

# A good intensifier

Elena Castroviejo and Berit Gehrke\*

ILLA-CSIC and CNRS/Université Paris Diderot  
elena.castroviejo@cchs.csic.es  
berit.gehrke@linguist.univ-paris-diderot.fr

**Abstract.** We provide a semantic account of the Catalan ad-adjectival modifier *ben* ‘well’, which yields intensification by, we argue, positively evaluating a property ascription. Formally, this translates as applying the predicate **good** to the saying event available to any utterance. We treat the output of this modification as a Conventional Implicature (rather than at-issue content), which is responsible for its positive polarity behavior. Additionally, we exploit the semantic similarity between this intensifier use of WELL with other readings of WELL, including manner (*well written*) and degree (*well acquainted*), which we analyze as ‘manner-in-disguise’. In our proposal, they all predicate goodness of an event.

**Keywords:** Degree, Manner, Intensification, Conventional Implicature, Positive Polarity, Vagueness

## 1 Introduction

This paper focuses on the use of the evaluative adverb *well* in contexts where it conveys amount/degree intensification. Specifically, we employ Catalan data, since *ben* ‘well’ has a wider distribution than its counterpart in languages like English and German, as we will show. Consider (1).

- (1) Marxem amb el cap **ben** alt.  
we.leave with the head WELL high  
‘(lit.) We leave with our head WELL high.’ (We leave with dignity)  
<http://www.esport3.cat/video/4619973/futbol/Boadas-Marxem-amb-el-cap-ben-alt>

This sentence conveys that the degree to which the head is high is considerable. Our challenge is to yield the semantics of degree intensification while maintaining its relation to other uses of *well* across languages, most prominently the manner use, as well as maintaining the lexical semantics related to goodness.

We will provide a formal analysis for Catalan ad-adjectival modifier *ben* ‘well’ [henceforth BEN], which we argue derives intensification by positively evaluating a property ascription. It introduces the predicate **good** as part of its denotation,

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but in examples like (1), it applies to a saying event rather than to the event associated with the lexical verb (manner *ben*). As an extension, we suggest a unified treatment of intensifying BEN, (1-a), with ad-nominal modifier *bon*, (1-b).

## 2 The empirical generalizations

Among various readings or uses that the adverb *well* and its counterparts in other languages [henceforth WELL] can have, the manner reading is the most common one, where WELL can be paraphrased by ‘in a good manner’ (2).

(2) He has written the article **well**.  $\rightsquigarrow$  in a good manner

Under this reading, which arises with all verbs that allow manner modification, i.e. with most eventive verbs, the adverb can be straightforwardly analyzed as predicating the property *good* over the event in question (e.g. in (2-a) the event of writing the article is said to be good), on a par with manner modifiers more generally (e.g. [25]).

A second reading that is less clear how to analyze is the “degree reading” (cf. [3, 16]), under which the adverb can be paraphrased by ‘to a good degree’ (3).

(3) They are **well** acquainted.  $\rightsquigarrow$  to a good degree

While the manner reading seems to be available across languages, we argue that what has been identified as degree WELL in the literature does not correspond to a uniform phenomenon. Rather, there is a distinction between what we will call ‘manner-in-disguise’ WELL, illustrated in (3-b), and a (degree-)‘intensifying’ WELL, which we will label BEN and which is absent in English and German, but present in Spanish and Catalan.

### 2.1 Intensifying *ben* vs. manner-in-disguise *well*

Whereas the examples to illustrate the degree reading of WELL in English generally involve participles, as in (3-b) (e.g. [3], [16]), it does not seem to be possible to use WELL as a degree modifier of genuine adjectives (4-a); the same can be observed for German (4-b).

(4) a. \*The train is **well** blue / long / beautiful.  
 b. \*Der Zug ist **gut** blau / lang / schön.  
     the train is WELL blue long beautiful

In contrast, in languages like Catalan (and some varieties of Spanish, cf. [12], [14], [11]), this is possible (5).

(5) El tren és **ben** blau / llarg / bonic.  
 the train is WELL blue long beautiful  
 ‘The train is pretty blue / long / beautiful.’

These facts suggest that English and German WELL is exclusively a VP modifier (a predicate of events, in the broadest sense, to include states), whereas in languages like Catalan it has similar uses as other degree modifiers such as *pretty*, *rather*; cf. the translation of (5).

Furthermore, [16] argue that the ‘degree’ reading of *well* only comes about with adjectives (= adjectival participles) associated with scales that are closed on both ends, evidenced by their compatibility with *partially* or *fully* (6).

