

Quantifying: Fuzzy categories and non-regularity in English

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Abstract

Expressing quantity in English is an area replete with complexity, irregularity, fuzzy categories and nuances of usage that pose a hurdle for many English language learners. This paper describes some of these complexities that underlie seemingly straightforward binary categories such as the mass/count and singular/plural distinctions. The paper will also describe other aspects of quantification such as the usage of *much* and *many* in questions versus propositional statements and the expression of vague amounts. The aim is to reveal the complex conceptual, grammatical and pragmatic factors that bear on any expression of quantity in English.

Keywords : Quantifiers, L2 language acquisition, pragmatics, cognitive linguistics

Introduction

One of the basic ways in which humans conceptualize the world is the use of quantification terms. Even a language as famously pared-back as the Amazonian language Pirahã, which lacks things like color terms and numerals, still has some basic way of expressing different quantities (Everett 2009). Although it seems to be a conceptually simple field, the expression of quantity is carried out in very different ways in different languages. For language learners, coming to grips with the quantification systems of a language is a

major challenge. In addition, the quantification system of a language may not be entirely meta-cognitively accessible to native or proficient L2 speakers of that language, meaning teachers may also struggle with this aspect of the language. This paper will describe some of the ways in which the English language uses lexical, grammatical and pragmatic resources to express number and quantity and thus reveal some of the complexities that language learners need to deal with in order to both form and answer the simple questions *How much?* and *How many?* Learning how to quantify in a foreign language is a basic skill, appearing early in learner materials, but in the author's opinion, often not acquired in full measure until advanced levels of proficiency have been attained.

The mass/count distinction

In English, one of the basic conceptual divisions in quantifying is the mass/count distinction. Simply put, this division of the world sees, on the one hand, things that can be counted using the numeral system of the language, and on the other hand, things which cannot be counted and must be quantified in other ways; the world is divided between things and stuff. Things which are prototypically countable are concrete objects, existing separately from other objects, with stability of form and scale and having durative existence.

Humans, being at the top of the animacy hierarchy (Corbett, 2000, p.56) are seen as prototypically countable in count/mass languages, alongside other animate creatures, (dogs, cats, etc.), naturally occurring items such trees, plants, stones, human artefacts like chairs, tables, vehicles and the like. On the other hand, there exists a varied set of items which fall into the mass, or uncountable, category. Inherently formless substances such as gases, liquids, pastes, gels are all uncountable. Examples are smoke, water, mud, jam and other such substances. In addition, there are solids that have no inherent

shape, but have a concrete and more or less fixed and durable form in each instance, for example, cheese, chocolate, soap and bread. A further group of items that fall into the uncountable category are aggregates. These are items that usually exist in profusion and each item of the mass is generally seen as (nearly) identical in shape and size. Examples of these mass aggregates are sand, sugar, salt, gravel and the like. Although composed of discrete items, each individual item is visually indistinguishable from any other item and they often exist in such profusion that counting, although theoretically possible, is not actually practical, or indeed necessary. In addition to these items, which are concrete and accessible through perceptual means, there are other, abstract and non-concrete items that are uncountable, such as love, advice, information, room (as in space, not a subdivision of a building), and others.

Thus, a language such as English has, on first view, a neat binary distinction with nouns either being countable or uncountable. For language learners, this binary division is probably an inevitable starting point. However, the division is not as clear cut as it first appears, and the boundary between countability and uncountability is a fuzzy one that may cause problems for language learners even after they have achieved quite advanced levels of proficiency in English. Following are some of the areas in mass and count categories that are often problematical for language learners.

Interference

Although many languages do not have a count/mass typology, and instead use a classifier system (e.g. Massam, 2012), even in the case of languages that do orient to the count/mass distinction, the members of a category in the L1 may not align with the same category in the L2. For example, in English, the noun *information* is uncountable. That is, one cannot talk of 'many informations'. In other languages, such as Italian, the analogue word is

countable with singular and plural forms (*informazione – informazioni*), meaning that in Italian one can indeed refer to “many informations”. Many other languages have a similar distinction (See chapters on Italian, Greek and Portuguese in Swan and Smith, 1987), and confusion over pluralizing words like *information* and *advice* may stem from these interference issues.

