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Degree concealed questions

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The article examines a set of nouns which can be interpreted as questions on the degree to which some property holds and can be paraphrased by clauses introduced by *how* + Adjective, in some interrogative contexts. This subset of nouns is shown to clearly differ from (traditional) Concealed Questions. Nouns that allow the concealed degree reading (DCQ nouns) are argued to share specific semantic features: only nouns that can denote eventualities involving (intensional) gradable states can have degree concealed question readings. The concealed degree reading is shown not only to result from lexical semantic properties of nouns and from the semantics of the predicates that select them, but also to depend on contextual parameters, which can disambiguate concealed question readings.

Keywords: nominal gradability, intensive gradation, state, presupposition cancellation

1 Introduction

It has long been agreed that some nouns (e.g. mayor, governor, president, capital, time, place, location, price, number...) can have an interrogative reading in some interrogative contexts, as illustrated in (1).

(1) The very survival of your country and the Western World depends on your <u>answer</u>¹ (≈ ... depends on what you'll answer)

The semantics of such 'concealed question' nouns has been extensively studied (see Baker 1968; Grimshaw 1979; Nathan 2006; Frana 2010; Barker 2016; Frana 2017 *inter alia*). It is usually agreed that Concealed Questions (CQ) correspond to identity questions (similar to interrogatives introduced by *who* or *what*), as illustrated in the paraphrase provided in (1), and that other *wh*-questions, such as *where/when/how much X is*, are not possible meanings for a CQ (Nathan 2006; Frana 2017). Nathan (2006: 21) states that 'insofar as a concealed question denotes a question, that question

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All the examples in this article are from the *Corpus of Contemporary American English* (COCA; Davies 2008), unless indicated otherwise. Using such corpus data allowed us to identify not only which nouns allow a Degree Concealed Question reading, but also which contextual elements allowed this interpretation.

is an identity question, i.e. one of the form who X is or what X is'. Our hypothesis is that this assumption should be questioned. First, it has recently been argued (Jugnet & Miller 2024) that a distinct subclass of nouns, which they call polar nouns, can have a different type of interrogative readings, a Polar Concealed Question (PCQ reading), i.e. interrogative readings similar to polar interrogatives, in a subset of interrogative or modal contexts. Such nouns differ from 'concealed question' nouns in that they never denote first order entities (rather, they can denote states or eventualities involving a state).

(2) The very <u>survival</u> of your country and the Western World depends on your answer. (≈ whether or not your country and the Western World survive depends on your answer / ≠?? what your country and the Western World survive depends on your answer)

This article argues that a large set of nouns (e.g. dedication, effectiveness, failure, honesty, involvement, likelihood, loyalty, suitability, usefulness, willingness, ...), partially overlapping with those that allow a polar concealed question use, can have a degree reading, and involve a questioning on a gradient, in a subset of interrogative contexts.

(3) The <u>success</u> of any Head Start program depends on the <u>involvement</u> of parental volunteers during the day. (≈ How successful any Head Start program is depends on how involved parental volunteers are during the day / ≠?? What the success of any Head Start program is depends on what the involvement of parental volunteers is during the day)

The possibility of a degree/level of reading is mentioned by Nathan (2006: 98–9), who hypothesizes that there may be two classes of relational nouns, one class (including nouns such as *price*, *height*, *area* and *age*) corresponding to 'abstract relational nouns'. The distinction between degree nouns and other intensional nouns has also been mentioned in the analysis of Bangla data (Bhadra & Mendia 2019). Focusing on English data, this article will first motivate the distinction between Degree Concealed Question (or DCQ) and Identity Concealed Question (or ICQ) readings, by describing the specificities of nouns that can have a DCQ reading, or DCQ nouns, as opposed to ICQ nouns. More specifically, in an attempt to determine what

² Nathan (2006: 21) explicitly argues against Baker (1968) and Grimshaw (1979), who gave paraphrases of Concealed Questions introduced by wh-words other than what (e.g. Susan found out the place where the meeting was to be held = Susan found out where the meeting was to be held). According to him, all CQs can be paraphrased with questions introduced by what (e.g. Susan found out what the place where the meeting was to be held was), which shows their common meaning. Nathan (2006: 23) notes that in some contexts a DP can have the meaning of a non-identity question (e.g. teach French being understood as teach how to speak French, rather than ?? teach what French is). But he argues that such DPs are not CQs in his sense of the term, which is confirmed by the fact that they cannot occur with CQ-taking verbs (such as find out or tell).

³ The following nouns have been identified as 'central polar nouns' (i.e. nouns which have a polar reading, as opposed to other possible concealed question readings, in non-presupposing contexts): cooperation, participation, resignation, completion, integration, consent, surrender, return, recovery, disclosure, existence, attendance, survival, approval, acceptance, victory, presence, truth, legality, conformity, loyalty, availability, veracity, silence.

makes the DCQ reading possible, the subset of (possibly polar) nouns that can have a degree reading, and the subset of contexts that allow this reading, are circumscribed and described. This description is followed by an analysis of key lexical semantic features of DCQ nouns. The DCQ reading is then shown to depend not only on lexical, but also on contextual parameters, in a discussion of the potential ambiguities of DCQ nouns.

2 The class of Degree Concealed Question (DCQ)

Before we discuss some semantic features of nouns that can have Degree Concealed Question readings, we examine the similarities and differences between Degree Question Nouns and other Concealed Question nouns. This leads us to argue that DCQ nouns should be identified as a distinct subclass of nouns.

2.1 Some similarities between ICQs and DCQs

Nouns that can have Degree Concealed Question readings⁴ and nouns that can have (traditional) Identity Concealed Question readings⁵ share some properties. All of these nouns have an interrogative interpretation and can be paraphrased by a *wh*-clause (in some contexts):⁶