- (6) a. The truck is **well** / partially loaded.  
 b. ??Marge was **well** / partially worried when she saw the flying pig.

A further condition they posit is that the standard of comparison cannot be the maximum. For example, when the argument is an incremental theme (7-a), they argue that what counts as a loaded incremental theme can only be such that the maximum standard is met (it is completely loaded); the ‘degree’ reading of WELL is not available, as there are no different degrees of loadedness that could be compared to one another. With other arguments, on the other hand, as in (7-b), the standard is not necessarily the maximum (e.g. a truck can also be partially loaded), and thus the ‘degree’ reading is available.

- (7) a. The hay is **well** loaded. ONLY MANNER  
 b. The truck is **well** loaded. DEGREE/MANNER

In contrast to WELL, BEN does not exhibit such scale structure restrictions: it can also combine with the (relative) open scale adjectives in (8-a), as well as with the (absolute) closed scale adjectives with maximum standards in (8-b).

- (8) a. Open scale: ben a prop ‘WELL close’, ben amunt ‘WELL up’, ben sonat ‘WELL nuts’, ben simpàtic ‘WELL kind’, ben trist ‘WELL sad’, ben viu ‘WELL alive’, ben idiota ‘WELL idiotic’  
 b. Closed scale, maximum standard: ben tancat ‘WELL closed’, ben buit ‘WELL empty’, ben recte ‘WELL straight’, ben pla ‘WELL flat’

It can be shown that the scale structure restrictions on ‘degree’ WELL can be derived from restrictions on the kinds of events that WELL applies to. This becomes evident by the fact that the same restrictions are found in the verbal domain, a fact that is not discussed in [16, 21]. For example, in German, the same verbs that do or do not give rise to a ‘degree’ reading with adjectival participles (which combine with the copula *sein* ‘be’) also do or do not so with verbal participles (which combine with the auxiliary *werden* ‘become’) (9).

- (9) a. Der Lastwagen {ist / wurde} **gut** beladen. DEGREE/MANNER  
 the truck is became well AT-loaded  
 ‘The truck {is / has been} well loaded.’  
 b. Das Heu {ist / wurde} **gut** geladen. ONLY MANNER  
 the hay is became WELL loaded

This difference is primarily related to event structure and only indirectly to scale structure: with (simple) incremental theme verbs such as *laden* ‘load (x on y)’ in (9-b), there is no scale to begin with but it is only provided by the incremental theme (as [15] argues himself; see also [30]); hence the verb itself only has an activity component that can be modified by *well*, thus giving rise to the manner reading. This is different with the prefixed verb *beladen* ‘load (y with x)’, which – due to its prefix – has a built-in stative component that can be modified by *WELL*, giving rise to what one might want to call a degree reading.

Furthermore, even verbs that do not derive adjectival participles allow for the ‘degree’ reading, such as the stative one in (10-a); other verbs do not, such as the necessarily agentive one in (10-b).

- (10) a. Sie kennen einander **gut**. DEGREE  
they know each other WELL  
b. Sie ist **gut** in den Baum geklettert. ONLY MANNER  
she is WELL in the.ACC tree climbed  
‘She has climbed into the tree well.’

Hence, whether or not we get a ‘degree’ reading of *WELL* depends entirely on the nature of the event denoted by the (underlying) verb. With verbs that only have an activity component (9-b), or whose manner/activity component cannot be absent (e.g. they cannot appear as inchoatives) (10-b), we only get the manner reading. With verbs that have a stative component (resultatives and statives) the degree reading is possible (9-a), (10-a); with statives it is even the only reading. Thus, degree *WELL* is an event predicate, predicated over the stative (sub)event of non-agentive verbs or verbs that allow for a non-agentive reading.

In section 3, we will propose that *WELL* under both readings is a VP modifier which predicates the property **good** over an event; this makes it a manner modifier in the broadest sense, under both readings, which is why we label the ‘degree’ reading manner-in-disguise.

Another difference between *WELL* and *BEN* is that the former can be modified by degree modification (11-a), whereas the latter cannot (11-b).

- (11) a. They know each other (very) **well**.  
b. En Pere és (\*molt) **ben** alt.  
the Peter is very WELL tall

The compatibility of *WELL* with degree modification would be left unexplained if it were a degree modifier itself, since elements that directly operate on the degree bind off the degree argument and make it inaccessible for further degree modification (cf. [16]). However, nothing prevents degree modification of *WELL*, though, if it is treated as an event predicate, a kind of manner modifier, so the account we propose straightforwardly captures this fact.