A further example of interference issues is the word *hair*. In English, this word can be used as either a countable or an uncountable noun. One can say that “there is a hair in my soup”, meaning a single strand of hair. Alternatively, one can say that a person has long or short hair, in this case referring to head hair as a mass of uncountable, undifferentiated strands. In Punjabi the hair of the head is referred to with the plural form (*val*) (Majid, 2006, p.243), so one would say in this language that a person has “long/short hairs”. In another example of non-matching between languages, Wierzbicka (1983, p.313) notes that “... in Russian, the words for peas and beans (*gorox, gorošek, fasol*) are mass nouns, just like the words for rice and flour (*ris, muka*) are.” Items which are seen as purely countable in one language may fall squarely in the uncountable category in another language or vice versa. Koderá (2011) lists the ways some nouns are treated in a sample of thirteen languages and finds some commonalities, with canonical count nouns like “dog” and “car” being treated as count nouns in all sample languages, but there is also a fair amount of variability among other items, with a number of nouns falling into a ‘mass-count flexible’ category.

Water is a mass noun in all 13 languages including three languages (Turkish, Greek, French) that allow a count sense when denoting a unit (e.g. a bottle, a glass). As for typical count and mass nouns, all thirteen languages share more or less the same mass-count distinction. As for mass-count flexible nouns, about half the languages share the distinction with English: 6 languages for ‘rope’ and 7 for ‘cake’. The mass-count distinction of English

mass nouns that L2 learners find confusing varies from language to language. 'Furniture' and 'evidence' are countable in 11 languages; 'information', 'advice', 'research', and 'work' in 10 languages; 'equipment' in 9 languages; 'news' and 'homework' in 8 languages. On the other hand, 'education', 'fun', 'music', 'money', 'knowledge', and 'violence' behave like mass nouns in most languages. 'Education' and 'knowledge' do not allow the countable sense in 10 languages, and 'music' and 'money' in 11 languages. 'Violence' is uncountable in all thirteen languages. (p.46)

It is clear from these data that the mass/count distinction is highly variable across languages. Even within a single language, the distinction is often not clear-cut.

Mass count variability

The mention of the differential status of hair in Punjabi and English above brings us to another aspect of variability and potential confusion for language learners. There are words that can appear in either the count or mass category in the same language with different senses – the mass/count flexible category. In English the word hair can refer to the aggregate of a person's head hair or to individual strands of hair. Compare "*She has long hair*" versus "*The forensic scientist discovered three hairs on the murder weapon.*" Similar cross-category nouns are words like paper (the material versus a newspaper or essay), room (the concept of space versus the subdivision of a building), chicken (the animal versus the meat of the animal), time (the concept of constantly unfolding duration versus a number of instances), glass (the transparent material versus the drinking vessel). A further example is where the singular form of certain nouns can be used with a plural verb as in "We observed three elephant in the game park" or "The elephant are downwind of us", (Corbett, 2000, p.68). Corbett describes these cases (usually referring to animals that

are hunted) as “truly exotic” (p.68).

Not only is the boundary between countable and uncountable a fuzzy one, things which are usually seen as inherently in one category or the other can shift category under certain circumstances. Beer, being a liquid, is canonically an uncountable substance. Nevertheless, the word can be used in a countable sense such as “two beers”. This plural occurrence could refer to either two servings of beer (two glasses or two pints) or it could refer to two varieties of beer (Brand A and Brand B), depending on the context. This way of referring to mass nouns with count morphology is “sometimes referred to as the universal sorter or universal packager” (Pelletier, 2010, p.127). The reverse operation, from count to mass is referred to as the universal grinder (Pelletier, 1975).

Plurality

Once we have proceeded past the complexity and fuzzy categories that obtain in the distinction between mass and count, we are faced with the complexity of the singular versus plural distinction that exists in English. The dictionary or reference form of countable nouns is by default assumed to be the singular form and in any language teaching environment the singular form is taught first. This is in line with the observation by Nitz and Nordhoff (2020, p.247) “... that the plural form of lexemes will consist of more segments than the singular form because the plural also denotes more entities than the singular form.” The underlying conceptual schema is that one does something (usually morphological in nature) to the singular in order to create the plural, not the other way around. (Although Nitz and Nordhoff (2020), explain that subtractive morphology, i.e. the plural form being a shorter item than the singular form is a feature found Sinhala and a few other languages.)

These outlier languages aside, the schema that usually applies in language

teaching is one of learning to do something to a basic, singular noun to make it plural. In the case of English, there is no single algorithm that switches a singular form to a plural one. Of course, in English, the basic operation is to add an “s” to the noun to transform it from singular to plural form, but even here, there is complexity. The plural forms “cats” and “dogs” both simply add an “s” to the base form as an orthographic convention, but in pronunciation the former, because it ends in an unvoiced consonant, has the plural marker as unvoiced (/kæts/) while the latter, due to a voiced final consonant in the singular form, has a voiced plural marker (/dɒgz/). Further complexity arises with sibilant final words that take a syllable (VC) plural marker /ɪz/ (Pass – Passes – /pɑ:s, 'pɑ:sɪz/), with the orthographic convention of adding “es” to the base form, unless the base singular form already ends with an unpronounced “e”, as in the case of the word horse, which simply adds an “s” orthographically, but whose pronunciation shifts to add a final syllable /ɪz/ as in “horses” (/ 'hɔ:sɪz/).