- (4) The <u>answer</u> to this question is not clear, although hypotheses are many. (≈ what the answer to this question is not clear)
- (5) ... individuals have innate value -- regardless of their <u>productivity</u>, or <u>achievement</u>, <u>wealth</u> or <u>power</u> (≈ regardless of how productive, how accomplished, how wealthy or how powerful they are)
- ⁴ The following nouns have been found with a DCQ (and/or a polar) reading (case discussed in section 4.2) in the COCA: ability, accessibility, adherence, appropriateness, aptitude, assimilation, awareness, autonomy, bias, charisma, closeness, complexity, concern, confidence, cooperation, correctness, curiosity, cynicism, determination, disdain, diversity, effectiveness, expertise, fairness, familiarity, fear, flexibility, fondness, guilt, health, honesty, importance, interest, involvement, legitimacy, likelihood, loyalty, luck, merit, motivation, openness, patience, popularity, practicality, productivity, profitability, proximity, receptivity, responsiveness, ripeness, safety, sensitivity, severity, skill, significance, sincerity, sophistication, strength, success, suitability, support, talent, usefulness, utility, visibility, willingness, worthiness... The following nouns have been interpreted with a DCQ (and/or ICQ) reading in the COCA: ability, expertise, fear, inclination, interest, motivation, skill, talent.
- No exhaustive list of such nouns is provided in the literature, but a partial list based on Caponigro & Heller (2003) is provided by Nathan (2006: 86): governor, outcome, location, size, price, temperature, square root, winner, capital, color, height, time, telephone number, sum. Nathan (2006) also discusses mayor, president, place, amount, murderer, color, age, weight.
- The nouns that can have DCQ meanings were identified by first determining which verbs select interrogative clauses introduced by how (using the queries 'VERB how', 'ADJ how', 'PREP how'), discarding the manner reading of how, and checking which predicates are traditionally identified as interrogative in the semantic literature (in Karttunen 1977). Then the nouns that these verbs/adjectives/prepositions can select were identified thanks to the queries '[previously selected lexical item] POSS NOUN', '[previously selected lexical item] DET NOUN'. Only examples involving a possessive or a definite determiner turned out to allow DCQ readings.

The semantics of concealed question nouns thus seems similar to that of a clause, even though their syntax is typically nominal: as shown by (Grimshaw 1979) concealed question nouns have the distribution of Noun Phrases rather than that of clausal complements: they can undergo subject—auxiliary inversion and they cannot be extraposed.

- (6) Is the answer to this question clear? (based on the COCA example (4))
- (7) *Is it clear the answer to this question? (based on example (6))

Furthermore, concealed question nouns can occur in some indirect interrogative contexts. More precisely, they appear in intensional contexts, as shown by the fact that no inference holds in the following examples: the sentences in (c) cannot be inferred from (a) and (b):

- (8) (a) I know Sam's <u>height</u>. (b) Sam's height is the same as Tom's height. (c) I know Tom's height. (made-up example)
- (9) (a) Tom's success depends on his motivation. (b) Tom's motivation is as strong as Bob's motivation. (c) Tom's success depends on Bob's motivation. (made-up example)

Yet Identity Concealed Questions and Degree Concealed questions do differ in several respects, which justifies our claim that Degree Concealed Questions deserve further study. Nouns that can have DCQ readings (in contexts described in section 2.4) will be argued to differ from ICQs in that: (i) their ('default') semantic types are different; (ii) the set of ICQs and the set of DCQs only marginally overlap; some nouns can have distinct ICQ and DCQ readings; and (iii) ICQs and DCQs are not selected by the same predicates. These differences are examined in turn.

2.2 Different semantic types

The class of Concealed Question Nouns has been shown to differ semantically from nouns that cannot have interrogative readings, and usually denote objects. The semantic conditions of the concealed question reading have been discussed (by Baker 1968; Grimshaw 1979; Nathan 2006; Frana 2010; Barker 2016; Frana 2017 *inter alia*). Nouns that can have Identity Concealed Question readings have been shown to denote objects or measures in non-interrogative contexts, and 'an identity question, i.e. one of the form *who X is* or *what X is*' (Nathan 2006: 21) in interrogative contexts.

(10) The <u>answer</u> to this question is not clear, although hypotheses are many. (\approx what the (correct) answer is is not clear / \neq ? how the correct answer is is not clear)

Contrary to classical Identity Concealed Question nouns, DCQs do not denote objects in non-interrogative contexts, but rather second-order or third-order entities

such as states or properties (e.g. dedication, willingness, effectiveness, likelihood, suitability, honesty, loyalty, usefulness, ...), or eventualities (e.g. failure, success, support, ...)

Besides, in interrogative contexts, these nouns may be argued to correspond to Degree questions, which is reflected in the fact that they can be paraphrased by clauses introduced by *how* (but not by clauses introduced by *what* or *who*):

- (11) Our nation's security depends on the <u>honesty</u> and <u>integrity</u> of those entrusted with our technological secrets. (≈ ... depends on how honest and virtuous those entrusted with our technological secrets are... / ≠? ... depends on what the honesty and the integrity of those entrusted with our technological secrets is ...)
- (12) ... this questionnaire is designed to determine the <u>severity</u> of these three cardinal symptoms according to the DSM-VI 51. (\approx to determine how severe these three cardinal symptoms are... / \neq ? to determine what the severity of these three cardinal symptoms is...)

The paraphrase by a clause introduced by *how* (Adj) can obviously be argued to be equivalent to a clause introduced by *what the level/degree of... is.*

(13) ... this questionnaire is designed to determine the <u>severity</u> of these three cardinal symptoms according to the DSM-VI 51. (\approx to determine what the level of severity these three cardinal symptoms is $/ \neq ??$ to determine what the severity of these three cardinal symptoms is)

But even though such paraphrases are possible, the similarity to usual paraphrases of ICQs is only superficial: the paraphrase cannot simply be introduced by *what*; rather *what* must be followed by *level of* or *degree of*. It is then necessary to explain why the paraphrase introduced by *what* has to include *level of* or *degree of*, in other words why a 'usual' individual reading is not possible.

Possible paraphrases (by *how* vs by *what*) obviously should not be the only criterion to delineate the class of DCQs. The fact that a paraphrase by *how* + Adjective is possible can then help to identify DCQs, but is not a necessary and sufficient condition for a noun to be analysed as a DCQ. Indeed, some nouns allow for both paraphrases by clauses introduced by *what* and by clauses introduced by *how* (e.g. *height*, *weight*, *age*, *strength*, *depth*, *length* or *width* allow both paraphrases).

(14) No matter your <u>age</u> or skill level, he will work with you, at your own pace, to get you into good shape. (\approx no matter how old you are ... / \approx no matter what your age is ...)

These nouns all correspond to functional nouns, more specifically to functions from indices to numbers or measures, and as such may be argued to correspond to (Identity) Concealed Question Nouns.