The fact that *BEN* is incompatible with further degree modification suggests that it is one itself. However, in the following sections, we will discuss reasons why it should not be treated as a degree modifier, either.

## 2.2 Intensifying *ben* vs. degree modifiers

In this section we show that intensifying BEN is different from ordinary adjectival degree modifiers (say, of type  $\langle\langle d, et \rangle, \langle e, t \rangle\rangle$ ), such as *very* (a standard booster) and *completely* (a slack regulator). We will phrase the description in a degree-based approach to gradability of the type found in [16] but the overall point that BEN does not behave like a degree modifier could also be made within other approaches such as [31].

A degree modifier like *very*, which is a standard booster (see [16, 31] and literature cited therein), readjusts the standard of gradable adjectives. For example, to truthfully utter a sentence with a relative adjective like *tall*, one has to know what the standard of comparison is. In (12-a), Peter can truthfully be said to be tall if he is at least as tall as the standard (the average height set by the members of the comparison class), which can be different from context to context (12-ai, aii). For absolute adjectives like *full*, on the other hand, the standard of comparison is commonly (semantically) the upper bound of the closed scale ('completely full') (but see also [31] for qualifications) (12-b); pragmatically some slack might be allowed, e.g. if 20 seats are still empty.

- (12) a. En Pere és alt.  
the Peter is tall  
(i) for a 10-year-old boy from Barcelona: at least 1.40m  
(ii) for an NBA basketball player: at least 2.05m  
b. L'estadi està ple.  
the stadium is full  
'The stadium is full.'

With relative adjectives, a degree modifier like *very*, then, boosts the standard, i.e. it raises the standard degree on the scale associated with the adjective (13-a). It also does so with absolute adjectives after first relativizing them into having a context-dependent threshold. For instance, (13-b) is acceptable in a situation where the threshold for *full* has been readjusted to e.g. 80% full and the sentence felicitously describes a situation in which the stadium is 85% full.

- (13) a. En Pere és molt alt.  
the Peter is very tall  
(i) for a 10-year-old boy from Barcelona: at least 1.50m  
(ii) for an NBA basketball player: at least 2.15m  
b. L'estadi està molt ple.  
the stadium is very full  
'The stadium is very full.'

The effect with BEN is different from *molt*. With absolute adjectives (14), the standard degree remains unchanged and is semantically the same as with 'completely full': it describes a situation in which the stadium is 100% full.

- (14) L'estadi està **ben** ple.  
the stadium is WELL full

However, when BEN applies, no slack is allowed anymore, unlike what we find in the non-modified case in (12-b), which brings its effect closer to that of *completely* and other so-called slack regulators ([17]) or precisifiers. With *completament* ‘completely’, just like with BEN, no slack is allowed anymore, but every seat in the stadium has to be filled (15-a). Nonetheless, unlike BEN, slack regulators are only felicitous in cases there is a pragmatic slack that can be regulated; hence they are infelicitous with open scale (relative) adjectives (15-b).

- (15) a. L’estadi està completament ple.  
           the stadium is completely full  
           ‘The stadium is completely full.’  
       b. \*En Pere és completament alt.  
           the Peter is completely tall

Thus, the meaning effect of BEN seems to be more of the type that it focuses on the most typical instances of the property in question, thus excluding borderline cases. For example, in combination with color adjectives which can apply to extended areas in the color spectrum, the application of BEN has the effect that this area is smaller and the property in question falls within the prototypical area. The same effect is reached with relative adjectives: borderline cases that are just at the average of what might count as tall will be excluded so that we indirectly get a similar effect to that of a standard booster, as in (16), in that this sentence would be odd if Peter were just average tall.

- (16) En Pere és **ben** alt.  
       the Peter is WELL tall

However, given that this apparent standard boosting effect is absent with absolute adjectives, we propose that it comes about only indirectly, by focusing on the core cases to which the adjective in question can apply. In section 3 we will propose an account of BEN as positively evaluating a property ascription, which directly captures this effect.

We therefore conclude that the meaning effect of BEN has nothing to do with the standard per se: it neither directly boosts the standard associated with a given adjective nor does it regulate slack that pragmatically appears only with absolute adjectives. This, in essence, means that it is not a degree modifier.

As a final remark, note that nothing in this analysis explains why only gradable adjectives can be modified by BEN, cf. (17).

