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Lexical and Grammatical Gradability

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Introduction

In this presentation I will deal with the concepts of grading[1] and gradability[2], and I will show that gradability is concerned with a kind of qualitative grading, which has to be distinguished from another type of division into degrees[3], called quantitative grading. I will refer myself to metalinguistic tools taken from Antoine Culioli's *Théorie des opérations énonciatives*[4] (TOE) such as what is called the "notion" and the notional domain[5] attached to it, which I will briefly define. I will also try to distinguish between various types of gradability, namely lexical[6] and grammatical[7] gradability.

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[1] Grading refers to the construction of graded forms ordered on a scale along which to locate a quantity or a quality. See Sapir (1944) and Whittaker (2002), in particular Whittaker (2002: 24-28) on Sapir (1944). See Annex 3 on positive degree for a distinction between grading and grade; as such grade can be defined independently of comparison (Huddleston & Pullum 2002: 1161-1162).

[2] Such forms are gradable as they can be divided into various degrees. *The Oxford English Dictionary* (hereafter *OED*) online defines the adjective "gradable" in the following terms: "1. Capable of being classified by grade; 2. *Grammar.* Of a word (esp. an adjective) or quality denoted by it: that admits of comparison or of qualification with respect to degree."

[3] The word *degree* in English comes from French *degré*, which itself comes from late popular Latin **degradus*, formed with the prefix *de-* ("down") and the noun *gradus* ("step"); it had therefore the same meaning of "marche d'un escalier" and "degrés d'une échelle" as its English counterpart *degree* ("a step in an ascent or descent; one of a flight of stairs; a step or rung of a ladder. *Obs.*" in *The OED* online), before taking on the more abstract senses of "échelon" and "grade", influencing French in turn as to its sense of "diplôme de l'enseignement".
The word *degré* in French can refer to "une série d'états réels ou possibles" which the *Grand Robert de la Langue Française* (online) describes as "système organisé, sans idée de hiérarchie, de valeur" or on the contrary as "chacune des positions dans une hiérarchie, un système de valeurs" when it relates to "degrés de l'échelle sociale". It also means "graduation" in the sense of numerical quantification linked to measurement: "chacune des divisions d'une échelle de mesure". It is compatible with states "dans une évolution" and is then synonymous with "stade" or even "point" when it denotes "l'intensité relative d'un sentiment, d'une faculté de l'esprit"; finally is is close to "paroxysme" in the case of "[une] émotion qui atteint son plus haut degré".
This orientation downwards or upwards then comes to refer to various stages linked to a quantitative/qualitative progression: "a step or stage in a process, etc., *esp.* one in an ascending or descending scale", which applies to proper or figurative meanings: "a step or stage in intensity or amount; the relative intensity, extent, measure, or amount of a quality, attribute or action" (*The Oxford English Dictionary* online).
The notion of degree is thus associated to both *grade/grading* and *scale/scaling*. See also Moreau's paper on "degree and scalarity" (24 janvier 2014, Université de Bordeaux 3).

[4] The Theory of Enunciative Operations. Also referred to as The Theory of Predicative and Enunciative Operations (Théorie des Opérations Prédicatives et Enonciatives, notée TOPE). See Filippi-Deswelle (2012) for an introduction to TOE, including a presentation of the notion and the notional domain.

[5] See Culioli (1990) and Filippi-Deswelle (2012).

[6] "Lexical" here refers to what is inscribed in the open word classes of the lexicon, as opposed to "grammatical" which relates to items found in the closed word classes associated to grammar and therefore used as grammatical tools. However, "lexical" is not to be equated with "lexicalized", which refers to items having an entry in the dictionary and thus includes both lexical and grammatical words as previously defined; both "grammaticized" and "grammacalized" denote a process of grammaticalization, i.e. loss of lexical content leading to a use as a grammatical tool.

[7] See note 6 above.

Quantification and measurement: a type of quantitative grading

Quantification applies to nouns (count and uncount) in order to determine their reference, either specific or generic, that is to say either in terms of occurrences or of types and properties. This operation has to do with discernibility[8] (the fact of both identifying and separating/individuating elements or parts within a class or mass) and actual fragmentation/fraction into units for count nouns or pieces for mass nouns. There are two main kinds of quantification, using indefinite articles ("primary quantification") and quantifiers ("secondary quantification"): numerical and objective quantitative grading on the one hand (using numerical and indefinite quantifiers, respectively: "one room", "three men" which are examples adapted from excerpt 8, see Annex 1 for fully contextualized examples), and approximate/vague and subjective quantitative grading on the other hand (using indefinite articles and indefinite quantifiers, respectively: "a room", "several rooms" ; out of context: "a piece of bread", "a piece of advice", "a glass of water"). Both can be represented by scales involving either numbers or rougher means of delimitation, i.e. division into degrees in the literal sense of the word, "graduations". Thus in order to refer to a given situation of speech the speaker has to distinguish between units or classes of units sharing the same meaning relative to the concept or "notion" they convey, and assign a particular quantitative grading to them (one X or more than one X; none), whether the speaker wishes to identify specific items or to generalize at the level of the whole set. A certain kind of measurement in terms of numerical or approximate distance between separate points is therefore at play in quantitative grading, involving some quantitative degrees of discontinuity.