A subcategory of the “s” plural is the case of a small number of nouns that end in an unvoiced labiodental fricative /f/. In the case of the words *wife*, *knife*, *wolf* and *sheaf*, the plural orthographic form adds an “s” and switches letter “f” to the letter “v”. In pronunciation the labiodental fricative becomes voiced and the plural marker ‘s’ is likewise voiced, giving wives (/waɪvz/), knives (/nɑ:vz/) wolves (/wɒlvz/) and sheaves (/ʃi:vz/).

Moving on from the addition of an “s” to form the plural, the next resource for pluralization in English is the umlaut plural, where the vowel of the singular form undergoes alteration to give the plural form. This is found in a closed class of high frequency nouns drawn from core vocabulary, referring to humans, body parts and animals and plants.

Man – Men

Woman – Women

Foot – Feet

Mouse – Mice

Goose – Geese

Tooth – Teeth

Louse – Lice.

A similar closed class of conceptually basic nouns uses the suffix *-en* to form the plural. The words *child*, *ox*, *brother* change to *children*, *oxen* and *brethren*, although this last one is archaic. This class used to have more members, including *eye* – *eyen*, and *knee* – *kneen*, but these have now regularized (eyes, knees) and the class only has the aforementioned three members in common usage, with *brother* now regularized in the male sibling sense and retaining the form *brethren* mostly in the sense of a religious order.

English vocabulary is replete with loanwords and in some cases, especially words borrowed from Greek and Latin, the pluralization of the word in English can retain the pluralization strategy from the source language. Examples of these kinds of words are curriculum – curricula, symposium – symposia, fungus – fungi, datum – data, although this last one is an example of a word which is gradually moving towards a more regular English form with some style guides insisting on “the datum is” versus “the data are”, but the form “data” often being used in daily discourse as an uncountable mass noun, like “information”.

Next, we come to nouns which do not show any morphological change between singular and plural, with the number being marked on the verb. Compare the following examples from Corbett (2000, p.6).

(1) The sheep drinks from the stream.

(2) The sheep drink from the stream.

Several animal species such as deer and sheep and many fish and other aquatic species such as salmon and squid are in this unmarked category. Also in this unmarked category are some loanwords from other languages such as *Bento*, *Geisha* and *Samurai* from Japanese. It is a moot point whether the lack of pluralization in these nouns is aligned with the lack of pluralization in the source language, or whether it is based on ignorance of whether Japanese has plurals, and if so, what the form might be. It seems reasonable to suggest that languages which are related and have a long history of contact and borrowing may be more likely to affect the grammar of each other than typologically and geographically distant languages like Japanese and English.

Finally, we come to the class of English nouns that only exist in the plural form, shown by the addition of the “s” phoneme and plural agreement marked on the verb. These nouns are referred to as plural tantum, and in my experience, although language learners have no problem with the noun, the verb or determiner agreement is often a problem, giving utterances like “*This jeans is cute.*” Examples of these plural tantum words are:

- Glasses (as in spectacles)
- Pants
- Scissors
- Jeans

One further aspect of plurality that is notable is the precise demarcation between the single and the plural. Although, it seems a straightforward proposition that there is a binary distinction between one and more than one, in practice the singular plural distinction has some nuances that may not be

apparent at first glance. As noted by Rotge (2009, p.108) “In English, it is the presence of any numeral other than ‘1’ that triggers the plural, as in *1.5 kilometres*. In French a singular noun would be used here: *1,5 kilomètre*.” That is, the plural kicks in at any value above 1 in English, but is only applicable to numbers from 2 upward in French. Rotge (2009) also notes that for decimal values of less than one, and also for the value zero, the plural form is also applicable in English (0.5 kilometers, zero degrees centigrade) and this leads him to conclude that the terms singular and plural may be misleading, and the plural, instead of meaning “more than one” actually can be viewed as a “non-singular marker”. (p.108.)

To sum up, for the language learner trying to acquire the English language system of quantification, there are a number of intricacies that complicate the process. The mass count distinction is not clear cut and there are items that are mass-count flexible (rope, cake) and also items that are prototypically either mass or count may switch categories using the universal grinder or universal sorter. Within the class of countable nouns, the singular/plural distinction is similarly complex, with a variety of morphological means available for marking plural nouns, including borrowing the pluralization system of other languages or not marking plurality at all on the noun and leaving it to things like verbal agreement to show singular or plural. For speakers of languages like Japanese, that don’t overtly mark count, non-count, singular or plural, the whole system is extremely challenging and “alien to Japanese speakers.” (Kodera, 1991, p.49.)