- (17) En Joan és un arquitecte (\***ben**) tècnic.  
       the John is an architect WELL technical  
       ‘John is a (\*WELL) technical architect.’

*Tècnic* is a relational adjective (cf. e.g. [23]), one of the few adjective types that can be hardly coerced into a gradable predicate (cf. e.g. [2]). This example can be used as a counterargument to our claim that intensification is obtained by indirect means, i.e. by evaluating a property ascription, and as an argument in favor of treating BEN as a degree modifier after all.

Nevertheless, we can provide a strong argument in favor of the present proposal, namely that if BEN should be a degree modifier, we would still need to explain how *goodness* is involved in deriving intensification. The alternative we propose consists in blaming the ill-formedness of (17) not on a type clash, but on a conceptual constraint. In particular, it only makes sense to self-evaluate a property ascription if vagueness arises, i.e. if its criteria of application can be different in different contexts (e.g. [5]). That is, if we cannot evoke contexts where we have different truth conditions for the predication **technical**–**architect(j)**, then it does not make sense to positively evaluate this property ascription. Take for instance a gradable predicate like *tall*. Depending on the context, which is determined by the choice of comparison class – i.e. all the male individuals, basketball players, kindergarten classmates, etc. – **tall(j)** can be true or false. The critical issue is that discourse participants can disagree on whether the property is well ascribed, and so the positive evaluation is acceptable. This makes *tall* a vague (and gradable) predicate which warrants that it can combine with BEN.

### 2.3 Intensifying *ben* involves subjective evaluation

How does the apparent meaning of intensification come about then and what are the meaning effects of BEN more generally? For examples like (16), for instance, BEN has the effect that the speaker contradicts something that was said in the previous context (e.g. after someone said that Peter is short) or expresses some satisfaction or positive evaluation of Peter’s tallness. This is related to the point that BEN nevertheless shows some contextual restrictions depending on the type of gradable adjective it modifies, even if it is not a degree modifier. Specifically, it does not felicitously modify an adjective out of the blue (18), unless it is a clear case of a predicate of personal taste.

- (18) A: Com és en Carles?  
 how is the Charles  
 ‘What is Charles like?’  
 B: És {molt / #ben} intel.ligent i {molt / #ben} generós.  
 is very WELL intelligent and very WELL generous  
 ‘He is {very /#pretty} intelligent and {very /#pretty} generous.’

Predicates of personal taste, on the other hand, which have a built-in evaluative character and therefore a clearly subjective meaning component (cf. e.g. [18, 33]), are generally good with BEN, even out of context (19-a); the subjective nature of such predicates is evident from the fact that they can be embedded under predicates like *find* (19-b) (on which cf. [34] and literature cited therein).

- (19) a. El pastís és **ben** bo.  
 the cake is WELL good  
 ‘The cake is WELL tasty.’  
 b. Trobo el pastís bo.  
 find.I the cake good  
 ‘I find the cake tasty.’

Other gradable adjectives that are not qua their lexical semantics predicates of personal taste become felicitous with BEN when it is under discussion and when there can be disagreement whether or not *x* has the property in question. The added subjective component is explicit in the use of *trobar* ‘find’ in (20), but it is also implicit in (21), where a contrast is established between the expectations of the speaker and her actual opinion.

- (20) A: Ahir m’ho vaig passar molt bé amb en Pere. És tan  
 yesterday me-it have.1SG passed very well with the Peter is so  
 divertit!  
 funny  
 ‘I had such a blast yesterday with Peter. He is so funny!’  
 B: Doncs jo el trobo **ben** avorrit.  
 actually I him find WELL boring  
 ‘Actually, I find him WELL boring.’
- (21) La Mar porta un barret **ben** bonic. M’ha sorprès que tingui  
 the Mar wears a hat WELL pretty me-has surprised that has.SUBJ  
 tan bon gust.  
 that good taste  
 ‘Mar is wearing a WELL pretty hat. I am surprised that she has such  
 good taste.’

The connection to a subjective evaluation of a property ascription is further illustrated by the correlation in (in)compatibility with BEN and *trobar* in (22).

- (22) a. \***ben** just cf. \*El trobo just.  
 WELL fair him find.1SG just  
 b. \***ben** solidari cf. \*El trobo solidari.  
 WELL solidary him find.1SG solidary  
 c. **ben** ridícul cf. El trobo ridícul.  
 WELL ridiculous him find.1SG ridiculous

No such contextual restrictions and requirements of a subjective component are found with the degree modifier *molt* ‘very’, see, e.g., (23).