This is exemplified in excerpt 8 which deals with the level of the water of the river Thames in London "when the tide is in": it is measurable in objective quantitative terms[9] ("*six* or *eight feet* deep and *fifteen* or *twenty* wide"). When such (numerical) objectivity[10] cannot be maintained adjectives denoting approximate measure are used with reference to quantitative scales the upper and lower limits of which are (culturally) shared by speakers in terms of considerable or small amounts: still in excerpt 8, the level of the river can be assessed as being "high" – i.e. above its average/usual/normal level – when an objective measurement is considered unnecessary by the speaker ("It is a creek or inlet from the Thames, and can always be filled at ***high*** *water* by opening the sluices at the Lead Mills"); the adjective "great" also serves to illustrate such marked subjective quantitative grading[11] both in "wholly unknown, even by name, to the *great* mass of its inhabitants" and "*great* piles of merchandise", as opposed to the unmarked use of the noun "mass" in "To reach this place, the visitor has to penetrate through *a mass of* close, narrow, and muddy streets" which already denotes "a consequent number of streets" viewed as more important than the average/usual amount the speaker (and cospeaker) would normally expect to encounter. Vague and subjective quantity can thus be expressed through various degree scales inscribed in the

[8] See Annex 2 on Sapir and Culioli.
[9] In the English edition (1990) of the "Album" of the *Musée des Arts et Métiers* in Paris the first section deals with "scientific instruments": "Like any other craft, the scientific arts require tools. However, rather than shaping matter, the tools in question are designed as a means to measure, inform and experiment" (p. 4). The visitor can admire the "tide predictor by Lord Kelvin, 1876. Thanks to this analogical calculator, the first harmonic analyser of its kind, tide levels could be calculated mechanically on a continuous basis and variations could thereby be forecast from hour to hour" (p. 7).
[10] In Sapir's words (1944: 95) it is called "implicitly graded by quantification"; it corresponds to objective secondary quantification in the terms of Culioli's TOE.
[11] In Sapir's words (1944: 95) it is called "quantified by implicit grading"; it corresponds to subjective secondary quantification in the terms of Culioli's TOE.

lexicon ("high/average/low"; "a mass of / piles[12] of"), which can themselves be qualified by the use of co-occurring degree words (such as "great" in "a great mass of / great piles of")[13]. However it is difficult to make a clear distinction between lexical words and the grammatical use of some lexical terms as expressions of quantitative grading, since such lexical items are often used grammatically in discourse and are even listed as quantifiers in grammars (i.e. quantifying OF-phrases with a nominal head functioning as a whole as a complex determiner complemented by a noun referring to their semantic head: "a mass of / piles of").

Qualification and measurement: a type of qualitative grading

Qualification refers to the relation between individuated occurrences (called phenomenal instances) and their notional domain: it is another kind of measurement involving a type of qualitative grading. The speaker evaluates the degree of correspondence between a specific item and the abstract occurrence (called the typical notional occurrence) epitomizing its semantic features (based on physical and cultural properties shared by speakers of a given language and society). The speaker thus assesses the notional distance from one specific instance, the linguistic occurrence X, to the type, or abstract organizing centre of the notional domain ("what can be called /X/, nothing more, nothing less"; /X/ referring to the notion, made accessible through the property/quality of the predicate <be X>[14]), but also the distance from one instance to another within the notional domain and its pole of reference. One may gloss such an identifying process (involving both comparing and categorizing occurrences relative to a semantic prototype[15]) by using on the one hand "to what extent", and "more or less" on the other: "To what extent does X equate with the type <be X>?" ; "Is X more or less adequate to the type <be X>?" This kind of qualitative grading is called "notional adjustment".

Such notional adjustment occurs when X (the linguistic occurrence, entering itself into a relationship of reference to the phenomenal/extralinguistic instance) is adequate to the speaker's notional representation of <be X>; a stable designation is assigned to X in terms of the degree to which it matches such a typical representation, operating on an implicit level based on intersubjective understanding and shared knowledge (called "intersubjective adjustment"). There is very often no need to comment on it, to indicate to which extent it differs from another occurrence of the same notion, since it is constructed as having the same

[12] It is worth noting that originally, the word "pile" was associated with numerical grading, as is stated in the *OED*: "A set of weights fitting one upon another so as to form a solid cone, pyramid, or other figure, prob. used esp. for gold and silver; such a set of weights conforming to a standard. Also: the balance or weighing device making use of these weights. Freq. in pile weight. *Obs.*" Then it took on the quantitatively vague meaning of:
"any large group or collection of things (without reference to height).
Now *colloq.*: (in *sing.* and *pl.*) a large quantity, amount, or number."
http://www.oed.com.ezproxy.unrrunn.fr/view/Entry/143824?rskey=T3ntcE&result=5#eid
In the English edition (1990) of the "Album" of the *Musée des Arts et Métiers* in Paris, there is a reference to the original meaning of "pile" as the visitor can admire "the 'pile' by Charlemagne, standard established at the end of the XVth century, composed of 13 stacked buckets with a total value of 50 marks. It was used by Lefèvre-Gineau in 1799 to determine the value of the kilogramme in terms of previous weight units" (p. 4).
See Filippi-Deswelle (2012)'s case study of French "la tonne de + N" vs. "une tonne de + N" in her paper about adjustment in TOE. It is frequent that lexical items denoting objective quantity undergo a grammaticalisation process and come to convey subjective quantity when used as indefinite quantifiers. Also see Bolinger (1972: 58).
[13] See Annex 3 on positive degree.
[14] See Culioli (1985: 38) about the notations / / and < >.
[15] See Annex 2 on Sapir and Culioli.

notional definition/delimitation as every other occurrence relative to <be X> – no need to assess "their distance from each other" (Culioli [1978], PLE, 1990, "The Concept of Notional Domain", page 69) – as both these kinds of notional and intersubjective adjustment[16] are unmarked or implicit on the part of the speaker. X possesses the quality of the type to the true extent, that is, according to the assumed, shared semantic norm relative to the definition of <be X>; the gloss is: "to the normal extent, that is, nothing more nothing less than what is implied by the designation of X". In other words, the reading of the gloss is quite neutral, even if the unmarked degree of identification relates to a full extent, the organizing centre of the interior being constructed as an "unfragmented whole" (Culioli [1978] 1990: 69).