***Much* and *many* in quantifying questions and statements**

In the most basic interactional sense, a question is an attempt by a speaker to draw on the assumed epistemic status of the addressee, and in doing so to change the epistemic status (K = knowledge) of the questioner from K – to K +

(See Heritage, 2012). For questions regarding quantity in English, the questioner has to differentiate between count and mass referents, asking either “How much?” or “How many?” For language learners, especially speakers of languages like Japanese that do not overtly mark countability, this can be an issue in question formation. There is however, a further issue with these two quantifying words in English. In answering any question (or making a propositional statement about amount) a speaker may choose to give an accurate report using a number or amount term such as “Twenty students passed the test” or “He bought three liters of wine.” The speaker can also make a more general report of an amount or number. For general reports of a number or amount that is perceived as large, or larger than average or expected, the speaker can use the words “much” or “many”, using the same words from the question formulations. However, it is often the case that language learners are in error, either grammatical or stylistic, when they use these words. Swan (1980) notes that English usage often avoids the use of these words in unmarked propositional sentences, especially in spoken language. The words “much” and “*many*” are generally used in the following cases:

(1) *Questions:*

How many people came to the party?

How much wine did you buy?

(2) *Negatives:*

Not many people came to the party.

He didn't buy much wine

(3) *Statements with “too”, “so” and “as”:*

Too many people came to the party.

So many people came to the party that we ran out of drinks.

We'll invite as many people as we can.

He drank too much wine.

He drank so much wine that he passed out.

Drink as much wine as you want.

For positive statements outside these cases, the use of *much* or *many* is subject to differing usage rules. The countable word “many”, as in “Many people came to the party” is acceptable, but it sounds rather formal and is probably more characteristic of the written language genre. By contrast, the use of “much” in basic, positive propositional statements is rather infelicitous. Utterances such as “He drank much wine” are usually avoided by native English speakers.

In other languages, the quantifying questions may also be formed with equivalents of “much” and “many” but there is no restriction placed on the use of these words in affirmative sentences to signify large amounts or numbers. For example, German is a language that marks a distinction between countable and uncountable items. To ask a quantifying question about an uncountable noun, one uses the word *viel* and to ask about a countable noun one uses the word *viele*, the words being analogous to English “much” and “many” respectively.

(4a)

Wie viel Bier?

How much beer?

(4b)

Wie viele Leute?

How many people?

In basic affirmative sentences the words are used to indicate a large amount or number.

(5a)

Ich trank viel Bier

I drink-past much beer.

I drank a lot of beer

(5a)

Ich traf viele Leute

I meet-past many people

I met a lot of people.

As can be seen from the glosses, in English there is an alternative for the much/many word that is preferred in these basic affirmative sentences specifying a large amount or number. As Swan (1980, section 393) states,

In affirmative sentences they [much and many] are not so common, and we generally use expressions like *lots (of)*, *a lot (of)* and *plenty (of)*. This is particularly true in an informal style (for instance in conversation).

Swan (1980) further notes the register differences in the use of these and other quantifying expressions, highlighting the grammatical and socio-linguistic nuances of quantification.

The tendency to use the words “much” and “many” in basic affirmative

sentences, and to not use, or underutilize the “a lot of” formulation is, in my experience, a common occurrence in the talk of English language learners. This is despite the fact that “a lot of” is applicable to both countable and uncountable nouns and thus would seem to be a solution to any confusion that may arise as to whether a noun is countable or uncountable. Instead of uncertainty as to whether “He gave me much advice” or “He gave me many advices” is the correct expression, the language learner could opt for “He gave me a lot of advice.” In this case, even if the question of whether singular or plural form of the noun is correct, (advice versus advices), the quantifying expression is correct.

Many students seem to have real difficulty in moving away from using the much/many mode of expression and using “a lot of” even though it eases the processing burden of attending to the mass/count distinction. In my experience, even after extensive teaching and practice of this point, students quite often revert to using “much” and “many” in their spontaneous spoken discourse.

Swan’s description of the nuances of English usage is a valuable point, but one thing that is not touched upon is the productivity of expressions that serve the same function as “a lot of”. Native English speakers have at their disposal a fairly extensive repertoire of fixed and semi-fixed expressions to indicate a large number or quantity. The following lists a representative selection.

- Lots of
- A lot of
- Loads of
- Tons of

In addition to these fairly common expressions there are regional, colloquial

and idiolectal variants such as “scads”, “oodles”, “lashings”, “mountains”, “truckload”, “gobs”, “fistfuls” and the like. A further embellishment is the recruitment, in casual speech, of taboo, words such as “a shitload”, or “fuckton” or “fuckload”. (This employment of taboo words in this productive category is paralleled with the case of vague category markers (or general extenders) such as “and stuff”. English has a very large class of these extenders such as “and so on”, “what have you”, and “all that kind of thing”, (see Overstreet, 1999), and a commonly occurring expression in casual conversation is “and shit”, or “and all that kind of shit.”)