- (23) En Joan és molt just / solidari / ridícul.  
 the John is very fair solidary ridiculous  
 ‘John is very fair / solidary / ridiculous.’

Related to the observation that BEN involves a subjective evaluative component is the fact that it cannot occur under negation (24-a), and it cannot be questioned (24-b) (cf. [12], [14] for Spanish).

- (24) a. \*En Pere no és **ben** simpàtic.  
 the Peter not is WELL nice  
 b. \*En Pere és **ben** simpàtic?  
 the Peter is WELL nice

These facts have led some people ([13, 14, 12]) to argue that BEN (in Spanish and Catalan) is a positive polarity item (PPI), a proposal also made cross-linguistically for evaluative adverbs like *unfortunately* ([24, 9]). However, we will argue that BEN contributes a meaning at the Conventional Implicature [CI] tier and that the PPI properties follow from it being a factive evaluative. Building on [19, 20] on evaluative adverbs, we propose that BEN sides with factive adverbs in that infelicity under negation is the result of a contradiction between the meaning conveyed at the at-issue tier and the presupposition of the CI.

Let us then turn to our unified analysis of WELL and BEN as event modifiers, which at the same time captures their differences.

### 3 The analysis

In this section we argue that **good** applies to events to derive both manner(-in-disguise) *well* and intensifying BEN. In the former case, the event that is targeted is the event associated with the lexical verb (the VP), while in the latter case, it is the saying event. Moreover, we provide an analysis that accounts for the PPI behavior of BEN that builds on the idea that CI items may bear their own presuppositions, which are not satisfied in entailment-canceling contexts.

#### 3.1 Manner and manner-in-disguise *well*

We assume that the adverb WELL under both readings has the same general lexical semantics as the underlying adjective *good* (approval by some judge). Following the degree approach to gradable adjectives (e.g. [16]), we treat *good* as a relation between degrees and individuals (25-a). Combined with the standard treatment of manner modifiers (= VP modifiers) as predicates of events (e.g. [25]), we get the uniform semantics of WELL in (25-b).

- (25) a.  $\llbracket \text{good} \rrbracket = \lambda d. \lambda x [\text{good}(x) \geq d]$   
 b.  $\llbracket \text{well} \rrbracket = \lambda d. \lambda e [\text{good}(e) \geq d]$

In the absence of additional degree morphology,  $d$  gets bound by POS, which determines the standard with respect to some comparison class, as commonly assumed in degree approaches to gradability.

[21] propose that the ‘degree’ reading comes about (via selective binding) when *good* modifies the event in the telic quale of the participle, whereas under the manner reading it applies to the event in its agentive quale (building on the analysis of *fast cake* vs. *fast car* in [29]). Since nothing in this paper hinges on the precise implementation of this idea, we formalize this in terms of underspecification. In particular, we follow [32], who builds on [8]’s notion of a ‘big event’, represented by  $e^*$ , which is a complex event consisting of smaller event objects, introduced by the **PART\_OF**-relation. Abstracting away from the degree argument, which is bound off by POS at this point, *good* accesses either the big event or part of the event, as illustrated for (9-a) in (26) (ignoring Tense).

$$(26) \quad \exists e^*, x[\mathbf{subject}(x, e^*) \wedge \mathbf{object}(\mathbf{the-cart}, e^*) \wedge \exists e[\mathbf{PART\_OF}(e, e^*) \wedge \mathbf{load}(e) \wedge \mathbf{good}(e/e^*)]]$$

In the following, we will argue that intensifying BEN shares with the other two the lexical semantics of *good* and the fact that it is a predicate of events, but in this case not of the VP event but of an implicit saying event.

### 3.2 Intensifying *ben*: Self-evaluation of a property ascription

To provide a uniform account of WELL and BEN as predicates of events, we rely on [26]’s analysis of the performative use of speech-act adverbs like *frankly* in (27-a), which is treated as a predicate of expression manners ( $\mathbf{expression}(e)$ ) that self-describes the utterance of the context  $C$  as a saying event (27-b).