Let me take two examples from excerpt 8: "a house" ("this house", "the houses", "this place"); "a room" ("in the upper[17] room"). The notions at stake can be glossed as follows: "one separate unit that possesses the properties relative to <be-house> or <be-room>, nothing less nothing more", that is to say an item characterized by a certain number of expected physical and cultural features : "a building consisting of walls, a roof and a chimney, a house-front and a house-parapet, with open spaces such as a door in order to get in and out, windows and shutters to let light in or keep it out; consisting of rooms, that is, separate spaces with their own doors, and a staircase to go to the upper rooms – being a place where people live (and normally/usually feel safe)". It is interesting to note that, in his own terms, Sapir also refers to what Culioli calls the type when he states that there are "hundreds of features which are constitutive of the concept 'house' " (Sapir 1944: 94).

A house is "truly" a house in so far as there is no deviation from the normal definition roughly stated above. There is to be no scaling upwards or downwards (in terms of more or fewer characteristics) from such a designation, for it has to meet a relatively closed set of predictable properties. When several units denoting the same notion viewed predicatively as <be-house> or <be-room> are being referred to the same quantitative-qualitative categorizing process applies to each occurrence. This type of qualitative grading thus corresponds to the mental operation of comparing phenomenal instances via their linguistic occurrences with this abstract bundle of pre-established/pre-constructed properties called the type, resulting in identification to it (situating it in the interior of the notional domain, "truly <be-house> or <be-room>) or differentiation from it (the exterior, "truly not <be-house> or not <be-room>").

If X corresponds only partially to the centre, the representation involves "a gradient (from centre outward)" (Culioli [1978] 1990: 70) which locates X within an intermediary zone, called the boundary, ranging from "not truly <be-house> or <be-room>" to "not truly not <be-house> or not <be-room>". In his own words Sapir also refers to altered properties of the notion /house/ when he states that "C is so much smaller than either A or B that it is "less than a house" than they and may be put in the class "toy" or at best "shack" (Sapir 1944: 94), which reads as a location of "toy" in the boundary and that of "shack" possibly in the Exterior of the notional domain in the terms of Culioli's TOE.
In the context of excerpt 8 one may wonder if the houses described are still houses at all given the advanced state of degradation they are in, which locates them at the far end of the boundary: "he walks beneath *tottering* house-fronts projecting over the pavement, *dismantled walls* that seem *to totter* as he passes, chimneys *half crushed, half hesitating to fall*, windows guarded by *rusty iron bars* that time and dirt have *almost eaten away*, every imaginable sign of desolation and neglect"; "[...] *dirt-besmeared walls* and *decaying foundations*".

[16] See Filippi-Deswelle (2012) about the metalinguistic use of the term 'adjustment' in Culioli's TOE, as well as Ranger (2012) especially about the choice of 'adjustment' to translate 'ajustement' into English.
[17] See Huddleston & Pullum (2002: 1163) on the lexical comparatives *upper*, *inner* and *outer*.

Within the semantic unfragmented whole constituted by the notion of X and its reference to the type <be X>, which is viewed as being continuous, the speaker may introduce some discontinuity in terms of the extent to which X possesses the quality <be X>: "Is X more or less adequate to the type <be X>?" can be read as meaning "where can X be situated on a scale involving its comparison to itself in terms of qualitative graduations, denoting either high, average or low degrees of the property <be X> in question?" In this case, qualitative grading equates with an "intensity" scale, the expression of degree referring to the **quantification of qualification**[18] on a subjective level. In this case, the organizing centre (or type) may "act as an attracting centre" (Culioli [1978] 1990: 70), from which high degree values are derived, for example the absolute degree expressed by VERY: "truly <be X> to the highest point/degree".
It is worth noting that Bolinger (1972: 91-94) also distinguishes between "identification" and "intensification" in his own words, which can be linked to Culioli's topological representation of both the type and the attractor, respectively, in relation to the construction of the centre of the notional domain. Some markers denoting identification have come to express intensity as is the case with SUCH, which can sometimes have two different interpretations: " 'Who can be patient in such extremes?' where we may read 'extremes like these' or 'extremes so great' " (Bolinger 1972: 60). Bolinger calls the first use "identifying" and the second one "intensifying" because degree is then at stake; the first reading can be paraphrased by "something that merely conforms to a set of specifications" while the second use "is necessarily enhancing" (Bolinger 1972: 67).