It is not immediately clear why casual English speech has specific environments for ‘much’ and ‘many’ (questions, negatives, affirmative sentences with ‘too’, ‘so’ and ‘as’) and then switches to other expressions in basic affirmative sentences, but the same pattern is found in several other instances of quantification, such as distance and time.

Distance

In quantifying the concept of distance, many Japanese learners of English produce sentences such as “My house is far from the station.” In Japanese, speakers expressing large distance can utilize the common adjective 遠い (*tooi*) which is usually translated in bilingual dictionaries as “far”. The following Japanese utterance is in no way marked or remarkable.

(6)

Ie wa eki kara tooi desu

(My) house topic station from far copula

My house is a long way from the station.

As the English gloss suggests, a straightforward translation of *tooi* as “far” is not felicitous. The same pattern that applied to “much”, “many” and “a lot of” applies here, with “far” being used in the same environments as much and many:

- Questions: How far?
- Negatives: Not far.
- Affirmative sentences with too, so and as: Too far, so far, not far, as far.

In basic affirmative sentences the word “far” is usually avoided and speakers express the quantity of distance with the expression “a long way” (Swan, 1980, section 233). The use is illustrated in the following constructed examples:

- How far is it to the station?
- It’s not far, let’s walk.
- It’s too far, let’s take a taxi.
- It’s a long way from here to the station.

In corpus searches, it is notable that the word “far” is seldom found to express the concept of large physical distance, and is often found instead in fixed expressions describing more abstract schema such as in the following examples from the British National Corpus (Davies, 2004).

- the outcome of the discussion so far
- Cos otherwise people ’ll have it so far in advance of their appraisal
- as far as I’m concerned
- as far as I’m aware we’ve had conformation

The word “far” has a broad range of meanings than and it seems that the physical distance meaning is no longer central in daily usage.

Time

Another category of quantification showing the same underlying pattern is found in expressions related to passage of time. In this case the word “long” is utilized in the question, negative, too, so and as instances.

- How long did you have to wait?
- We didn't have to wait long.
- It was too long to wait, so we went home.
- We waited for so long that I fell asleep.
- I'll wait for as long as it takes.

For the unmarked positive sentence, English speakers deploy a multi-word expression ‘a long time’ as in,

- I've been waiting a long time.

There are several observations to be made about these quantifying questions and the responses to them. Firstly, it will be noted that the unmarked questions use the upper, rather than the lower quantifying word. Consider the following list:

- Few – Many
- Little – Much
- Near – Far
- Short – Long

- Short – Tall
- Young – Old

In these pairs the first word represents the lower, minimal or reduced concept of a quantity or value, and the second word represents the higher, expanded or near-maximal end of a scale of number or amount. It will be noted that in English, quantity questions, in the default, unmarked setting, draw exclusively from the higher, not lower, quantity words. That is, speakers generally ask the question “How many/much/far/long/tall/old”, unless there is some pragmatic reason for using the lower value word. A question like ‘How few people came to the party?’ presupposes some epistemic stance by the questioner that is marked in the question. A person who asks this question is likely demonstrating some commitment to an idea that the number of people attending the party was unexpectedly or inappropriately small. Similarly, the question “How young is he?” expresses some stance towards the youth of the person in question, perhaps surprise at his being served alcohol or some other age-inappropriate situation. Similar marking could be ascribed to questions like “How short is the movie?” or “How near is the station?”

The use of the higher quantifier words is perhaps motivated by a basic cognitive schema that uses the metaphor of MORE IS UP (Lakoff and Johnson, 2008). To ask a question about quantity, length, duration and so on, generally presupposes that quantity, length or duration, et cetera is not zero and thus the question adumbrates a response where the value is ‘upwards’ of a zero value. The question “How many books did you buy?” indicates an epistemic stance that some rather than no books were bought. The answer may be, “Actually, I didn’t buy any books”. But note the inclusion of the discourse marker “actually” to show that the person judges the question to embed a certain expectation (i.e. books were bought) and furthermore, that

the expectation embedded in the question was not correct. In order to encode an expectation-free stance in a question, that is, if a questioner was unsure if books were bought or not, the enquiry is phrased as a binary. “Did you buy any books?” rather than “How many books did you buy?” So, using the higher value word like “much”, “many”, “long”, “old” or “far” aligns with an expectation that the amount, quantity, length or age is “upwards” of a zero value, but makes no commitment to a stance that the actual amount or number or distance being high or low. The question “How many books did you buy?” can be felicitously answered with “One”. The use of “many” and “much” in unmarked questions is bleached of any “high number or amount” presupposition. If “much” and “many” have these bleached meanings, then this may explain the utilization of other expressions such as ‘a lot of’ to mark a large number or amount.