$$(27) \quad \begin{array}{l} \text{a. Frankly, Facebook is overrated.} \\ \text{b. } \mathbf{utterance}(C) = e \wedge \mathbf{speaker}(C) = x \wedge \mathbf{hearer}(C) = y \wedge \mathbf{say}(e, \\ \quad \exists s(\mathbf{overrated}(s, \mathbf{facebook})) \wedge \mathbf{now} \subseteq \tau(e) \wedge \mathbf{agent}(e, x) \wedge \mathbf{re-} \\ \quad \mathbf{cipient}(e, y) \wedge \mathbf{frank}(\mathbf{expression}(e)) \end{array}$$

Unlike *frankly*, BEN is not a sentential adverb, but an ad-adjectival modifier. It also does not evaluate a proposition, but a property ascription. Moreover, we do not want to claim that BEN characterizes an expression manner, but just the saying event, so we dispose of the expression manner. We propose the slightly amended denotation in (28), and the translation of (29-a) as in (29-b).

$$(28) \quad \llbracket \mathbf{BEN} \rrbracket = \lambda P. \lambda z[\mathbf{utterance}(C) = e \wedge \mathbf{speaker}(C) = x \wedge \mathbf{hearer}(C) = y \wedge \mathbf{say}(e, P(z)) \wedge \mathbf{now} \subseteq \tau(e) \wedge \mathbf{agent}(e, x) \wedge \mathbf{recipient}(e, y) \wedge \mathbf{good}(e)]$$

$$(29) \quad \begin{array}{l} \text{a. En Joan és } \mathbf{ben} \text{ alt.} \\ \quad \text{the John is WELL tall} \\ \quad \text{‘John is WELL tall.’} \\ \text{b. } \mathbf{utterance}(C) = e \wedge \mathbf{speaker}(C) = x \wedge \mathbf{hearer}(C) = y \wedge \mathbf{say}(e, \\ \quad \llbracket \mathbf{POS tall} \rrbracket(\mathbf{j})) \wedge \mathbf{now} \subseteq \tau(e) \wedge \mathbf{agent}(e, x) \wedge \mathbf{recipient}(e, y) \wedge \\ \quad \mathbf{good}(e) \end{array}$$

This analysis of BEN essentially encodes the notion of *emphasis* as the self-evaluation of a property ascription. Emphatic statements are not supposed to be felicitous in out of the blue contexts or question-answer pairs – i.e. where conveying emphasis is not justified – unless we can accommodate that it is a matter of taste whether or not  $x$  should be considered ADJ. Hence, we expect that BEN should be felicitous in contexts where contrastive statements are being discussed and/or with predicates of personal taste, which are clearly judge-dependent.

Other than this, note that BEN operates on the speech act event. We assume with [26] that a performative verb is semantically represented in every utterance, and we claim that its output meaning is not part of the descriptive at-issue content of the assertion, but rather conventionally implicated, in the sense of [27] (and further elaborations). This allows us to explain its resistance to embed

under negation (24-a) and interrogation (24-b), and to be modified by additional degree expressions (11-b), as will be elaborated on in the following.

Previous literature on Spanish BEN (*bien*) has observed that it has a distribution analogous to that of PPIs (e.g. [12, 14]). We argue that BEN’s resistance to certain embeddings parallels the resistance of expressive items ([28]) such as evaluative adverbs ([19, 20]) and extreme degree modifiers ([22]). Let us illustrate this point for the extreme degree modifier *downright*, as in *downright dangerous*. It too is marginal when embedded under negation and interrogation (30) (from [22]); this also holds for better known expressives, such as *fucking* (31) or other such elements (e.g. *full-on*, *straight-up*, *balls-out*).

- (30) a. ??Murderers aren’t downright dangerous.  
 b. ??Are murderers downright dangerous?
- (31) a. ??He isn’t fucking calm.  
 b. ??Is he fucking calm?

(30) and (31), and similarly our examples (24-a) and (24-b), can only be rescued under an echo-reading. This is also expected under the assumption that they are expressive items (or else, that they convey meaning through a CI). The ill-formedness of these sentences can be accounted for by saying that there is a mismatch between the two meanings conveyed (at-issue and CI), as illustrated in (32-a) and (32-b), respectively.

- (32) ??He isn’t fucking calm. (= (31-a))
- a. At-issue tier:  $\neg(\mathbf{calm}(\mathbf{he}_i))$   
 b. CI tier: Speaker expresses a negative attitude at him being calm.

Here we adopt the analysis for evaluative adverbs like German *leider* and *unglücklicherweise* (‘unfortunately’) by [19, 20] to account for BEN’s PPI distribution. In her analysis, evaluative adverbs can be of two types. While *leider* cannot occur in the semantic scope of any entailment-canceling contexts (including negation, conditionals, questions, modals, also called “non-veridical” by [10, 35] a.m.o.), *unglücklicherweise* can occur in all of these contexts but negation (33).