As is well known, indefinite quantifiers can express a qualitative meaning when they apply to uncount nouns which cannot be fragmented into parts or pieces such as "courage" in "a lot of courage", meaning "a high degree of courage" (adapted from excerpt 7, "given it the *courage* and almost the attributes of virtue"), whereas they usually convey a quantitative interpretation with mass nouns such as "time" in excerpt 8 ("some time") which can be glossed by means of a quantifying phrase: "a certain amount/quantity of time"[19]. A qualitative reading of SOME is nevertheless at stake with count singular nouns such as "room" (in "*some* room" vs. "*a* room" ; "some other room" in excerpt 11,"Let me go into *some* other room" vs. "into *an*other room") when the cardinality has already been fixed by the marker of number, here the singular, which refers to a single item both in "some room-Ø" and in "a room-Ø" regardless of the determiner (either the indefinite quantifier or indefinite article). In this example, unlike A, SOME indicates that the occurrence is located in the boundary of the notional domain, since not all expected notional features of <be-room> are stable enough to correspond to the organizing centre as is the case with A, but only a minimum of the basic ones will do in order for the

[18] Culioli (1985: 39) defines degree in the following terms: "Degré signifie ici quantité sur une qualité."
[19] See Nicolas (2004: 200; 202-203) about the "measure functions for concrete mass nouns" (such as *wine*) expressing quantity and "mass nouns" denoting "property instances" (such as *wisdom*) expressing degree, in a logico-semantic framework. See Culioli on the crucial distinction between two types of mass nouns (quantifiable mass nouns vs. non quantifiable mass nouns):
« Le /compact/ est une catégorie […] complexe. En fait, on a, d'un côté, affaire à un prédicat nominalisé strict, par exemple *blancheur* dans *la blancheur de la neige*, *dureté* dans *la dureté du granit*, d'un autre côté, à un prédicat nominalisé qui implique une qualification subjective, comme dans les substantifs cités en exemple (on peut gloser cela en parlant d'intensité, de qualité, d'une sensation ou d'un sentiment : on ne dit pas **cette pierre présente quelque dureté* mais *il manifeste quelque dureté envers ses enfants*). On aura donc, *j'ai quelque peine à te croire* ; *j'éprouve quelque tristesse, plaisir à te dire cela* ; *il y a quelque hypocrisie à prétendre cela*. Pour le /dense/, on constate qu'on ne peut pas avoir **quelque farine, quelque lait, quelque sucre*, etc. » (Culioli [1982] PLE, 1999: 55-56, note 7)
« Pour être complet, notons que si l'on ne peut pas travailler en extension sur du compact (sauf passage, toujours possible, dans une autre catégorie), on peut travailler sur l'intensité du prédicat nominalisé, d'où les équivalences *quelque/de l'/une certaine amertume,* à côté de *une grande amertume*. » (Culioli [1982] PLE, 1999: 58, note 9)

speaker to maintain such a designation within the interior, necessarily including the boundary, where qualitative discontinuity is at play. The room in question is adequate to <be-room> only to some extent but not to a full degree of notional and intersubjective adjustment. It is qualitatively unstable[20].
In 11, the subjective quantification of qualification is explicitly constructed by the determiner SOME, whereas in other excerpts, such as 7, it is made either implicit in "the *courage*", since it is representative of its normal expression (its true extent), or marked by the degree adverb ALMOST in "and *almost* the attributes of virtue", implying that there is a notional gap, a zone of qualitative otherness[21], which cannot be bridged, in the right designation of the property at stake, "virtue", though one comes close to it: Oliver Twist was forced into stealing but was always innocent of vice at heart – in opposition to "courage" which he showed in every occasion in his young life.

I will now turn to positive degree based on lexical properties[22], which I will then contrast to grammatical forms of gradability.

What is called "positive degree"

Positive degree[23] refers to the use of words without any indication of syntactic marking of grading, such as degree adverbs or expressions of comparison (comparative and superlative forms), as already exemplified in excerpt 11 with "given it the *courage*". It is not necessarily apparent, then, that such words are gradable. I will define gradability as the possibility for the notional qualitative wholes that words denote to be divided into various degrees of intensity.

Adjectives are often used positively, as shown in excerpt 5: "in a tone intended to appear *incredulous*": there is no syntactic markers of the various degrees of intensity attached to the adjectival property of being "incredulous". It is the same with the count nouns "a *punishment*"

[20] See Mazodier (1997) on SOME.
[21] "otherness" refers to "altérité" in French.
[22] See Annex 3 on positive degree.
[23] See Annex 3 on positive degree. Sapir refers to positive degree in terms of "implicitly gradable but ungraded" (1944: 94). Therefore the noun "house" is described as "a gradable but ungraded absolute", and when used in the plural the term "absolutes" is equated with "positives" (1944: 95). Then in the phrase "positive degree/grade" the adjective "positive" must not be understood as referring to polarity, i.e. positive form vs. negative form. It can also be called "plain grade", and even "absolute degree" as shown in Sapir's quotation, which in the latter case may be confusing as VERY is often considered as denoting "absolute degree" and thus referred to in the same terms as when absence of modification is at stake. Note that positive degree may be marked in other languages such as Chinese, as has been stated both by Culioli and by Kennedy & McNally:
« En position d'attribut, un tel prédicat (*grand* par exemple) induit nécessairement une valeur comparative (**x** est grand – par rapport à **y**, à ce que je souhaitais, etc.), c'est-à-dire une relation d'occurrence à occurrence (il s'agit d'occurrences abstraites). Si je veux supprimer cette relation de comparaison, j'emploierai *hen* (« très »), qui, ici, ne se « traduira » pas, si l'on utilise le français comme métalangue (mais une glose en chinois aboutirait à la même constatation) : on rendra donc par *grand* (sans plus) et non par *très grand*. Il est clair que *hen* est le marqueur de centrage (suppression du gradient) et bloque donc toute relation d'occurrence à occurrence. » (Culioli, [1987], PLE, 1990: 119-120)
Kennedy & McNally (2005: 350) refer to Mandarin, in which "the positive form is morphologically marked", to justify their analysis: "we assume that unmodified APs actually contain a null degree morpheme *pos* (for POSITIVE FORM) whose function is to relate the degree argument of the adjective to an appropriate standard of comparison".
Also see Riegel et al. (2009: 619): "En emploi non modifié, l'adjectif n'est pas marqué relativement au degré de la qualité qu'il dénote. Ce degré dit *positif* constitue en fait le degré *neutre* de l'évaluation des adjectifs."
and Whittaker (2002: 87-141; more particularly 128-140 about word classes other than adjectives) for French.