Upgrading

A further observation that can be made about the usage of quantifying expressions is that the alternative expressions to “much” and “many”, words like “loads of”, “tons of” and the like, are often upgraded. That is, they can collocate with the word “absolutely” to give an upgraded, stronger description. Many adjectives in English have an upgrade version (e.g. Cold < Freezing, Hot < Boiling, Funny < Hilarious). Many of the quantity words similarly have upgrade versions. For large amounts or quantities expressions like “absolutely loads” or “absolutely tons of” are available to speakers. Likewise, large distance can be expressed by “absolutely miles” (not kilometers), as in, “We walked absolutely miles that day”. For duration, the upgrade “ages” is available as in “It takes absolutely ages to download”. The following table shows the distribution across quantification categories.

Table 1.

Quantity expressions in English usage

Concept	Question	Basic sentence use	Upgrade
<i>Number</i>	How many?	A lot of	(Absolutely) loads of, etc.
<i>Amount</i>	How much?	A lot of	(Absolutely) tons of, etc.
<i>Distance</i>	How far?	A long way	(Absolutely) miles
<i>Duration</i>	How long?	A long time	(Absolutely) ages

In interactional senses, upgrading is an important resource for speakers, and one that is often neglected in language teaching (e.g. Campbell-Larsen, 2015). A prototypical use of an upgrade term is in an agreeing response to an initial assessment. For example, if a speaker assesses the weather today as “cold”, then the preferred (in the conversation analysis meaning of the word) response is an agreement with this assessment (Pomerantz, 1984). The agreement very often takes the form of an upgraded assessment. That is, if the first speaker assesses today as being “cold”, then the second speaker may show agreement by saying “Yes, it is absolutely freezing.” This is not to be interpreted as meaning, “Yes, you are right in assessing today’s weather as cold, but you are incorrect in the degree of your assessment and in fact, it is sufficiently cold to warrant the assessment freezing”. Rather, this upgraded assessment is a subtly constructed response that is doing more than just agreeing. When a participant agrees with an assessment using an upgraded adjective, this shows not only that agreement is taking place, but on a more basic level, that understanding has occurred. Clearly, if one does not understand the original assessing term, one cannot upgrade it, thus upgrading is a demonstration rather than merely a claim of understanding. (Mondada, 2011). On a side note, it is interesting to observe that although concepts of

amount, number, distance and duration have upgrade terms, the adjective “long” in its “physical length” not “temporal duration” sense does not seem to have any readily available upgrade. Why this should be is not clear.

In any case, the use of upgrade terms to agree with assessments shows that a term can be preferred not, or not only, for its truth condition appropriacy, but also for reasons to do with the interactional architecture of the unfolding sequence and other pragmatic concerns. The use of terms such as “loads of”, “miles”, “ages” and the like may be strongly influenced by pragmatic and sequence placement concerns rather than simple truth condition considerations.

So, to sum up, quantity questions in English (primarily referring to number and amount, but also including age, length, duration and distance) use the maximal word (much, many, old, far) not the minimal word (few, little, young, near) to form the unmarked question. By contrast, the words “much” and “many” are generally not used in mundane spoken English for basic propositional statements, although many can be used in more formal genres and in writing, such in this paper. To express the concept of a large amount or number, speakers will use “much” and “many” if marked with some other word (“not”, “too”, “so”, and “as”) or they will use a multi-word phrase, often an upgrade term, and possibly incorporating taboo language.

It is possible that the simplex words “much” and “many” are being grammaticalized as question words and thus speakers are deploying other words and expressions in affirmative (and negative) sentences or add marking to the words because the words used in the question forms are now being bleached of the meaning of large amount or number. It may also be possible that there are pragmatic reasons for using the multi-word and upgraded expressions, to stress the amount, and mark it in a way that hearably emphasizes the amount or number. Alternatively, speakers may be orienting

to elegant variation and be implementing a lexical version of the *horror aequi* principle, which is defined as “the widespread (and possibly universal) tendency to avoid the unmotivated recurrence of identical and adjacent grammatical elements or structures.” (Rohdenburg, 2007, p.220).