- (33) a. Otto ist nicht {\*leider/\*unglücklicherweise} krank.  
 Otto is not unfortunately sick
- b. Otto ist vielleicht {\*leider/unglücklicherweise} krank.  
 Otto is maybe unfortunately sick
- c. Ist Otto {\*leider/unglücklicherweise} krank?  
 is Otto unfortunately sick
- d. Falls Otto {\*leider/unglücklicherweise} krank ist, muss das  
 if Otto unfortunately sick is must the  
 Seminar ausfallen.  
 seminar be cancelled

The former is factive and the latter, non-factive, which correlates with a difference in their lexical semantics. Specifically, Liu proposes the following:

- (34) a.  $[[\text{leider}]] \rightsquigarrow \lambda p.\text{unfortunate}(p)$  FACTIVE  
 b.  $[[\text{unglücklicherweise}]] \rightsquigarrow \lambda p. p \rightarrow \text{unfortunate}(p)$  NON-FACTIVE

Liu furthermore shows that only factive evaluative adverbs come with their own presuppositions, which happen to match the at-issue content in affirmative sentences (35), but which yield presupposition failure in entailment-canceling contexts like (33). That is, in (35-a), *leider* conveys a CI (35-c) whose presupposition is that Otto is sick (35-d), which in contexts like (33) clashes with the asserted content that negates or questions the at-issue meaning in (35-b). This explains the infelicity of factive evaluative adverbs in contexts where the presupposition and the at-issue meaning do not coincide anymore.

- (35) a. Otto ist leider krank.  
 Otto is unfortunately sick  
 ‘Otto is unfortunately sick.’  
 b. At-issue tier: Otto is sick.  
 c. CI tier: It is unfortunate that Otto is sick.  
 d. CI’s presupposition: Otto is sick.

Non-factive adverbs receive a different explanation for their incompatibility with negation, inspired by [4]. The conditional semantics they have make the CI tier completely independent from the at-issue tier and in principle, (36) does not represent a logical contradiction.

- (36) a. At-issue tier: Otto is not sick.  
 b. CI tier: If Otto is sick, then it is unfortunate that he is sick.

However, it has the status of an incongruence, called a semantic clash by [20]. Note that in one tier we are stating that Otto is not sick and in the other tier we are entertaining the idea that he is sick, and what would follow from that.

Turning now to BEN, we seem to have a distribution parallel to factive evaluative adverbs (37),<sup>1</sup> so a plausible explanation for its PPI behavior can be spelled out as in (38). Note that the at-issue meaning in (38-a) is at odds with the presupposition in (38-b), which causes the ill-formedness of the sentence.

<sup>1</sup> The data are much more complex than we are able to show due to space limitations, though. For instance, certain adjectives whose degree can be interpreted as good for a purpose are fine in conditionals (i).

- (i) Si els pantalons són **ben** estrets, no caldrà que et  
 if the trousers are well tight not be.necessary.fut.3sg that you  
 posis mitges.  
 put.on.pres.subj.2sg stockings  
 ‘If these trousers are well tight, it won’t be necessary for you to wear stockings.’

We have also identified differences of behavior in BEN that seem to relate to the properties of the adjective it modifies, but they are not completely straightforward to us at this point. We leave this investigation for future research.

- (37) a. \*Si en Pere és **ben** simpàtic, estaré contenta.  
           if the Peter is WELL nice        be.fut.1sg glad  
       b. \*És possible que en Pere sigui **ben** simpàtic.  
           is possible that the Peter is.pres.subj WELL nice
- (38) \*En Pere no és **ben** simpàtic. (= (24-a))  
       the Peter not is WELL nice
- a. At-issue tier:  $\neg(\mathbf{nice}(\mathbf{p}))$   
 b. CI tier: **nice** is well ascribed to Peter.  
 c. CI's presupposition: **nice**(**p**)

We hence propose that BEN is of type  $\langle\langle e, t \rangle, \langle e, t^c \rangle\rangle$ , where  $c$  indicates that the output is delivered at the CI tier, following [27].

#### 4 Excursion: On *good*

So far, we have explored the distribution and analysis of intensifying BEN, which hinges on the lexical semantics of the predicate **good**. In this final section we reflect on the semantics of **good** and extend our proposal to intensifying BON ‘good’.