(taken out of its context in excerpt 1) and "to have the *honour* of a visit from a young gentleman" (in excerpt 9), and with the uncount nouns "astonishment" in excerpt 6, "his strong resemblance to this picture […] struck me with *astonishment*"; and "dirt", "perplexity and expectation" in excerpt 8, "the air would seem too tainted even for the *dirt* and squalor which they shelter", "three men […] regarding each other every now and then with looks expressive of *perplexity* and *expectation*"; and also with verbs such as "injure", "forget" and "eat away" when taken out of their contexts in excerpts 1, 4 and 8. Some adverbs may also be used "positively" when they are not submodified by another degree adverb, as is the case in excerpt 2 with "gently" in "I am moved to treat you *gently*". In all these cases, there is an operation of identification to the centre of the interior of the notional domain ("nothing more, nothing less"). For example, the noun phrase "the dirt" in 8 corresponds to the expected bundle of physical and cultural properties attached to a state of uncleanliness caused by lack of washing and care, linked to poverty in this context.

Explicit degree marking and its co-occurrence with qualitative grading

Markers of degree (adverbs like VERY[24]) and comparison (comparative and superlative forms[25]) make the gradability of such words explicit and therefore accessible to the cospeaker. Compare the above examples with the following: excerpt 8 "Near to that part of the Thames […], where the buildings of the banks are *dirtiest* […], there exists the *filthiest*, the *strangest*, the *most extraordinary* of the many localities hidden in London", in which the superlative forms – the flexional suffix –EST with monosyllabic and dissyllabic words ("strange"; "dirty", "filthy"); the adverb MOST premodifying more than two-syllable words ("extraordinary") – express the highest possible degree of the qualities involved, excluding any other higher degrees that could be imagined by the cospeaker. In excerpt 2, the speaker could have said "I am moved to treat you *very* gently now", instead of "gently"; it is the same with excerpt 9 in which the adjective "great" could have been used to express high degree: 9a "to have the *great* honour of a visit from a young gentleman" – in which case degree can be denoted by lexical words, not just by grammatical items such as adverbs specialized in the expression of degree. Depending on the notional categorization of nouns (count / uncount) and also their use in context, uncount nouns may either read as quantitative or qualitative in meaning: in excerpt 8, as shown before, the adjective "great" in association with the noun "mass" denotes a considerable amount of inhabitants / piles of merchandise whereas in 9a ("to have the *great* honour of a visit from a young gentleman") it refers to a high degree of "honour", making a continuous whole discontinuous in terms of intensity (not quantity).

Still in excerpt 9, "Well, I thought you'd have been *a little more glad* to see me than this", in which the degree of "gladness" is less important than expected by the speaker, the comparative adverb of superiority MORE is itself submodified by the adverbial quantifier A LITTLE, which expresses the fact that a small degree of intensity would have been enough to satisfy him, contrary to the actual lack of it stated by the complement "than this", so long as it was above the normal degree of "gladness" usually shown on such occasions. Again, when associated to qualitative lexical words such as adjectives or nouns denoting adjectival properties, indefinite quantifiers are used with a qualitative meaning, constructed by a qualitative type of syntactic grading.

[24] See Charreyre (1997) on VERY.
[25] In Sapir's words (1944: 95): "explicitly graded and implicitly quantified."

Excerpts 9 and 10 ("when a man keeps himself *so very ex-clusive* as I have done"; "but his legs were *so precious long* that they stuck out at the top, and so they took him too.") present the same use of submodification of a high degree adverb ("very"; "precious" meaning "very" here) by another degree adverb (SO) to the effect of reinforcing the intensity of the adverb and that of the quality of the adjectives "ex-clusive" and "long", situating their respective semantic properties above the high level of intensity already constructed by VERY and PRECIOUS. "very exclusive" and "precious long" denote a high degree which is not strong enough to be identified to the speaker's representation of reality. Hence the need to use SO which, as a degree modifier, introduces a comparison with various types of high degree, including those explicitly expressed by VERY or PRECIOUS, only to indicate that they are below what the hearer expected in such cases and then cannot account for the consequences that such a very high degree entails in the extra-linguistic situation: in excerpt 10, the excessive length of the man's legs prevents him from escaping and results in his arrest by the police, as indicated by the complement "that they stuck out at the top" and its immediate consequence "and so they took him too", in which SO here functions as a linking adverbial. The absolute degree conveyed by VERY can therefore be made even more so when combined with SO[26], or when it is repeated twice in a row in final position in excerpt 3, "I am very glad you've changed it – very – very."

In excerpt 10, the adjective "precious"[27] is used in an adverbial way and resembles "real" in contemporary English when REAL means "really" in "This is *real* good" for instance, corresponding to a colloquial register. It is the same for "mighty" in excerpt 3, "This is all *mighty* fine", but ALL is used as a quantifying proform referring anaphorically to "I am very glad you've changed it" and cannot be considered as a degree adverb premodifying the degree adjective "mighty" used as a degree adverb premodifying the adjective "fine" in post-nominal position to "all". These occurrences exemplify the fact that degree adverbs are not all found in grammatical closed word classes but can also come from grammaticized lexical items such as "precious", "mighty" or "real", originally found in the lexical open word class of adjectives. This shows that the limit between lexicon and grammar is not clear-cut and that it is not a given one either; it rather signals that it is part of the speakers' language activity. Linguistic constructions therefore result from contextual properties interacting with the possibilities offered by the linguistic system itself, viewed as deformable and whose plasticity has to be accounted for by the linguist.

