declension, feminine; also *mōdru*), *frēond* (cf. generally *frīend*) “friends” (nd- declension, masculine; also *frēondas*), and *wealdend* “rulers” (nd- declension, masculine; also *wealdende*, *wealdendas*) (Wardale 1967). Some plural forms in the examples above show signs of inflectional levelling from the original declension form to others. A zero plural has been steadily declining from then onwards.

In the general declension of strong neuter nouns, to which twenty-five per cent of the nouns belonged, almost all had nominative/accusative plural in *-u*, e.g. *scip/scipu* “ship/ships” or no ending, e.g. *land/land* “land/lands” (Quirk & Wrenn 1994: §25). Those differences in plural form did not exist in prehistoric continental English and the plural ending of many neuter nouns was *-u* (Bradley 2006: p.18). The ending *-u* in the nominative and accusative plural remained in the words that had short stems, such as *scipu* and *limu* “limbs”, and after a long monosyllable ⁽⁴⁾ final the ending *-u* was lost (Davis 1953: §6.(6)(b)), such as *land* and *bān* “bone”. The existence of the two different forms of plural may have an effect on the decline of inflection.

The only neuter nouns with long single or final syllable, such as *hūs* “houses” ⁽⁵⁾, *dēor* “wild beasts”, *gēar* “years”, *scēap* “sheep”, *swīn* “swine”, *þing* “things”, *wīf* “women”, *word* “words”, *etc.*, had an uninflected form in nominative/accusative plural in OE. Although among these *deer*, *sheep*, and *swine* keep the original uninflected (nominative and accusative) plural form still in PDE, many of these nouns took a new plural form in *-(e)s* mostly in Middle English (ME).

4. Changing of a Zero Plural in the History of English

The unchanged plurals, which were descended in a direct line from the OE neuter nouns of a long stem-syllable, were still preserved in the 13th century, such as *schēp* (OE *scēap*), *deor* (OE *dēor*), *þing* (OE *þing*), *word* (OE *word*), *etc.* (Miyabe 1974: p. xxxvii). But these minor declension types had begun to lose ground to the dominant type with *-es*. The *-es* plural appeared in the 13th century in Northern (N)

and north-East Midland (nEM), such as *þing/þingess*, *word/wordess*, *land/landess*, etc. (*Ormulum*⁽⁶⁾) (Miyabe 1974: p. xxxvii).

OE *hors* “horse” was a strong neuter noun and the plural was the same as the singular. “[H]orse plural was in general use down to 17th century, and is still frequent dialectally; but *horses* appears as early as Layamon (c1205⁽⁷⁾), and its use increased till in 17th century it became the usual plural in the literary language” (OED). The progress of changing from the Ø-plural to the influential plural with *-(e)s* was different in each word. In the case of *horses*, it took about four hundred years, when it was the equivalent of the whole ME and the Early Modern English (ModE) period, to take hold. It is a case worthy of notice that the two plural forms were used differently for different tasks: “sometimes *horse* appears as the collective and *horses* as the individual plural, which explains the retention of *horse* in military language as in ‘a troop of horse’” (OED).

It is considered that the *-(e)s* plural form was generalized not later than the age of Sir Thomas Malory (c1405-1471). Although he used a smaller number of unchanged plural, such as *horse* (pl.) and *thing* (pl.), he used the *-(e)s* plural, much more by far: *horses* and *things*. He also wrote with the Ø-plural, such as *twelve month* “twelve months”, *fourten night* “fourteen nights”, *fourty yere* “forty years”, and *seven myle* “seven miles” (Mossé 1970: p.110; The translation is mine.).