A further possibility is that the connotations of formality that attach to the use of the words “much” and “many” in simple affirmative sentences may have prompted the uptake of variants which are more casual sounding such as “loads of” and “tons of”. Similarly, the availability of taboo language expressions to express large amount or number is in line with the gradual move away from spoken formality to a more casual mode of conversational expression that has occurred in several areas of English over the course of the twentieth century. (e.g. Buchstaller, (2013) on the rise of “be like” as a quotative, e.g. Rühlemann, (2018) on the frequency of the denotic and epistemic usages of “must”.) Further research, perhaps involving diachronic data, may throw more light on the reasons why English speakers tend to use the words “much” and “many” in various different environments. The reasons are likely to be complex and multilayered.

Existentials and quantifying

One of the basic regularities of a singular/plural marking language such as English, is that in addition to (usually) marking plural number on the noun, the form of the verb also agrees with the noun in number. In a sentence such as *The boy plays football*, not only does the noun “boy” show singular form, but the verb “plays” is also marked for number (alongside tense). Contrast this with “The boys play football”. This time the noun “boy” is marked with an “s” suffix showing plurality. The form of the verb agrees with this plurality. (Although the verb in this case is actually zero marked for plurality and is understood to agree with the subject noun, even though it is indistinguishable

from the citation form “play”).)

The notion of verb and noun agreement would seem to be a fundamental property of English, but there is a small subsection of spoken English where number agreement is not so rigorous. Above I noted the way in which certain game animals can be used in singular form with plural verb agreement. Another area where normal agreement rules sometimes do not apply is in existential statements. In English, existential statements are generally expressed with the use of the word *there* bleached of its locative meaning and serving as a dummy subject, followed by the appropriate form of the ‘be’ verb. This verb can encode time (*There is* versus *There was*), and number (*There is* versus *There are*). However, in informal, spoken British English, even if the referent is clearly plural, it is common for native speakers to use the singular form of the be verb with the plural noun. The British National Corpus lists 122 examples of the formulation “There’s lots of”. Following are some examples:

- suddenly there’s lots of people working in that area.
- and they were saying look, there’s lots of stereotypes
- although there’s lots of them about
- but there’s lots of other jobs that archaeologists do
- you turn the baby over and there’s lots of little creases

In each case, it will be observed that although the referent is plural, (*people, stereotypes, them, things*) the existential construction makes use of the singular form of the be verb in its reduced form. Similar use of the singular form with plural referent can be found in other cases such as “There’s many”, “there’s loads of”, “there’s tons of.” Although limited to spoken, casual usage, it would, I think, be a mistake to dismiss this as merely slang and carelessness. The use of this formulation may be pragmatically motivated. In spoken language the

existential formulation may be subject to reduction and liaison. That is, the vowels and diphthongs may be reduced to schwas, and in non-rhotic varieties of English the “r” may be reduced, and in some varieties of spoken English, the “t” may be dropped or replaced with a glottal stop. Thus, the production of the polyword expression “There are a lot of...” may be shortened to $\delta\bar{a} r\bar{a} r\bar{a} l\bar{o} \bar{a} /$ (*Thu ru ru lo' u*) and the hearability of the chunk starts to become problematic. To utilize the singular form, “There is” means that a voiced fricative (*z*) is used and this may have a higher hearability in the stream of speech. “There’s a lot of” = $/\delta\bar{e}\bar{a}z \bar{a} l\bar{o}t \bar{a} /$. (*Thuz uh lot uh*). Reduction of sounds, especially in common chunks, is a common feature of diachronic language change and speakers often resort to other strategies to make reduced formulaic expressions more prominent and hearable (e.g. Jespersen (2012) and Deutcher (2010), pp.167 – 168). Whether the non-agreement of verb and noun for number in these existential phrases is motivated by pragmatic, acoustic or other concerns remains to be seen, but the fact is that verbal non-agreement in these expressions has become a fixed and regular part of mundane speech, the proscriptions of style guides and grammars notwithstanding.

Approximate values and vagueness

When making a propositional statement that involves an expression of quantity, speakers can either mention the quantity in exact terms (Two people, twenty years, six liters, two packs, et cetera) or, they can refer to the quantity in vague terms. Purposeful vagueness is a recurrent feature of spoken interaction (e.g. Cutting, 2007) and the expression of vague amounts and numbers is often carried out in a structured way. There are a variety of schema that apply to the expression of vague quantities, some of them are relatively easy to recognize and account for. Others may present more cognitively complex challenges to language learners and teachers alike. One

of the simplest systems for expressing vague or indeterminate quantities is to give a short list or string of quantity words and expressions. Here are some examples from the British National Corpus:

- This enables us to think about the RNLI ten, twenty, and thirty years into the future. I am confident that we are well
- the big, black waves came out of the darkness — waves ten, twenty metres high!
- a French undertaking for Vietnamese independence within a specified period of five, ten, twenty, or thirty years
- is of the order of five or six hundred pounds

There are two observations to be made about these kinds of quantification strings. The first is that the values tend to be expressed in numerical order, meaning that a speaker would automatically say “five or six hundred pounds” and not “six or five hundred pounds.” The second point is that the number values are scalar, meaning that the second number is within the same scale of reference as the first number. Thus, a speaker could say “three or four” or “fifty or sixty” but would probably avoid expressing a vague quantity as “twenty or seventy”. In the example sentence above referring to Vietnamese independence, the sequence of numbers gradually increases, the first multiple pair (from five to ten) is an acceptable increment. The third item in the list could have felicitously been either fifteen or twenty, and the last item — thirty years — is a felicitous increment on twenty, but would not be so on the number five.