In excerpts 12 and 13, the adjectives "stupefied" and "helpless and bewildered" are premodified by the degree adverb QUITE expressing a marked degree of intensity too, but with reference to the organizing centre of the notional domain (in the context of 12 and 13 – not in all contexts[28]): "the three spectators were *quite* stupefied"; "…replied Crackit, who, with the other two men, still remained *quite* helpless and bewildered." From 12 to 13, the marked degree remains unchanged, 13 echoing 12; in both examples, QUITE refers to a degree of surprise that is confirmed as being what it is, that is to say that there is no mistake relative to the notion in question: the chosen terms denoting "surprise" and "lack of reaction" are notionally adequate according to the speaker to describe the three men's state in the situation of speech; but it also implies that although it could have been characterized in another way it corresponds to the intended meaning of the speaker, therefore eliminating lesser degrees of helplessness and bewilderment. QUITE indicates a centering operation after

[26] See Régis Mauroy's paper on SO (24 janvier 2014, Université de Bordeaux 3) and Gilbert (2001).
[27] See Bolinger (1972: 18).
[28] See Gilbert (1989) for a thorough analysis of QUITE and Huart (2012) https://webtv.univ-rouen.fr/channels/#journee-detudes-consacree-a-lagregation-danglais in English

taking into account qualitative otherness, thus enhancing *grammatically* the positive degree denoted *lexically* by the adjectives themselves.

As far as the gradability of verbs is concerned, I will refer the reader to excerpts 1, 4 and 8 without any further analysis: "the mercy of those you have *deeply* injured"; "Your mother, *wholly* given up to continental frivolities, had *utterly* forgotten the young husband ten good years her junior"; "windows guarded by rusty iron bars that time and dirt have *almost*[29] eaten away". 1 and 4 can be glossed as follows: "not simply V but V to a full or fuller extent than imaginable"; 8: "V to a lesser extent than expected".

There also exists a range of lexical words which express degree, either positively: "intensity" in excerpt 12, "in the *intensity* of his energy", or very close to grammatical use: "extent" in excerpt 1 qualifying the intensity of the punishment awaiting Monks: "consign you to a punishment the *extent* of which, although I can, with a shudder, foresee, I cannot control." Note that the word "extent" is profusely used in grammatical glosses of degree, as well as of quantity, thus expressing either qualitative or quantitative types of measurement according to the context.

Surprise and grading

The notion of "surprise"[30], that is to say the resulting state experienced by the subject when confronted to unexpectedness, can be denoted by words expressing various degrees of the features considered common to that notion in order to be situated in the interior of the attached notional domain. There are therefore various ways of expressing surprise according to the degree of unexpectedness that the speaker finds necessary to make explicit: either by means of premodification by a degree adverb, which can also be premodified by another degree adverb if need be, involving syntactic qualitative grading, or by choosing a term from a range of lexical items already specialized in expressing a certain degree of surprise, inscribed in the lexicon itself. Such lexical grading corresponds to Sapir's relation of "envelopment":

> Judgments of "more than" and "less than" may be said to be based on perceptions of "envelopment". If A can be "enveloped by B", contained by it, so placed in contact with B, either actually or by the imagination, as to seem to be held within its compass instead of extending beyond it, it is judged to be "less than" B, while B is judged to be "more than" A. (Sapir 1944: 93)

Such a psychological process equates with what Culioli calls a relation from occurrence to occurrence, which are quantitatively distinct in terms of degrees of *intensity* (as quantification applies to uncount nouns in the present case) though they are qualitatively identified to the attracting centre of the notional domain attached to the notion /surprise/.

Only a selection of surprise words is presented here with the adjectives above mentioned ("stupefied", "bewildered") and also "disconcerted" in excerpt 1, "Monks was plainly *disconcerted*"; and the nouns "astonishment" in excerpt 6, "his strong resemblance to this picture I have spoken of, struck me with *astonishment*", and "surprise" in excerpts 5 and 12.

[29] See Ratié (1989) on ALMOST.
[30] *Surprise* is considered as a gradable noun. See Whittaker (2002: 136-138).

This notion can also be qualified through subjective appreciation[31] by adding to it the negatively-oriented adjective "disagreeable" in 5 (" 'I never heard of that,' interrupted Monks in a tone intended to appear incredulous, but savouring more of *disagreeable surprise*."), or described in terms of its effect on the subject in 12: "Pouring out these cries, and accompanying them with violent gesticulation, the boy actually threw himself, single-handed, upon the strong man, and in the intensity of his energy and the *suddenness* of his *surprise*, brought him heavily to the ground." In 12, the subject is deprived of any anticipatory power of reaction because of the totally unexpected attack by the young man who is normally his associate in crime.