Now it seems difficult to argue that DCQs correspond to functions from indices (world/time pairs) to entities or to measures, like ICQs. This is reflected in their different distributions: while nouns that can have ICQ readings, such as *temperature*,

can be found in equative sentences involving extensional identity (e.g. *The temperature is 90*), nouns such as *success* cannot be found in such equative sentences. This can be related to the fact that nouns that can have DCQ readings do not correspond to different entities or different values at different indices. For example, a noun such as *discomfort* denotes a state whose intensity can vary at different indices, which may justify the analysis of such nouns as intensional (Bolinger 1972), but they cannot be assigned values.

The semantic types of (traditional) Individual Concealed Questions and Degree Concealed Questions thus clearly differ (the semantics of DCQs will be discussed further in section 3). This (semantic) difference is reflected in linguistic differences, examined in section 2.3 (which shows that ICQs and DCQs correspond to distinct sets of nouns) and section 2.4 (which shows that DCQs and ICQs do not have the same distribution).

2.3 Two sets of nouns

DCQs and ICQs clearly differ in that the set of nouns that can have DCQ readings and the set of nouns that can have ICQs are different, and only marginally overlap. Most nouns that can have Identity Concealed Question (ICQ) readings never have Degree Concealed Question (DCQ) readings.

(15) "That," replied the prosecutor, "depends on the President you work for."

On the other hand, nouns that can have DCQ readings mostly do not have ICQ readings (which motivates our claim that DCQs correspond to a distinct set of CQ nouns).

Yet a small set of nouns (such as *ability*, *commitment*, *expertise*, *inclination*, *interest*, *motivation*, *skill*, or *talent*) can have either an ICQ reading or a DCQ reading in (different) interrogative contexts.

- (16) Serafini (2011) noted further that "individuals take up cultural texts differently depending on their <u>interests</u> and positioning in various social and historical contexts" (p. 347). (ICQ ≈ ... depending on what their interests are / depending on what they are interested in / DCQ ≠ ... depending on how interested they are)
- (17) These books, all of which are handsomely produced and sell in the neighborhood of \$ 20, demand to be taken seriously as literature regardless of your interest in their settings. (DCQ \approx ... regardless of how interested in their settings you are / ICQ \neq ... regardless of what your interest in their settings is)

Such nouns can be analysed as polysemous, the identity and degree meanings being clearly distinct (if the Identity Concealed Question reading is selected in a context, the Degree Concealed Question is not available, and vice versa). The fact that very few nouns can have either the ICQ or the DCQ reading, but both readings cannot be

simultaneously available (the polysemy will be further discussed in section 4.1), justifies the distinction between two (marginally overlapping) sets of nouns.

Besides, in contexts allowing concealed question readings, many DCQ nouns can have both a DCQ and/or a PCQ reading (i.e. similar to a clause introduced by *whether*), but not a (classic) ICQ reading (these nouns, and the possible ambiguity between degree and polar readings, will be further discussed in section 4.2):

(18) Well, I think this sort of warm glow we get from giving is actually built into human nature. So human beings have evolved to experience joy from giving because actually our survival really depends on our willingness to make some sacrifices along the way to help each other out. (DCQ ≈ our survival really depends on how willing we are to make sacrifices... / PCQ ≈ our survival really depends on whether we are willing to make sacrifices / ICQ ? ≠? our survival really depends on what our willingness to make sacrifices is ...)

As already mentioned, DCQ readings are available in some interrogative contexts. But not all interrogative contexts allow this reading, and the contexts that allow DCQ readings differ from those that allow ICQ readings. We will now examine the contexts that allow the DCQ interpretation.

2.4 Selectional restrictions: predicates selecting DCQ readings

Degree Concealed Question readings are possible with a subset of interrogative predicates which differ from the predicates selecting Identity Concealed Question readings. While ICQ nouns have a concealed question reading when selected by some epistemic verbs, i.e. verbs of mental attitude such as *know*, *reveal*, *forget*, *ask* (Nathan 2006; Frana 2010; Heim 1979), DCQ nouns have a degree reading when selected by another set of (epistemic or unconditional) predicates – similar to predicates that can select PCOs.

The hypothesis that the set of predicates selecting CQ nouns should be explained by semantic parameters has been supported by Dor (1992), who assumes that CQs can be selected by predicates implying negative epistemic commitment, i.e. implying that the subject does not know the answer to the question complement (or has not assigned the true value to the variable represented by a wh-phrase). According to Nathan (2006: 45–8), this hypothesis is not completely convincing, as some predicates implying negative epistemic commitment (such as wonder) do not take ICQs. Nathan's hypothesis is that the predicates that usually take ICQs are those which can have (direct) NP complements, and select a clausal question or a clausal proposition (e.g. know, forget, tell, guess, predict but not wonder). This supposedly explains which verbs can select concealed questions, among verbs that can have question arguments listed in the semantic typology by Karttunen (1977): predicates of retaining

This conclusion is drawn from a comparison of the predicates that are most often mentioned as selecting ICQs in the literature and the predicates selecting DCQs which we identified (as specified in the preceding note).

knowledge (John {knew/recalled/remembered/forgot} the price of milk), predicates of acquiring knowledge (John {learned/noticed/found out/discovered} the price of milk), predicates of communicating (John {told/showed} me the price of milk, John {indicated/disclosed/revealed} the price of milk), predicates of decision (John {decided/determined/specified} the price of milk), predicates of conjecture (John {guessed/predicted/estimated} the price of milk). This hypothesis supposedly explains why DPs with CQ meanings are excluded by some predicates which usually take prepositional complements, i.e. some predicates of opinion (*John {was certain / was convinced} the price of milk), some predicates of relevance (*John cared the price of milk), as well as some predicates of inquisition (John asked (me) the price of milk. / *John {wondered/inquired} the price of milk).