On the basis of the examples in (39), [1] argues for the need of a more fine-grained typology of semantic types, similar in some respects to the system proposed in [29], which is also used by [21]. Specifically, a lunch is good if it tastes good, i.e. *good* seems to select the purpose or telic role of the modified N in (39-a), and thus it behaves like a subsecutive adjective.

- (39) a. a **good** lunch  
       b. a **good** rock  
       c. **good** children

However, rocks and children are natural kinds, for which it does not make sense to assume a given function. In such cases, Asher argues, they can be coerced into having an artifact for which the telic (polymorphic) type is well defined, and can thus be evaluated as good. The exact value of the type is left underspecified, but it can be made clear through e.g. a modifier, as in (40) (from [1]).

- (40) This is a **good** rock *for skipping/throwing/carving/chiseling, etc.*

Here we observe an additional use of *good*, which is not captured in (39) and which we illustrate in (41-a) for English, and as BON in (41-b) for Catalan.

- (41) a. a **good** while, a **good** thirty minutes  
       b. una **bona** estona, un **bon** misteri, un **bon** embolic  
           a good while    a good mystery a good mess

In (41-b), we do not really associate a while or a mystery or a mess with a purpose that can be positively evaluated. In fact, if we add a *for*-clause, as in (40), it is not interpreted as the purpose for which N is good (42).

(42) ??Thirty minutes is a **good** while *for reading a squib*.

Rather, we propose to relate these uses to BEN, since they also involve intensification and cannot be embedded under negation or in questions (43).

- (43) a. \*It didn't take John a **good** while to finish his homework.  
b. \*En Joan s'ha ficat en un **bon** embolic?  
the John SELF has put in a good mess  
Intended: 'Did John get himself into a good mess?'

In spite of these differences, we argue that this intensifying use of *good* is still related to subsecutive *good*. Romance provides us with additional evidence that BON is closer to the subsecutive rather than the intersective interpretation of the adjective. Syntactically, the subsecutive interpretation correlates with A-N order, while the intersective one correlates with N-A order (but see [7] for qualifications); morphologically, *good* surfaces as *bon* when preposed and as *bo* when postposed (44).

- (44) a. un **bon** alumne  
a good student  
≡ good as a student  
b. un alumne **bo**  
a student good  
≡ a student with goodness

The contrast between (45-a) and (45-b) is evidence that, under the intensifying reading, BON has to be interpreted subsectively.

- (45) a. un **bon** misteri  
a good mystery  
b. \*un misteri **bo**  
a mystery good

While a child, a lunch, a rock and a student can be good for a purpose, it does not make sense to predicate goodness (in that sense) of a while, a mystery or a mess, which is why (45-b) is unacceptable.

Analogously to BEN, we propose that BON is a modifier that applies to a property and an individual and returns a content that is delivered at the CI tier. As expected from a subsecutive modifier, BON is not a predicate of individuals, but a predicate modifier, a function from properties to properties. Thus, the lexical semantics of BEN and BON both share the predicate **good**, but rather than applying to an individual (evaluative *good*) or an event (manner *well*), they select good property ascriptions from a set of saying events. The reason why one use surfaces as BEN and the other as BON is purely syntactic in our account: Whereas the former is an ad-adjectival modifier, the latter is an ad-nominal modifier. One advantage of our analysis that treats BON on a par with BEN and thus not as a degree modifier, is that we do not need to posit the existence of gradable nouns (cf. the discussion in [6]) to explain the distribution

of BON. We only need to assume that certain nouns are vague, and this is what licenses modification by BON.

## 5 Conclusions

In this paper we have provided a semantic account of the Catalan ad-adjectival modifier *ben* ‘well’, which yields intensification by, we argue, positively evaluating a property ascription. Formally, this translates as applying the predicate **good** to the saying event available to any utterance. Thus, the output of this modification is a manipulation of the performative rather than descriptive content of the utterance, in other words, a Conventional Implicature rather than at-issue meaning. We also suggested that this analysis can be transferred to similar uses of adnominal *bon* ‘good’.

Issues for future research include a thorough analysis of the distribution of the properties of the nouns that can be modified by BON. Furthermore, it could be interesting to explore the additional inferences that may arise from the predication of **good** such as satisfaction or else irony depending on whether the adjective is positive or pejorative. Finally, it would be worth checking whether our account can be extended to elements that are used in other languages to render the meaning of BEN, such as German *ganz schön*, *richtig* and *schon*, or English *pretty*.

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