OE *hūs* “house” was originally a strong neuter noun and the plural was the same as the singular. The unchanged plural form had survived “until at least the end of the 14th century” (OED) and the forms with plural in *-(e)s* became the norm⁽⁸⁾. The plural with *-(e)s* (*huses*) appeared early in 13th century (OED: a1225⁽⁹⁾). According to the OED, “occasional by-forms are found showing levelling of the plural endings of the strong masculine (*hūsas* . . .) or (in Northumbrian) weak masculine (*hūso*, *hūsa*, *hūse* . . .)” in OE. Like some other nouns the plural in *-en* (*housen*), which was originally the plural ending of the weak declension, appeared in the middle of the 15th century (OED: 1450-1) and was “preferred by some writers of standard English in the early modern period (. . .), and remains widespread in regional use” (OED). Even in the middle of the 20th century the plural *housen* is still used (OED: 1950).

OE *gēar*⁽¹⁰⁾ “year” was originally a strong neuter noun and had the same forms both in the plural and the singular. The *-(e)s* plural became usual in the course of ME after taking the place of the original Ø- plural. *Year* has been used very often with a cardinal number, such as *one year*, *two years*, etc. It is used in Ø- plural in some context as in *a five-year-old girl*, where *year* co-occurs with a cardinal number *five* and *old* in the adjective phrase *five-year-old* and it is used as one unit. The plural *years*, however, is used in the following expressions: *a girl of three years* and *a girl three years old*.

OE *wīf* “woman, wife” and OE *word* “word” were also strong neuter nouns and Ø-plural survived into the ME period. In the case of *wife*, a sign of the moving from Ø-plural to the plural in *-(e)s* took place as early as in the late OE period and in Northumbrian dialect in OE; another analogical weak plural form appeared; and a new analogical plural in *-(e)s* became the norm in ME (OED). In the case of *word*, the plural in *-(e)s* as *wordes* appeared in the early 14th century (OED: c1330) and the form without *-e* as

words was found in the early 17th century (OED: *a1616*).

Swine derives from OE *swīn* “swine, pig”⁽¹¹⁾ which was a strong neuter noun like *scēap*. The nominative and accusative plural forms were *swīn*, a zero plural, and it has still continued until PDE. The spelling *swine* began to be used in ME and the plural in *-(e)s* appeared at least for a while in ME, such as *swynes* (OED: 1484-), and in the 15th and during the 17th and 18 the centuries, such as *swines*.

5. Representative Nouns with the Same Form for Both Singular and Plural

Three nouns *fish*, *sheep*, and *deer* that have the same form for both the singular and the plural are discussed individually in this section.

5.1 Fish

There are not many nouns with a zero plural in PDE, such as *fish*, *sheep*, *carp*, and *salmon*. In the case of *fish*, it has a different grammatical character from *sheep*, *carp*, and *salmon* which have no specific plural forms. *Fish* has two plural forms: *fish* (a zero plural, e.g. *two fish-Ø*), and *fishes* (a regular plural, e.g. *two fishes*). The former, the usual plural form, refers to the ordinary plural meaning: *They caught several fish* (OALD). The latter refers to different kinds of fish, which is specific meaning: *The list of endangered species includes nearly 600 fishes* (OALD). *Fish* derives its origin from an OE masculine noun *fisc* “fish” and declined as follows:

	Sg.	Pl.
Nominative/Accusative	<i>fisc</i>	<i>fisc-as</i> (<i>fiexas/fisceas/fyxæs</i>)
Genitive	<i>fisc-es</i>	<i>fisc-a</i> (<i>fixa</i>)
Dative	<i>fisc-e</i>	<i>fisc-um</i> (<i>fixum</i>)

The nominative and accusative plural endings were *-as*, from which the common plural ending *-(e)s* in PDE derives. *Fishes*, one of the two plural forms, is the original one and *fish*, the other one, was formed later in history. It may be thought that the occurrence of the plural form *fish* is deeply related to a collective noun. Creatures that live in water and wild animals or birds that people fish or hunt for sport or food, i.e. game, are expressed as a collective noun that “refers to collection of people, animals, things as a group” (Richards & Schmidt 2002: s. v. collective noun).