Now, predicates selecting or rejecting DCO readings are not the same as those selecting ICQ readings. To compare these sets more easily, we also used Karttunen's typology of predicates (Karttunen 1977). What emerges is that three subsets of predicates can be distinguished. A first subset selects DCQs as well as ICQs: this is the case for predicates of conjecture (such as *predict* or *estimate*), predicates of decision (such as agree on, control, determine ...) in negative or modal contexts as well as some inquisitive predicates (ask about, 8 investigate, be interested in, ...). With such predicates, the answer to the question complement is not known, hence the compatibility with both types of concealed questions (ICQs and DCQs). A second subset of predicates can select DCQs, but not ICQs according to (Nathan 2006) – this includes predicates of dependency,9 such as depend on, be related to, have an influence on, be a function of, make a difference to, ... and predicates of relevance (matter, be relevant, be important, care, be significant, ...) in negative or modal contexts. 10 These differ from the other sets in that their arguments can be questions but not propositions (Nathan 2006: 138–9). The fact that DCQ readings are available may be due to their semantics, as these predicates can be used to state that variables in one dimension correlate with values in another dimension. ¹¹ Another subset of predicates that can take DCQs is unconditionals (such as regardless of or no matter). As argued by Frana & Rawlins (2011: 502), such predicates 'take interrogative clauses of all

Note that ask used transitively can select ICQs but not DCQs: He asked the price of this item /?? He asked the availability of pickers vs. When asked about the availability of pickers, Mauro Morales, one of the current distributors, explained... (COCA)

⁹ Nathan (2006: 13) explains that verbs of dependency do not take CQs as they do not take the full range of DPs that can have CQ meanings (*The price of milk* /# *The governor of California* /# *The city I will visit next week depends on a few factors*). Our assumption is that predicates that can select *wh*-clauses as well as NPs with interrogative readings should be included in the set of (D)CQ-selecting predicates, whether they select all types of CQs or only some of them.

Nathan's generalizations may be questioned, as it seems possible for at least some of these verbs to select ICQs: His happiness depends on her answer \approx on what her answer will be / Their answer does not matter \approx what their answer is does not matter. Such verbs can therefore be inferred to possibly state a correlation between two specific individuals.

As pointed out by an anonymous reviewer, this property also explains why these predicates are typically found in generic statements or in statements about some possible future situation, as in both cases several possible instances are considered (which is not the case in non-quantificational episodic statements).

types, as well as just those DPs that have a CO interpretation'. A third subset of epistemic predicates cannot, or can only marginally, select DCQs (while they can easily select ICQs): this subset corresponds to predicates of acquiring knowledge (he discovered its importance), predicates of retaining knowledge (John knows her intelligence, 12 John remembered her involvement), and predicates communicating (John {indicated/disclosed/revealed} their availability / the likelihood of population collapse / ??He told me their importance). Many DCQ nouns are thus not (or very rarely) selected by predicates which usually take propositional arguments. This may be related to the fact that DCOs (contrary to ICQs) cannot easily be paraphrased by propositions identifying the value of a variable: levels of involvement, autonomy, or loyalty are not easy to quantify, and hence are not specific pieces of information that can be communicated, learned or remembered (unlike prices, lists of capitals or governors or presidents of countries).

The contexts allowing DCQ nouns therefore correspond to a subset of (non-presupposing) predicates that differs from the set of predicates selecting ICQ nouns. Predicates selecting DCQ nouns seem rather similar to the set of predicates selecting PCQs (Jugnet & Miller 2024). While ICQ nouns are selected by verbs that can have proposition as well as question arguments, DCQ nouns (as well as PCQs) can be selected by predicates that can take question arguments, or can be found in contexts of presupposition cancellation.

More precisely, in the COCA corpus DCQ are frequently selected by the following predicates: *depend*, *regardless of*, ¹³ *ask/inquire about*, *investigate*, *predict*, *unclear*, *uncertain*, *determine*, *decide*, or *agree on* (most of which do not select nouns with Individual Concealed Question readings, according to Nathan (2006)).

The differences in selectional restrictions discussed in this section confirm that DCQs are a subclass of CQs which differ from ICQs in various respects (while they share some similarities with PCQs). Our assumption is that nouns that can have DCQ readings share specific semantic properties. These are discussed in the following section.

3 Semantic features of DCQs

As stated in section 2.4, the concealed degree reading is only possible in a restricted set of contexts. But not all nouns can have a concealed degree reading in such contexts (some can have an ICQ reading only). This section examines which lexical semantic

¹² In a discussion of the restrictions imposed by know, Nathan (2006: 42) indicates that the DP his intelligence in I know his intelligence, if it can be interpreted at all, 'can be interpreted only as a concealed question: I know how intelligent he is or I know what the level of his intelligence is.'

Depend and regardless do not only select interrogative complements, they can also allow factive readings of their arguments (e.g. Regardless of his failure as a dad, I could hardly blame him for wanting to escape). If a degree reading is available in those cases, it is a high degree reading rather than a Concealed Degree Question reading.

features allow some 'central' DCQ nouns to have a DCQ reading. The possible influence of dependents will be examined in section 4.

3.1 States

Our hypothesis is that one of the prerequisites for the DCQ reading is that the noun involves the description of a state. Two subcases will be examined in turn: nouns denoting stative eventualities, and nouns denoting non-stative eventualities but describing a related state.

3.1.1 *Tropes*

In non-intensional, non-interrogative contexts, most of the nouns that can have DCQ readings denote states, properties, or eventualities implying a (scalar) property (they do not denote first-order entities). Most of the nouns that denote eventualities and can have a DCQ reading can be characterized as non-dynamic, atelic and homogeneous situations, i.e. stative eventualities (Rothstein 2004 *inter alia*) – about seventy nouns corresponding to this description were found to occur with DCQ readings in the COCA. As such, they cannot be the arguments of *take place*, *happen* or *occur*, nor can they be the complements of *undertake* or *make*.

- (19) *His loyalty took place yesterday.
- (20) *He recently undertook this receptiveness.
- (21) *His autonomy occurred yesterday.

Most of these nouns correspond to tropes, i.e. 'instantiations of a static property' (Moltmann 2007), rather than to abstract states (or Kimian states). A trope can be defined as a concrete entity that instantiates a property, or 'concrete manifestations' of a property (Moltmann 2007: 371), while a state ('abstract state', or 'Kimian state') corresponds to a property holding of an entity (to a relevant positive degree). Tropereferring terms can refer to objects that have changing concrete manifestations (*John's talent* may change, increase or decrease, while *John's being talented* does not). This is reflected in several linguistic differences between tropes and (abstract) states, such as (i) the possibility for tropes (but not abstract states) to be measured, (ii) the compatibility of nouns denoting tropes with some predicates or modifiers, or (iii) the compatibility of nouns denoting tropes with some determiners. DCQ nouns seem to have all these properties. (i) Nouns denoting tropes are typically gradable, as

The following (stative) nouns can have a DCQ reading: ability, accessibility, adherence, appropriateness, aptitude, awareness, autonomy, bias, charisma, closeness, complexity, concern, confidence, cooperation, correctness, curiosity, cynicism, determination, disdain, diversity, effectiveness, expertise, fairness, familiarity, fear, flexibility, fondness, guilt, health, honesty, importance, interest, involvement, legitimacy, likelihood, loyalty, luck, merit, motivation, openness, patience, popularity, practicality, productivity, profitability, proximity, receptivity, responsiveness, ripeness, safety, sensitivity, severity, skill, significance, sincerity, sophistication, strength, suitability, support, talent, usefulness, utility, visibility, willingness, worthiness...

the degree to which tropes instantiate a property (the property expressed by the base predicate) can be measured (while abstract states cannot be measured) (Moltmann 2007: 370):

(22) John's tiredness was extreme/mild/greater than Bill's (? John's being tired was extreme/mild/greater than Bill's) (Moltmann's examples 6, 7 and 8)

Gradability is a key feature of DCQ nouns, which will be further discussed in section 3.2.