A further regularity which may be observed in vague quantification is the expression of a three-part list. (Jefferson, 1990, p.66) states that “Three-partedness, then, is an empirically observable, recurrent phenomenon which

shows up in various forms". That is, when giving approximate quantities and amounts it is a common and recurrent practice of speakers to provide three quantity expressions, or perhaps two quantity items and to round out the list with what Jefferson (1990) refers to as a generalized list completer. This can be combined with claims of lack of epistemic access such as "I dunno" or hedges to produce a vague quantity reference like:

Oh, I dunno, probably around twenty, thirty people, something like that.

Although on the surface this looks like a fairly straightforward utterance, in fact it displays a sophisticated interactional structure, with multiple vagueness and uncertainty markers prefacing the expression of the number. The number is then expressed by two number words, presented in order, according to a recognizable scale and as part of a three-part list, with the third item of the list being a vague category marker or generalized list completer. From the point of view of conversation analysis methodology, an utterance such as this is an example of a turn which expends a lot of resources focused on recipient design and sequential unfolding. The actual expression of quantity or amount has to be embedded within these other interactional considerations. Expressing vagueness of number or amount is, or can be, a complex and multi-layered issue in real-time spontaneous interaction, and the choice of vague or accurate expression of number is a resource that speakers use to achieve specific interactional goals. Number or amount expression is not necessarily always bound to maximal accuracy as shown in Rowland (2007) where, counterintuitively, even the process of performing mathematical operations in a classroom setting is characterized by vagueness.

Conclusion

Quantifying the things that exist in the world (and abstract things that have no concrete existence) would seem to be one of the fundamental operations of language and human cognition. However, there is a large amount of variation in the languages of the world in terms of how quantifying is carried out (Corbett, 2000). In English, there would at first glance appear to be fairly clearly delineated concepts underlying quantification: Countable versus uncountable (alternatively referred to as count/mass) and singular versus plural. For beginner level students of English, especially students whose L1 has a very different quantification system such as Japanese, these broad-brush, binary categories are probably an inevitable starting point. However, once we proceed a little further into the language we see that these categories are fuzzy-edged and complex. The mass count distinction has a porous frontier. Mass items can become count (two beers) and count items can become mass (there was cat all over the driveway, said after reversing a car incautiously). Other items exist, seemingly equally in both mass and count forms (e.g. rope, cake, hair). The neat distinction between mass and count may be a pedagogic necessity, but not a very accurate representation of how English actually works.

Within the class of countable nouns, the distinction between singular and plural is another case where initial simplicity quickly gives way to complexity. The ways in which plurals are formed is a mixture of one main morphological operation (add an “s” to the base noun) followed by a number of other methods, such as umlaut plurals (foot/feet) and nouns that are unmarked plurality (sheep/sheep). Even the boundary between the singular and plural is not as straightforward as might seem the case at first glance, with pluralization kicking in at decimal numbers greater than one (one point five kilometers), rather than at two and also applying to zero amounts, as in “zero

degrees Celsius”.

There are also nuances of usage that continually cause problems for language learners, such as the tendency for questions, negatives and sentences using *too*, *so* and *as* to utilize the words “much” and “many”, but for unmarked, positive declarative sentences to use “a lot of” and the like. Even the use of “much” and “many” is not straightforward with “many” being grammatically correct in positive sentences, but tending towards the written and formal genre, whilst “much” (as in *I spent much money*) is borderline infelicitous. The same pattern of usage is paralleled in questions and statements concerning time, duration and so on.

Even in the case of a supposedly stable and well-delineated grammar point such as number agreement, spoken English does not always align with the expectations of formal grammar. Forms such as “there’s two of them” are common in spoken English. The grammar in this case may be secondary to pragmatic concerns of spoken language in use.

Altogether, the area of quantification in English is very complex and, like some other areas of the language such as use of definite and indefinite articles, appears very early in any course of language study but is often not correctly acquired until the very final stages of high proficiency achievement. It may take a long time and involve a lot of study for a learner to acquire these proficiencies.

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