On lightly and playfully and other such manners

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On Adjectives and Adverbs

1. On Adjectives and Adverbs

2. Some Observations on Playfully and Angrily

3. Concrete Research Questions

4. Testing Dimensionality in a Corpus

5. Some more observations
adjectives in a nutshell

“John is tall.”
adjectives in a nutshell

“John is tall.”

→ the analysis of the lexical entry for tall in degree semantics: set of degrees, ordering relation, quality dimension (height)

Kennedy & McNally (2005)
Can we use this framework to account for adverbs as well?
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→ the lexical entry for *lightly*: set of degrees, ordering relation, quality dimension (e.g. force)

Looks good. So is this the end of the story? ... (spoiler alert: no)
remainder of this talk

- playfully and angrily
- research questions
- some corpus data
- further observations
1. On Adjectives and Adverbs

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playfully or lightly

“Shiona punched his arm playfully.”
(source: BNC)

playfully: quality dimension: force?, set of degrees, ordering
relation: down

Can one really say that the lexical entry for playfully contains a specification for the force dimension?

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“Shiona punched his arm playfully.”
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*playfully*: quality dimension: force?, set of degrees, ordering relation: down

→ Can one really say that the lexical entry for *playfully* contains a specification for the force dimension?
the force of \textit{playfully} - Part 1

Nancy hit him \textit{playfully}, but still rather lightly, on the shoulder. Under the assumption that “to hit someone lightly” means to hit with a decrease in force:

→ the sentence shows that \textit{playfully} contributes the force decrease reading, because it cannot be contrasted with \textit{lightly} very well.

Possible objection: But this does not prove that a decrease in force is coded in the lexical entry for \textit{playfully}. The force decrease reading could be a pragmatic inference.
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the force of *playfully* - Part 2
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√ Nancy hit him playfully, but still rather hard, on the shoulder.
# Nancy hit him lightly, but still rather hard, on the shoulder.
Under the assumption that "to hit someone hard" means to hit someone with increased force:

- Nancy hit him angrily, but still rather hard, on the shoulder.
- Nancy hit him angrily, but still rather lightly, on the shoulder.
- Nancy hit him hard, but still rather lightly, on the shoulder.

When combined with hit, both playfully and angrily result in a reading similar to that of to hit lightly and to hit hard respectively. Yet for playfully and angrily, this reading can be cancelled. This is not possible in the case of lightly and hard.
angrily or hard

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When combined with *hit*, both *playfully* and *angrily* result in a reading similar to that of *to hit lightly* and *to hit hard* respectively.

Yet for *playfully* and *angrily*, this reading can be cancelled. This is not possible in the case of *lightly* and *hard*. 
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extending the terminology to adverbs:

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extending the terminology to adverbs:

→ multidimensional adverbs: *playfully, angrily*
→ onedimensional adverbs: *lightly, hard*
Some more observations

Playfully
Angrily
Sassoon (2012)
Pragmatics

angrily or hard or loud or ...
possible objection (repeated): The “force” reading of so-called multidimensional adverbs (*playfully* and *angrily*) still looks a lot like a pragmatic inference.
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Yes, but:
“to hit someone angrily” → hard
“to say something angrily” → loud
“to do something angrily” → ?
1. On Adjectives and Adverbs

2. Some Observations on Playfully and Angrily

3. Concrete Research Questions

4. Testing Dimensionality in a Corpus

5. Some more observations
Research Questions

1. How can multidimensional adverbs target the same quality dimensions as onedimensional adverbs (when used to modify the same verbs)? Is this mechanism always the same for all types of multidimensional adverbs, and for all dimensions?

2. The meanings we get when multidimensional adverbs modify verbs are not "hard-wired" into the lexical entry. So what is the (primary) meaning of these multidimensional adverbs?

3. How are the dimensions coded in the verb? What requirements does the verb have to meet in order for the inference to arise?
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A first hypothesis that would confirm the distinction onedimensional vs multidimensional adverbs:

Multidimensional adverbs (playfully, angrily) co-occur with more types of verbs than onedimensional adverbs (lightly, hard).

Raw data from the BNC:

<table>
<thead>
<tr>
<th>Adverb</th>
<th>Verb Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>playfully</td>
<td>27</td>
</tr>
<tr>
<td>angrily</td>
<td>600</td>
</tr>
<tr>
<td>lightly</td>
<td>3044</td>
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Table: Number of verb types co-occurring with the adverbs

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→ hypothesis disconfirmed 😞
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- **lightly**: with little weight, with little force, with reference to sleep, with no great quantity, etc.
- **playfully**: in a playful manner

Another explanation might be the total frequency of the adverbs:
angrily (1030 - 364), hard (21799 - 3044), playfully (92 - 27), lightly (1864 - 600)
On Adjectives and Adverbs

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Some more observations
Nancy is taller than Oliver.

a) √ Nancy hit Oliver harder than Cat did.
b) ? Nancy hit Oliver more angrily/angrier than Cat did.
c) ? Nancy hit Oliver more lightly/lighter than Cat did.

→ It seems that adverbs are not as gradable as adjectives, at least not all adverbs. This might be purely due to morphology, but it would still be nice to have a semantic story of why that is not possible.
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Gradability

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Thank you for listening!

Input is very welcome!