Besides, as argued by Moltmann (2007), (ii) nouns referring to tropes can be the arguments of predicates implying that the internal structure or complexity of an argument is taken into account (e.g. describe, investigate, examine or admire) (while nouns denoting abstract states cannot). DCQ nouns can be the arguments of at least one of these predicates.

- (23) That's how Nacchio describes his <u>involvement</u> in the clandestine world of classified government work in documents recently <u>unsealed</u> in his criminal insider-trading case. (vs ? describes his being involved ...)
- (24) The study presented here investigated the <u>accessibility</u> and <u>usability</u> of MySchoolDayOnline for students with visual impairments. (vs? investigating their being accessible and usable ...)
- (25) In this study, I investigated and compared environmental perspectives of African Americans and Whites by examining their <u>adherence</u> to basic world views the DSP or the NEP and focused on the contrasting <u>dimensions</u>. (vs. examining their being adherent to basic world views ...)
- (26) I particularly admire his <u>willingness</u> to be a distributor. (vs? I particularly admire his being willing to be a distributor)

Tropes allow manner predicates or manner adverbials, which describe the ways the property is manifested, while states do not. Some nouns that can have DCQ readings also allow manner modifiers:

- (27) Italy's submarine fleet has profited from close <u>cooperation</u> with Germany's ThyssenKrupp Marine Systems. (vs ? Italy's submarine fleet has profited from closely cooperating with Germany' Thyssenkrupp Marine Systems.)
- (iii) Tropes allow a variety of determiners, and in particular 'allow for demonstrative reference ... and mass quantification' (Moltmann 2007: 370) (while abstract states 'act like definite descriptions only'). DCQ nouns also allow various determiners in non-interrogative contexts but note that when they have a DCQ reading, they can only be introduced by a definite determiner or by a possessive.
- (28) This is reflected in the review of Timperley et al. (2007), which showed that collaborating secondary school teachers tend to seek support for the status quo and marginalized or even ignored new ideas. This <u>adherence</u> to routine might be also present in higher educational contexts, which could hinder university teacher's need to engage in team learning behaviors.

(29) Women and people of color are probably expressing more frustration right now.

Based on these criteria, most nouns that allow a DCQ can be identified as tropes (rather than abstract states) in non-interrogative contexts. But not all nouns allowing DCQ readings are stative – as we will show in the following section, some dynamic nouns can be DCQs.

3.1.2 Stative feature: dynamic eventualities with a correlative state

Among nouns allowing DCQ readings, some are not simple states but rather correspond to dynamic eventualities, e.g. assimilation, involvement, success. Such nouns can be the arguments of happen, take place or make, like usual dynamic nouns.

- (30) I will show that this contradictory and difficult <u>assimilation</u> happened in the context of the increasing distribution of US silent films, a <u>minor aspect</u> of Mexican society in the first fifteen years of the century that would soon become overwhelmingly important.
- (31) Parents are intimately involved not only in their child's education but in the details of their child's life. More important, that <u>involvement</u> takes place in a sustained and continuous relationship rather than serving simply a supplemental role.
- (32) Yet had that success taken place no one would have been aware that 60 million lives worldwide and the destruction of European Jewish civilization had been avoided.

These nouns can then be characterized as dynamic, yet they differ from other dynamic nouns (e.g. *arrival* or *creation* or *walk*) in that they do not describe actions or correspond to a prototypical type of dynamic eventuality (e.g. many different eventualities can be characterized as successes, many different (agentive) dynamic eventualities can require involvement). Such nouns rather describe states correlated with (implicit) actions.¹⁵ The (gradable) stative dimension is thus the most important or salient semantic feature of these nouns, which may explain why they can have a DCQ reading (as illustrated in (33)–(35)), while most dynamic nouns (e.g. *running*, *return*, *recognition*) cannot.

- (33) To Nazis, Jews were not just those who practiced Judaism, but those of Jewish blood, regardless of their <u>assimilation</u>, intermarriage, religious activity, or even conversion to Christianity. (≈ regardless of how assimilated they are)
- (34) Charter Schools and Home Schooling are not black and white issues. It usually depends on the <u>involvement</u> of the parents and the interest of the teachers either way. (≈ ... depends on how involved the parents are...)
- (35) Continued public funding for such learning centers depended on their <u>success</u> in helping students meet performance expectations. (≈ depended on how successful they were in helping students meet performance expectations)

For example, a success can be described as any event that meets its initial goals and as such is successful – their agent being successful; an assimilation is any process leading to the subject's being assimilated; an involvement can be correlated with a subject's being involved in any accomplishment ...

As already hinted at, the states associated with DCQs have to be gradable. This property is examined in the following section.

3.2 Gradability

Definitions of gradability differ (Bolinger 1972; Schnedecker 2010; Matushansky 2002; Morzycki 2009 inter alia), ¹⁶ and the idea that nouns can be gradable has been questioned (Wierzbicka 1986; Constantinescu 2011; Croft 1991 inter alia). The idea that gradability in the nominal domain is similar to gradability in the adjectival domain has been questioned, as nouns are multidimensional (Sassoon 2017; Wierzbicka 1986): the semantics of nouns is often more complex (involves more semantic features) than that of adjectives (which can be reduced to a gradable property). Constantinescu (2011: 229-30) concludes 'in the nominal domain there are no grammatical phenomena that are exclusively sensitive to gradability and no expressions that perform the type of operations that are involved in degree modification as we know it from the adjectival domain, i.e. involving comparison of degrees or operations on ordered sets (depending on the approach)'. This contradicts Kennedy & McNally (2005), according to whom 'gradability is a feature of grammatical categories other than adjectives', and 'gradability is characteristic not only of adjectives but also of verbs and nouns'. We adopt Kennedy & McNally's view that some nouns can be analysed as gradable; more specifically nouns whose semantics is very close to that of gradable adjectives in that they denote a gradable property.