The number system in OE and in PDE may be quite different. Nouns in PDE are divided into two groups by the semantic and conceptual scales of “countable” and “uncountable”, while nouns in OE were not grouped by those scales. In OE every noun was inflected grammatically, not semantically. *Fiscas* referred to both “fish” (usual plural form) and “fishes” (different kinds of fish) in one form.

According to the OED, the first example of *fish* as the collective singular used for plural was in the end of the 13th century (OED: *a1400*): *Cursor Mundi* (Vesp[asian]) l. 9395 *Foghul and fiche, grett thing*

and *small*. In this example, *fish* pairs with *foghul* “fowl” (<OE *fugol* “bird”), which has two forms as *fowls* (plural) and *fowl* (collective singular used for plural) like *fish* in PDE. *Fowl* had referred to “any bird” by ME and began referring to “a domestic fowl”, i.e. “poultry”, at the end of the 16th century (OED: *a1586*).

According to the OED, the first example of *fish* referring to “the flesh of fish, esp[ecially] as used for food; opposed to *flesh*, i.e. the flesh of land-animals, and *fowl*, that of birds” first appeared in 1393: Langland *Piers Plowman* C. vii. 159 *Hij eteþ more fisch þan flesh*.

5.2 Sheep

Sheep traces its roots back to OE *scēap* “sheep”, which was a neuter noun of the strong declension. The words, such as *þing* “thing”, *flōd* “flood”, and *gēar* “year” were the same group as *scēap* in OE, but the plural form of these three nouns are made by adding the ending -s, such as *things*, *floods*, and *years* in PDE. The paradigm of *scēap* was as follows:

	Sg.	Pl.
Nominative/Accusative	<i>scēap</i>	<i>scēap</i>
Genitive	<i>scēap -es</i>	<i>scēap -a</i>
Dative	<i>scēap -e</i>	<i>scēap -um</i>

The form of nominative and accusative plural of *scēap* is *scēap* ⁽¹²⁾ with no ending. Although the prehistoric plural was **skāpu* (cf. Grm. **skāpo-m*), the final vowel -u was normally lost in OE (OED). The original way of forming the plural of *scēap* has survived to this day and *sheep* is both the singular and the plural forms.

The OED lists the variant spellings for *sheep*, which appeared in written works in history especially before introducing type printing around the middle of the 15th century, and the proper spelling descended from OE *scēap* (*scāp/scēp*) was *sce(a)p* (ME), *scepe* (ME), *scheep* (ME), *sheep* (from ME to PDE), etc. In addition to these, some other spellings descended from OE *scīp* (the form of Northumbrian dialect) existed, such as *schipe/schype* (ME), *schip* (ME-15th century), *ship* (ME, 15th-18th century dialect). According to the OED, “the pronunciation /ʃip / is specially characteristic of midl[and] (especially west-midl[and]) dialects, but is widely current elsewhere in England, except in the north-west”.

While the proper plural form in ME was *shep* (<OE *scēap*), various plural forms by analogy from other types of declension were taking place in ME, such as *she(a)pen* (early Southwest Midland dialect), which descended from the OE weak declension form, and (early influenced) *sceape*, -a(n) ; and *shepes*, which derived from the OE strong declension form. In ME the plural forms with the ending -e, such as *shep(e)*, *sheppe*, *sheip(p)e*, *shiepe*, *shipe*, *ship(pe)*, and *shape* also occurred (MED). It is considered that these forms are made by analogy from other types of declension or by weakening of the ending -en or -es.

Sheeps, the plural form with the ending -s, which is not accepted as grammatical in PDE, occurred in a certain time of history. It may be influenced by the dominant plural or made by false analogy. The form appeared between the 16th and the 19th centuries. The year in which *sheeps* appeared for the first time in a written work was 1521. Incidentally, the final example of *sheeps* cited in OED was the year 1890.

