# Expressive, much?

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**Introduction**    The distribution of *much* has played a major role in debates about the inventory of degree-denoting expressions in natural language and their compositional interpretation. In this talk we add to this literature by investigating a novel use of *much* in a construction that has not yet been recognized in the literature, illustrated in (1), which we dub expressive *much* (*x-much* henceforth).

(1)     Angry, much?

Our primary proposal is that *x-much* is a shunting operator in the sense of McCready 2010, which target a gradable predicate and adds a speaker's evaluative attitude about the degree to which an individual stands out on the relevant scale.

**The conversational force of *x-much***    Uses of *x-much* in the wild often almost always occur with a question mark. At first pass, one might think then that *x-much* is some sort of grammaticalized elliptical question.

(2)     a.    Angry, much?                                 b.    Are you angry much?

This cannot be the case, however. The most forceful argument that *x-much* is not an elliptical (NPI)-*much* question is that the former is not genuinely answer-seeking. We can see this in (3)-(4) from the behavior of *x-much* with respect to polarity particles in the answer.

(3)     A:   Do you get angry much?          (4)     A:   Angry, much?
        B:   No / Yes                                        B:   #No / #Yes

While clearly not a genuine question, we can also show that *x-much*, while committing the speaker in some way to its content, is not an assertion either. If so, (5) would correspond to (6), either with a degree reading or a frequency reading.

(5)     Angry, much?                          (6)     You are {very/often} angry.

This is not the case, though, because while the latter can be used to answer a question, as is expected from an assertion, the former cannot be.

(7)     A:   What's up with Harry?          (8)     A:   What's up with Harry?
        B:   He's very angry.                            B:   #Angry, much?

Having ruled out treating *x-much* as an assertion or question, we come to our positive proposal, which is that *x-much* is an expressive (Potts 2005). In particular, the use of an *x-much* construction makes a not-at-issue assertion that a salient individual has the property in question. Furthermore, according to the intuitions of native speakers, it also expresses evaluative attitude about that fact, which is usually, though not always, disdain.

**Semantic properties of *x-much***    In addition to the unique expressive content of *x-much*, there are more narrowly semantic differences between *x-much* and other attested uses of *much*. First, post-predicate *much* in English is usually restricted to frequency readings. For example (9-a) can only ask whether the addressee is often happy. I cannot ask whether she was particularly happy on a single occasion. In contrast (9-b) can express disdain about an individual's frequent happiness or an individual's excessive happiness on a single occasion.The availability of the high degree reading is more clearly shown with predicate that cannot be interpreted frequentatively as in (10). Canonical post-predicate *must* is infelicitous, while *x-much* is grammatical and entails that the relevant individual is tall to a high degree.

(9)   a.   Are you happy much?          (10)   a.   #Are you tall much?
      b.   Happy, much?                         b.   Tall, much?

Finally, in addition to the high degree reading, *x-much* has large cardinality readings with count nouns, as the attested example (11) from twitter shows.

(11)   Vocals at John Willis' studio....Guitars much??? [picture of racks with 12+ guitars]

These are striking because determiner *much*, which can have large quantity readings, cannot usually modify count nouns, as the contrast in (12) shows. Of course, the high cardinality reading does not become available in (13) when *much* has been moved to a post-predicate position.

(12)   a.   Does J. Willis have much money?   (13)   #Does J. Willis have guitars much?
       b.   #Does J. Willis have much guitars?

These contrasts show that *x-much* is distinguished, not only in its expressive content, but by having high degree and large cardinality readings that are not available for canonical uses of *much*.

**Formal proposal**   We follow McCready (2010) in assuming shunting types ($\sigma^s$) in addition to at-issue types and CI types ($\sigma^c$). Against this backdrop, *x-much* is translated as shunting expression that takes a degree relation of the usal type as its argument, i.e. *x-much* is of type $\langle\langle d,\langle e,t\rangle\rangle,t^s\rangle$.

(14)   *x-much* $\rightsquigarrow \lambda G \exists d[G(d)(x) \wedge d >!! \textbf{std}_c(S_G) \wedge \text{LAUGHABLE}(d)] : \langle\langle d,\langle e,t\rangle\rangle,t^s\rangle$

What is important about the shunting-analysis is that shunting-application does not leave anything back in the truth-conditional dimension, so that the 2-dimensional meaning of (1), would end up as $\langle\varnothing, \exists d[\text{ANGRY}(d)(x) \wedge d >!! \textbf{std}_c(S_{ang}) \wedge \text{LAUGHABLE}(d)]\rangle$. This not only captures the expressive character of *x-much*, but also the fact that it is not asserted, while still committing the speaker to its content—i.e., some contextually given individual $x$ is $d$-angry, which not only greatly exceeds ($>!!$) the contextual standard on the scale of anger, but is also laughable. The shunting analysis also explains why the *x-much*-construction cannot be extended syntactically. In virtue of contributing nothing in the truth-conditional dimension, the analysis correctly predicts that the *x-much* construction cannot compose with truth-conditional operators like conjunction and disjunction.

(15)   a.   *Angry, much and he left.       (16)   [looking at a picture frowning man]
       b.   He's very angry and he left.           a.   *Angry, much or not?
                                                   b.   Super angry or not?

The analysis further accounts for high frequency and large cardinality readings with only minimal assumption. For instance, suppose following Krifka (1990), that count nouns can be given a degree argument like (17), where $\text{GUITAR}(d)(x)$ holds just in case $x$ is composed of $d$-many guitars.

(17)   guitars $\rightsquigarrow \lambda d \lambda x[\text{GUITAR}(d)(x)]$   (18)   $\langle\varnothing, \exists d[\text{GUITAR}(d)(x) \wedge d >!! \textbf{std}_c(S_{gui}) \wedge$
                                                            $\text{LAUGHABLE}(d)]\rangle$

The 2-dimensional meaning of (11) is now given in (18). Note in particular that what is derided in (18) is $d$—the number of guitars. This is precisely the attested reading of (11).

**References**   ★ Krifka, M. 1990. Four thousand ships passed through the lock: Object-induced measure functions on events. *L&P* 13. 487–520. ★ McCready, E. 2010. Varieties of conventional implicature. *S&P* 3(8). 1–57. ★ Potts, C. 2005. *The Logic of Conventional Implicature*. OUP.