3.2.1 'Intensively gradable' nouns

Most of the nouns that have traditionally been analysed as 'intensively gradable' (in Bolinger's (1972) sense)¹⁷ can have DCQ readings. More specifically, the DCQ reading is possible with 'intensive' degree nouns (nouns of states or properties).¹⁸ These nouns pass all the traditional tests of gradability, i.e. the compatibility with *wh*exclamatives (36), with the 'degree' or 'intensifying' interpretation of *such* or *quite* (37), or the compatibility with some modifiers with a degree reading (e.g. *great*,

Our conception of gradability differs from Sassoon's (2017), which correlates gradability with prototypicality, any noun being compatible with comparative structures used to compare (more or less prototypical) instances of a concept, e.g. *This is more of a chair than a stool.* The 'metalinguistic' gradability in such comments on the appropriateness of a term differs from lexical gradability, where a linguistic term describes a gradable property.

According to (Bolinger 1972), intensively gradable items are expressions that seem to identify a scale in their lexical, conventional meaning, corresponding to a property that may hold of individuals to a higher or lower degree of intensity, in a similar way to gradable adjectives.

Such nouns tend to give rise to qualitative, intensive readings (rather than to quantitative, extensive readings) of their dependents. For example, usually quantifying determiners such as *much*, or modifiers such as *big*, have a specific interpretation when combined with gradable nouns: *much courage* indicates a high degree of courage (while *much gardening* describes a great amount of (time devoted to) gardening, *little courage* describe a low level of courage, while *a little walk* can describe a walk that has a small extension in time (does not take much time) (Huyghe 2014; Bolinger 1972; Van de Velde 1995).

terrible, real, sheer, pure, complete, total (38)). Besides, such nouns can be the complements of degree(s) of as well as level(s) of (39) – as noted by Nicolas (2010: 183) inter alia. Even though the validity of some of these tests can be questioned (Constantinescu 2011), ¹⁹ the fact that the nouns pass all the above-mentioned tests can be argued to support the hypothesis that DCQ are gradable:

- (36) Then it is beautiful to observe with what <u>patience</u>, sweetness, and <u>perseverance</u> Helen endeavours to bring the unruly fingers of her little friend into proper position.
- (37) I couldn't do anything on my own and was going a little mad, and he dealt with it with such patience and compassion.
- (38) Now that I actually taught a class I realize that keeping the attention of students and keeping them inspired or curious takes great patience.
- (39) "I assure you, Ms. Peterson," she went on, with a truly admirable degree of <u>patience</u>, "that we're working to get your daughter back home as soon as possible."

Nouns that have a DCQ reading can then be assumed to correspond to gradable states, while nouns that correspond to non-gradable states (e.g. *absence*, *authenticity*, *death*, *knowledge*, *life*, *presence*, *recovery*, *state*, *survival*, *truth* ...) cannot have DCQ readings (as discussed by Jugnet & Miller (2024), some can have polar readings).

Yet, as already hinted at, not all gradable nouns allow for a DCQ reading. This case is examined in the following section.

3.2.2 Evaluative nouns: gradable nouns without DCQ readings

Among nouns that have traditionally been analysed as 'intensively gradable' (in Bolinger's (1972) sense),²⁰ only some subcategories can have DCQ readings. More specifically, most evaluative nouns (analysed as gradable by Bolinger (1972) and Matushansky (2002) *inter alia*) seem to exclude that reading. Two subcases will be examined: evaluative nouns denoting events, and evaluative nouns denoting individuals.

Most dynamic 'evaluative' nouns which involve a gradable feature, such as *blunder, disaster*, or *mistake*, do not have concealed question readings, even though they are compatible with the above-mentioned structures testing gradability,²¹ and are traditionally analysed as gradable (Bolinger 1972 *inter alia*). The only exception we found is *success*, when a reference is made to some future possibility, whose characterization as a success cannot be established, or still has to be determined (reflected by the use of the modal *will* in the following paraphrases):

For example, as pointed out by an anonymous reviewer, the adjective *great* can combine with non-gradable nouns (e.g. *she is a great teacher*). Constantinescu (2011: 21) assumes that in this case, as the nouns have no inherent gradable property in their meaning, 'the evaluation is always made with respect to some external property that has to be recovered from the context'.

According to (Bolinger 1972), intensively gradable items are expressions that seem to identify a scale in their lexical, conventional meaning, corresponding to a property that may hold of individuals to a higher or lower degree of intensity, in a similar way to gradable adjectives

²¹ They allow degree readings of size adjectives (a big idiot).

- (40) Whether or not it's a dig, it may well be true if the future of the operatic musical depends on the <u>success</u> of "Martin Guerre." (≈ depends on how successful "Martin Guerre" will be)
- (41) Now the majority of Russians understand that their well-being depends on the <u>success</u> of their own efforts [...] (≈ depends on how successful their efforts will be)

Now success could be analysed as a noun denoting an eventuality which indirectly describes an individual: the agent at the origin of the (underspecified) successful event can be characterized as (potentially) successful – the implied state of the agent being stage-level. The noun success thereby differs from evaluative terms which cannot have DCQ readings, such as failure, blunder or disaster. The latter are typically used to characterize present or past events, and cannot be indirect ways of characterizing an agent. This may be related to the fact that the (subjective) gradable feature does not correspond to a (gradable) property of an individual involved in the event. While the modernization of a building can be defined as the process of making the building more modern, or the integration of individuals as the process of making these individuals more integrated, the characterization of the action of an individual as a blunder does not imply that this individual is a blunderer, just as the characterization of an action as a mistake does not imply that its agent is generally mistaken. Our hypothesis is that the degree reading is excluded because these gradable terms are ways of characterizing actions, but not characterizing the individuals involved in this action: they are not indirect characterizations of participants. It could then be argued that a key feature of DCQs is that they can both denote eventualities and describe properties of individuals.

Another set of evaluative nouns does not allow the DCQ readings: evaluative nouns which can denote individuals (e.g. *idiot*, *fool*, *fan*, *blunderer*). These are not compatible with *degree of* or *level of*:

(42) *There are different degrees of idiots / fools / enthusiasts / blunderers / fans.

The unavailability of the Concealed Degree Question reading with these nouns may be explained by the fact that they denote individuals. As already mentioned (in section 2.2) nouns that can have concealed degree readings usually cannot have identity concealed question readings.