Each of these words exemplifies a progressive semantic scale that is qualified in degrees either considered as relatively close to each other (both "astonishment" and "surprise" illustrate the minimum features required in order to belong to the field of manifestations of unexpectedness, though "astonishment" denotes a higher degree of surprise than "surprise" in some contexts; it is the same with the adjective "disconcerted") or scaling towards an imaginary extreme abstract point (the state of confusion in "stupefied" is stronger in intensity than the preceding nouns but it is close in intensity to bewilderment in "bewildered", hence the repetition). But there is no scaling downwards that would situate the words below a certain level of unexpectedness denoted by the notion of "surprise" without implying a change of lexical field, even if it can be related to it to some extent; it is the case with "perplexity" in excerpt 8, which denotes mental confusion but without unexpectedness in this context, although it can be associated with surprise in some contexts.

However, each lexical surprise word can be premodified by a degree term, as shown before, as well as in excerpt 1, "Monks was *plainly* disconcerted". The adverb PLAINLY in 1 plays the same role as QUITE analysed in excerpts 12 and 13, though displaying lexical features that are not transparent in the grammatical item: it is formed by the adjective "plain" to which the adverbial suffix –LY has been added; it is then possible to trace back its meaning as a grammatical degree term to its lexical adjectival status in the first place: "plain" here means that the normal features specific to the notion of perplexity are obviously present and therefore accessible to the cospeaker, which implies an enhanced degree of intensity by means of an operation of adequation to the organizing centre of the notional domain. In excerpt 8, the noun "astonishment" is modified by the high degree adjective "utmost" signaling a scaling upwards towards the highest levels possibly attainable in the intensity scale attached to the notion itself: "his *utmost* astonishment will be excited by the scene before him". This corresponds to the gloss: "he is very/extremely astonished", which conveys absolute degree, by identification to the attracting centre of the notional domain.

Conclusion

This presentation was not intended to be exhaustive. Its aim was to point to various kinds of grading, quantitative and qualitative, and in the latter case to explore the categories of degree and intensity in terms of lexical and grammatical gradability, defined as the quantification of qualification, which consists in introducing some qualitative discontinuity within the unfragmented, continuous wholes of notions in terms of orientations scaling either towards the type or attracting centre of the notional domain or outwards to the boundary. It is worth noting that in the absence of syntactic marks of qualitative grading, words express intensity of

[31] See Annex 2 on Sapir and Culioli about "affective valuation" (Sapir 1944: 110).

their own kind *lexically* in what is called "positive degree"[32]. Both kinds of gradability, lexical and grammatical, interact in the construction of meaning through notional and intersubjective adjustment.

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[32] See Annex 3.

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Annex 1

In Oliver Twist, Charles Dickens, Penguin Classics, London, 1837-1839 (1985)

Chapter 49 *Monks and Mr Browlow at last meet*

Excerpt 1

Monks was ***plainly*** *disconcerted*, and alarmed besides. He hesitated.

'You will decide quickly,' said Mr Brownlow, with perfect firmness and composure. 'If you wish me to prefer my charges publicly, and consign you to a punishment the ***extent*** of which, (p. 433) although I can, with a shudder, foresee, I cannot control, once more, I say, you know the way. If not, and you appeal to my forbearance, and the mercy of those you have ***deeply*** *injured*, seat yourself, without a word, in that chair.' (p. 434)

Excerpt 2

'it is because of all these things that I am moved to treat you **gently** now – yes, Edward Leeford, even now – and blush for your unworthiness who bear the name.' (p. 434)

Excerpt 3

'I am ***very*** *glad* you have changed it – ***very*** – ***very***.'

'This is *all* ***mighty*** *fine*,' said Monks (to retain his assumed designation) after a long silence. (p. 435)

Excerpt 4

'Your mother, **wholly** given up to continental frivolities, had **utterly** forgotten the young husband ten good years her junior.' (p. 435)

Excerpt 5

'I never heard of that,' interrupted Monks in a tone intended to appear incredulous, but savouring ***more*** of **disagreeable surprise**. (p. 437)

Excerpt 6

'I see that your cunning associate suppressed my name, although for aught he knew, it would be quite strange to your ears. When he was rescued by me, then, and lay recovering from sickness in my house, his strong resemblance to this picture I have spoken of, struck me with **astonishment**. […] I shall show you that I know more than that.' (p. 438)

Excerpt 7

Shadows on the wall have caught your whispers, and brought them to my ears; the sight of the persecuted child has turned vice itself, and given it the **courage** and ***almost*** **the attributes of virtue**. Murder has been done, to which you were morally if not really a party.' (p. 440)

Chapter 50 *The Pursuit and Escape*

Excerpt 8

Near to that part of the Thames on which the church at Rotherhithe abuts, where the buildings on the bank are **dirtiest** and the vessels on the river blackest with the dust of colliers and the smoke of close-built low-roofed houses, there exists **the filthiest**, **the strangest**, **the most extraordinary** of the many localities that are hidden in London, wholly unknown, even by name, to *the* ***great*** *mass of* its inhabitants.

To reach this place, the visitor has to penetrate through *a mass of* close, narrow, and muddy streets, thronged by the roughest and poorest waterside people, and devoted to the traffic they may be supposed to occasion. The cheapest and least delicate provisions are heaped in the shops; the coarsest and commonest articles of wearing apparel dangle at the salesman's door, and stream from the house-parapet and windows. Jostling with unemployed labourers of the lowest class, ballast-heavers, coal-whippers, brazen women, ragged children, and the raff and refuse of the river, he makes his way with difficulty along, assailed by offensive sights and smells from the narrow alleys which branch off on the right and left, and deafened by the clash of ponderous wagons that bear ***great*** *piles of* merchandise from the stacks of warehouses that rise from every corner. Arriving, at length, in streets remoter and less-frequented than those through which he has passed, he walks beneath tottering house-fronts projecting over the pavement, dismantled walls that seem to totter as he passes, chimneys ***half*** *crushed,* ***half*** *hesitating to fall*, windows guarded by *rusty iron bars* that time and **dirt** have ***almost*** eaten away, every imaginable sign of desolation and neglect.