Sheep /ʃi:p/ and *ship* /ʃip/ are a minimal pair and contain different vowels respectively. The two vowels /i:/ and /i/ are different sounds but much alike in sound. It is conceivable that the two words may have been confused in some dialects and periods. Those spelling variations which derived from OE Northumbrian dialect are recorded in OED, such as *ship* (ME and from the 15th to 18th century), *schip* (derived from OE Northumbrian dialect *scip*; ME to the 15th century), *schyp* and *shipe* (15th century), and *ship* (dialect ME, from the 15th to 18 century), etc. The spelling *ship* was used as a spelling variation of *sheep*. Some people may confuse the two words. The following passage is quoted from Shakespeare's *Love's Labour's Lost* ii. i. 219: [Marria]: *Two hot Sheepes marie. Bo[yet]: And wherefore not Shippes?* (OED). There is a possibility that the *sheepes* in this passage is a pun on *shippes*.

Why does the plural of *sheep* remain the zero form in PDE as it was in OE? Although we can't give a clear answer for that, some probabilities can be enumerated as follows: (i) *sheep* have been kept as domesticated animals since early times and many people feel it close to themselves; (ii) *sheep* have been considered to be a sacred and holy animal and are depicted as the meek and gentle followers of Christ⁽¹³⁾; (iii) *sheep* are considered to be a herd animal and speakers of English have recognized *sheep* aggregately, not individually; and (iv) *sheep* are a general term for that sort and as a general rule it applies to many species in the genus *Ovis*, especially the domesticated species *Ovis aries*. *Sheep*, that is to say, are regarded as a kind of hypernym and there are several words as its hyponym referring to the member of *sheep*, such as *rams* (male), *ewes* (female), *wethers*, *shearlings*, *teg(g)s*, *lambs* (young), and *bellwethers*. This usage is similar to the one of *furniture* which has some hyponyms but, incidentally, no articles called "furniture" are in existence, such as *tables*, *desks*, *chairs*, *beds*, etc. By the way, treatment for *sheep* and *goats* is different: *goats* also have been kept on farms in a similar way to *sheep* but, like the case of *fish/fishes*, two plural forms *goat/goats* are given in some dictionaries.

5.3 Deer

PDE *deer* derives from OE *dēor* whose declension was the same as the one of *scēap*. The meaning of *dēor* was "wild beast", and the meaning was retained until the second half of the 15th century (OED: (sg.) -1481; (pl.) -c1340). The meaning "deer" began to be used from OE but came into common use in ME. The paradigm of *dēor* was as follows:

	Sg.	Pl.
Nominative/Accusative	<i>dēor</i>	<i>dēor</i>

Genitive	<i>dēor -es</i>	<i>dēor -a</i>
Dative	<i>dēor -e</i>	<i>dēor -um</i>

Some plural forms that were modeled after two major types of plural forms that appended the ending *-en* or *-es* to the base were formed in ME: (early) *deoran*, *deoren*, (late) *deare*; *dēres*, *deores*, *dueres* (MED). The ending *-en* as in *deoren* derived from the OE plural ending *-an* of the weak declension and *-an* was also used in early ME as in *deoran*. The ending *-es* as in *dēres*, *deores* and *dueres* were formed by means of the OE plural ending *-as*. These temporary endings borrowed from other types of declension disappeared through dropping out the terminal *-s* or *-n* and became *dēre* (<ME *dēres*) or *deare* (<ME *deoren*) and then the final *-e* was left out during ME. At that point of time various plural forms were unified again and the plural form *deer*, which is the same as its singular form, has been kept until PDE.

In the case of *deer*, the plural form is *deer*. *Deer* has been one of the popular animals of hunting in England and Europe. *Deer* derives from OE *dēor* whose primary meaning was “beast/animal”, but of course it referred to “deer”. It may be considered that one of the reasons that *deer* has the same form for both the singular and the plural is closely connected with the primary meaning “beast/animal”. The nominative and accusative plural forms of *dēor* in OE were *dēor* with no ending. The primary meaning and the plural form in OE might be mutually involved.