3.3 DCQs: shared properties

Based on the preceding remarks, our conclusion is that DCQ readings are possible with nouns that may denote eventualities and have a stative, gradable feature (which can be understood as a property of an individual involved in the eventuality). These properties set DCQs apart from other nouns allowing CQ interpretations. These specificities allow us to delineate a subclass sharing particular semantic features, but this does not imply that the semantic analysis of DCQs should be completely different from that of (traditional) (I)CQs.

According to Nathan (2006: 19), 'a DP can be a concealed question [ICO in our terms] if: (a) its head noun is relational: it describes a relationship between two individuals (e.g. a state and its governor, a commodity and its price), or (b) its head noun is nonrelational, but is modified in certain ways (e.g. with a relative clause)'. More precisely, concealed question meanings are possible when the head of a DP is a relational noun, or when the context (such as dependents of the noun) can force a relational interpretation (Nathan 2006: 116). For example, nouns modified by relative clauses (such as the semanticist who teaches at USNDH), which can be the arguments of intensional predicates, can also have CQ meanings. Our hypothesis is that DCQ nouns describe the relation between a property and a grade – or a position on a gradient associated with a (gradable) state described by a noun denoting an eventuality. Just as 'traditional' concealed question meanings can be fostered by contextual elements, we will now see the DCQ reading can also be favoured by dependents. So far we have focused on the DCQ readings of gradable nouns, and examined what makes a DCQ reading available, without discussing possible ambiguities between different types of concealed question readings. We will now examine various cases of polysemy or ambiguity.

4 Polysemy and potential ambiguities

Very few nouns that can have DCQ readings in interrogative contexts get the degree reading only. Most DCQ nouns can have more than one concealed question reading: some can have either a degree or an identity question reading, or both a degree and a polar reading. These two cases will be examined in turn.

4.1 The ICO/DCO ambiguity

The sets of ICQs and DCQs have been argued to differ and to overlap only marginally in section 2.3, as most DCQs do not have ICQ readings (and vice versa). Yet, as already mentioned, a rather limited set of nouns (ability, expertise, fear, inclination, interest, motivation, skill or talent) can have either a DCQ or an ICQ reading.

... black unskilled laborers were "hired in low-paid work regardless of their skill or experience" (≈ regardless of what their skill or experience was / ≈ regardless of how skilled or how experienced they were)

Potential ambiguities can be resolved in context, as some contextual elements clearly favour the DCQ reading, while others favour the ICQ reading. Some dependents provide an answer to the (potential) identity question, and consequently 'coerce' the DCQ reading.

(44) In a meta-analysis of 13 studies from 1959 to 1980, Cooper and Tom (1984) evaluated different cultural groups and different levels of SES on academic motivation and found SES is a better predictor of academic motivation than culture. (\approx ... a better predictor of

how motivated students are $\dots \neq ??$... a better predictor of what the academic motivation of the students is)

In example (44), the ICQ reading is not available as the adjective modifier *academic* provides an answer to the ICQ (as it specifies a type of motivation – motivation for one's studies), so the ICQ reading becomes unavailable.

Disambiguation of DCQ/ICQ nouns by dependents is quite frequent; e.g. in most of its occurrences (in CQ contexts) in the COCA corpus, the noun *ability* is followed by a complement introduced by *to* which corresponds to the answer to the individual question, so the only reading that remains possible is then the polar, or the concealed degree question reading.

(45) Within weeks, the school reversed its policy, focused on collecting debt from parents rather than punishing students, and began offering hot lunches to all kids regardless of their <u>ability</u> to pay. (\approx ... regardless of whether they are able to pay / ? regardless of how much they are able to pay / \neq ?? ... a better predictor of what their ability to pay is)

Besides, predicates implying measurement such as *test* seem to favour the DCQ reading (rather than the ICQ reading):

- (46) Test Your <u>Skill</u>: While there are a number of shooting drills that will help a shooter test his level of improvement, I prefer "El Presidente." (≈ Test how skilled you are / ≠ Test whether you are skilled)
- (47) This Saturday, however, the Arch features some different ways to test your strength. (\approx ... to test how strong you are /? \neq ... to test whether you are strong)

In some cases, both the selecting predicate and a dependent favour the DCQ reading:

(48) Glasnost-era democrats measured their commitment to democracy by their ability to labor on for its sake even when all hope of immediate success had vanished.

Another contextual element favouring the ICQ (rather than the DCQ) reading is the plural form. Most nouns that can have DCQ readings can be analysed as mass nouns (Tovena 2001). As shown by Barque, Fabregas & Marin (2012), some (psychological) state nouns can have both mass and count uses. When used as mass nouns they typically denote a psychological state, while when used as count nouns, they can have object readings and denote the cause of the corresponding state. The fact that these nouns can have object readings explains that in interrogative (non-presupposing) contexts, they can have Individual Concealed Question readings (when used as count nouns).

(49) Now what makes this different is that Instagram is going to deliver these ads to users regardless of their <u>interests</u>, whereas Facebook tries to tailor them a bit more based on

what you've liked or followed. (\approx regardless of what their interests are / \neq regardless of how interested they are)

If the sense of a (D/I)CQ noun is not disambiguated by some linguistic dependent in the noun phrase, elements in the preceding context can help to determine which reading is more likely (which is often not the case with the DCQ/PCQ ambiguity). In the following occurrence of the noun *expertise*, the relevant area of expertise is specified in the preceding sentence (biking), hence the ICQ reading is not plausible, and the DCQ reading seems more relevant:

(50) How to Buy a Bike: This is an area where MMM readers will rightfully diverge, depending on their expertise and interest.

The analysis of occurrences of potentially ambiguous nouns in the COCA has led us to conclude that the DCQ/ICQ ambiguity is quite rare.²² This is not surprising, as this ambiguity is only possible with (very) few nouns, in a very limited number of contexts (as dependents or other contextual elements can disambiguate these nouns). This may confirm our claim that ICQ and DCQ correspond to clearly distinct senses of nouns, corresponding to semantic types of objects so different that the interpretation cannot remain undetermined.

The ICQ/DCQ ambiguity is clearly much less frequent than the DCQ/PCQ polysemy, discussed in the following section.

4.2 The Degree/Polar Concealed Question polysemy

As previously mentioned, many nouns can have both a degree and a polar reading in certain contexts, so can be paraphrased either by a degree *how* or by *whether*.

(51) However, with most students with learning disabilities placed in general education, the standards for general education may quickly become the standards for judging the efficacy of special education, regardless of their appropriateness. (≈ regardless of how appropriate they are /≈ regardless of whether they are appropriate or not)

Contrary to the ICQ/DCQ ambiguity, the DCQ/PCQ equivocacy seems quite frequent, as many nouns allow it,²³ in various contexts. The predicates selecting DCQs and PCQs are similar, hence predicates typically do not coerce or exclude one reading. In many cases, no dependents give any cues as to which reading is more

²² We identified less than ten ambiguous examples in the COCA.

The following nouns allow both the DCQ and the PCQ readings: accessibility, adherence, appropriateness, aptitude, awareness, autonomy, bias, charisma, closeness, complexity, confidence, cooperation, correctness, curiosity, cynicism, determination, diversity, effectiveness, fairness, familiarity, flexibility, fondness, health, honesty, importance, involvement, legitimacy, likelihood, loyalty, luck, motivation, openness, patience, popularity, practicality, productivity, profitability, proximity, receptivity, responsiveness, ripeness, safety, sensitivity, severity, significance, sincerity, sophistication, strength, stress, suitability, support, usefulness, utility, visibility, willingness, worthiness.

likely. It could even be argued that the distinction is in many cases not crucial, the polar/degree ambiguity causing no difficulties of interpretation. In contexts of presupposition cancellation, either only two poles of a gradient, or all the possible degrees (from one end of the gradient to the other, including all intermediary degrees), can be considered.

- (52) How posterity will view the CIA's use of enhanced interrogation tactics during the anxious years of 2002 and 2003, when the real possibility of another 9/11 attack loomed, may depend less on what we learn about the results of the interrogations themselves than on the Obama administration's conduct in determining their appropriateness and legality. (\approx determining how appropriate they are $/\approx$ determining whether they are appropriate or not)
- (53) How long before we also have a tragic accident? That depends on your cooperation. (\approx that depends on whether you cooperate / \approx that depends on how cooperative you are)

Our analysis of nouns that can have DCQ and/or PCQ readings in the COCA has revealed that most occurrences are ambiguous (can be understood as having a DCQ and/or a PCQ reading, without obvious consequences on the interpretation of the following context).²⁴

Obviously, unambiguous (or less ambiguous) examples can be found. Some dependents can favour one reading, such as the modifiers *continued*, *long-term* or *full*, which make the PCQ reading more likely, as the concealed questioned is whether the property denoted by the adjectival modifier (*continued*, *long-term* or *full*) can be assigned to the eventuality denoted by the noun (or not):

- (54) They're safe. At least for now. And their continued <u>safety</u> depends on how you answer my questions.
- (55) "Long-term success depends on ongoing consumer engagement delivered through the constant release of high-quality content [...]"
- (56) Ban said the mission's success depends on Syria's full cooperation.

Other dependents can make one reading more salient – for example, the coordination with a contradictory antonym clearly favours the polar reading:

(57) Drought stress determines the success or failure of plant establishment.

Linguistic cues can also be found in the complement: in (58), the modifier *key* in the complement of *importance* as well as the modifier *successful* both exclude the possibility that the variables are not important, hence exclude the polar reading.

As pointed out by an anonymous reviewer, these remarks based on the analysis of examples from the COCA could be confirmed and more systematically tested thanks to acceptability tests on constructed examples. This has not (yet) been done as the aim of the article was to show that subclasses of CQs should be differentiated, and to describe what allows the Degree Concealed Question reading.

(58) To determine the <u>importance</u> of selected key variables in successful training programs a field experiment was conducted in a corporate setting.

In other cases, no linguistic clues are given, but one interpretation is favoured based on one's world knowledge. For example, readers who are not familiar with astronomy may accept both readings of *accessibility* in (59), while those who are more familiar with the field may favour one reading. Similarly, in (60) the degree reading may be more likely for specialists of pragmatics. General shared knowledge may also explain why most speakers would agree on the degree reading of (61).

- (59) Regardless of their accessibility, other universes and other O-regions will surely change our larger sense of place. (≈ regardless of whether they are accessible / ≈ regardless of how accessible they are)
- (60) Our research is therefore in line with recent work within the experimental pragmatics field which has highlighted the need to investigate the importance of pragmatic information as part of people's comprehension of a speaker's intended meaning (Noveck & Reboul, 2008).
- (61) Not surprisingly, the amount of breakup distress is thought to be related to the <u>closeness</u> and the duration of the broken relationship.

It might also be argued that with some nouns such as *abundance*, *closeness*, *severity* or *sophistication*, which imply that the top of a scale is considered, degree readings seem more readily available:

- (62) Many incomes depend on the abundance of sea urchin, crab and abalone.
- (63) Once the crisis has been successfully managed, the patient may be discharged back to the care of their GP, although this depends on the <u>severity</u> of the crisis and the risks involved in the relapse.
- (64) But regardless of the <u>severity</u> of their mistakes, many of the men think of them as learning experiences.

In some cases, the DCQ reading may then seem more likely. But these contexts – and the disambiguating parameters illustrated in (54) to (58) – are clearly less frequent than the cases where both the degree and the polar readings are plausible. This confirms that the DCQ and the PCQ readings are clearly similar to one another, while the DCQ and the ICQ readings more clearly differ.

5 Conclusion

The main claim of this article is that, contrary to what is generally assumed, the class of concealed questions is not limited to (the subclass of) Identity Concealed Questions (contra Nathan 2006 *inter alia*), but includes the distinct subclass of Degree Concealed Questions. This class differs from (traditional) Identity Concealed Questions in that Degree Concealed Questions cannot denote individuals (contrary to ICQ) but can denote eventualities involving a gradable intensive property: only nouns that are

intensively gradable allow the Degree Concealed Question reading – such nouns (indirectly) describing the state of an individual. Given the limited number of nouns and the limited set of contexts allowing the DCQ reading, occurrences of nouns with a DCQ reading are not very frequent. This may explain why this subclass has been overlooked so far, just as nouns that allow a polar (PCQ) reading have been overlooked. The differences between two subclasses of nouns clearly deserve further investigation. Our main aim was to show that the set of Concealed Questions is not uniform, and that even if a uniform semantic analysis may be advocated, the analysis of concealed questions nouns should include a discussion of the specificities of Degree Concealed Questions, and of Polar Concealed Questions (with which they share many properties), as opposed to Identity Concealed Questions.

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