Conclusion

Grammatical elements in all respects have continued to do battle for power in the history of the English language, and alteration of plural forms is not an exception. Being defeated by the power of the plural *-(e)s*, the number of irregular plural forms had been reduced by early ME. There was variability in forming the plural and the new *-(e)s* based plural paradigm was not fully established at this stage. In the case of nouns that had a zero plural in OE, *deer*, *sheep*, *swine* and the like maintain a zero plural, whereas many nouns like *hors*, *yeer*, *thyng*, *wynter*, etc. have since shifted to *-(e)s*, but also keep a zero plural. A zero plural did not lose its efficacy entirely at that time. The zero plural affected some of the French nouns, e.g. *ca(a)s* “cases” and *vers* “verses” (Lass 1992: p. 111).

As Kisbye mentions below, many animals and more exotic species acquired Ø- plural in the early ModE period.

After the analogy of *sheep*, *deer* the names of many animals like *pike*, *trout*, *duck*, *pigeon*, *grouse* have come to acquire Ø-plural in the 18th and 19th centuries, particularly when regarded as game (we feed the ducks but shoot duck). Later this usage came to be extended also to more exotic species such as *bison*, *buffalo*, *rhino*, *antelope*, etc. probably through the jargon of hunters. (Kisbye 1992: p. 87)

Different attitudes and perspectives make different expressions. The ways of the plural expression of animals specify a part of the characteristic. Many nouns referring to animals have two plurals: *-(e)s* and zero plurals. However, the meanings given by the two forms are not the same. In (3a), a zero plural *elephant* is not acceptable but only a regular plural *elephants* is possible, whereas a zero plural is acceptable in the context of hunting and shooting as in (3b) (Huddleston & Pullum 2002: p.1589).

- (3) a. The three elephants/*elephant were the main attraction.
b. There were hunting elephant.

Nouns with irregular plural that are still existent in PDE have features in common: they are the nouns that are frequently used and that express things that happen in daily life or are considered socially to be significant. Only a handful of nouns have irregular plurals including a zero plural, which is a very important fact. If there are too many of them, the environment surrounding the plural might have changed completely.

Notes

- (1) The plural ending *-s* or *-es* derives historically from the nominative and accusative plural ending in *-as* of strong masculine nouns in OE.
- (2) It is also called “base plural” (Huddleston & Pullum 2002) or “unchanged plural”. “Some nouns have a zero plural, i.e. they have no overt plural ending, though they have plural meaning and concord” (Biber *et al.* 1999: §4.5.4).
- (3) The choice of plural sounds /z/, /s/, or /ɪz/ is predictable from the final sound in the semantic root, i.e. singular, of nouns.
- (4) A long syllable means that a syllable with a long vowel or a short vowel followed by two consonants.
- (5) The plural with *-as* is found in OE, such as *husas* (OED).
- (6) *Ormulum* was written by Orm in the later quarter of the 12th century (?c1200) in East Midland dialect. In *Ormulum* *-es* was spelled as *-ess*.
- (7) The letter *c* stands for *circa* “around”.
- (8) “The plural form *houses* (. . .) is the only current example of a distinct plural form preserving the voicing of intervocalic *s* in standard English . . .” (OED). Cf. *house* /haʊs/(sg.) → *houses* /haʊzɪz/(pl.) ; *horse* /hɔ:s/(sg.) → *horses* /hɔ:sɪz/(pl.).
- (9) The letter *a* stands for *ante* “before”.
- (10) Masculine gender is determined in addition to neuter by Clark Hall (1970: s. v. *ġēar*). However, the fact that *yere* “year” obtained the *-(e)s* plural in ME can be quite another matter.
- (11) “The original use may have been either generic or restricted to the young of the swine” (OED).
- (12) According to the OED, “Old Northumbrian, however, had a plural form *scīpo* beside *scīp*”.
- (13) Cf. A proverb derived from the Bible says to separate the sheep from the goat.

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