In such a neighbourhood, beyond Dockhead in the Borough of Southwark, stands Jacob's Island, surrounded by a muddy ditch, ***six or eight feet*** **deep** and ***fifteen or twenty*** **wide** when the tide is in, once called Mill Pond, but known in the days of this story as Folly Ditch. It is a creek or inlet from the Thames, and can always be filled at ***high*** *water* by opening the sluices at the Lead Mills from (p. 442) which it took its old name. At such times, a stranger, looking from one of the wooden bridges thrown across it at Mill Lane, will see the inhabitants of the houses on either side lowering from their back doors and windows, buckets, pails, domestic utensils of all kinds, in which to haul the water up; and when his eye is turned from these operations to *the houses themselves*, his ***utmost*** **astonishment** will be excited by the scene before him. Crazy wooden galleries common to the backs of *half a dozen* houses, with holes patched, with poles thrust out, on which to dry the linen that is never there; rooms so small, so filthy, so confined, that the air would seem too tainted even for **the dirt** and squalor which

they shelter; wooden chambers thrusting themselves out above the mud, and threatening to fall into it – as some have done; **dirt**-*besmeared walls* and **decaying** *foundations*; every repulsive lineament of poverty, every loathsome indication of **filth**, rot, and garbage; — all these ornament the banks of Folly Ditch. […]

In an **upper** room of one of these houses – a detached house of fair size, ruinous in other respects, but strongly defended at door and window – of which house the back commanded the ditch in manner already described – there were assembled **three** men, who, regarding each other every now and then with looks *expressive* of **perplexity** and **expectation**, sat for ***some*** *time* in profound and gloomy silence. (p. 443)

Excerpt 9

'Well, I thought you'd have been ***a little more*** **glad** to see me than this,' replied Mr Chitling, with a melancholy air.

'Why, look'e, young gentleman,' said Toby, 'when a man keeps himself ***so very*** **ex-clusive** as I have done, and by that means has a snug house over his head with nobody a prying and smelling about it, it's rather[33] a startling thing to have the honour of a visit from a young gentleman (however respectable and pleasant a person he may be to play cards with at conweniency) circumstanced as you are.' (p. 444)

Excerpt 10

'When was Fagin took then?'

'Just at dinner time – two o'clock this afternoon. Charley and I made our lucky up the wash'us chimney, and Bolter got into the empty water-butt, head downwards; but his legs were ***so precious*** **long** ***that*** they stuck out at the top, and so they took him too.' (p. 444)

Excerpt 11

'Let me go into ***some*** *other room*,' said the boy, retreating still farther. (p. 448)

Excerpt 12

Pouring out these cries, and accompanying them with violent gesticulation, the boy actually threw himself, single-handed, upon the strong man, and in the ***intensity*** of his energy and the ***suddenness*** of his **surprise**, brought him heavily to the ground.

The three spectators seemed ***quite*** **stupefied**. […] The contest, however, was too unequal to last long. (p. 448)

Excerpt 13

'Is the downstairs door fast?'

'Double-locked and chained,' replied Crackit, who, with the other two men, still remained ***quite*** **helpless and bewildered**. (p. 449)

[33] See Huart (2012) on the various word orders of RATHER in such contexts as: "rather a startling thing" vs. "a rather startling thing" https://webtv.univ-rouen.fr/channels/#journee-detudes-consacree-a-lagregation-danglais in English

Annex 2

Sapir and Culioli on grading and categorizing

Sapir (1944) presents different types of grading – logical, psychological and linguistic – in order to distinguish between processes and markers (in English), focusing on the process of comparison. On the logical level, Sapir establishes two kinds of judgments of grading according to whether an item is compared in relation to a norm or to another item. Thus division into degrees locates and orders items along a scale in terms of « mores » and « lesses » relative to a standard, i.e. an average value acting as a reference point; if several items are compared to each other without being referred to such an average point grading is then a relative process (Sapir 1944: 95-97). On the psychological level, the judgment of grading is primary as it precedes numerical and approximate quantification, which, on the linguistic level, can be directly stated, though it is second operationally speaking:

> The first thing to realize about grading as a psychological process is that it precedes measurement and counting. Judgments of the type "A is larger than B" or "This can contains less milk than that" are made long before it is possible to say, e. g., "A is twice as large as B" or "A has a volume of 25 cubic feet, B a volume of 20 cubic feet, therefore A is larger than B by 5 cubic feet", or "This can contains a quart of milk, that one 3 quarts of milk, therefore the former has less milk in it." In other words, judgments of quantity in terms of units of measure or in terms of number always presuppose, explicitly or implicitly, preliminary judgments of grading. […]
> Judgments of "more than" and "less than" may be said to be based on perceptions of "envelopment". If A can be "enveloped by B", contained by it, so placed in contact with B, either actually or by the imagination, as to seem to be held within its compass instead of extending beyond it, it is judged to be "less than" B, while B is judged to be "more than" A. (Sapir 1944: 93)

Sapir (1944: 103-104) introduces the dynamic concept of orientation ("kinaesthetic implications"), linked to that of ordering in a given direction, the scale grading either upwards or downwards:

> The main operational concepts that we have used in developing our notions of grading up to this point have been: the successive envelopment of values by later ones (giving us a set of « lesses » in an open series); the establishment of a norm somewhere in such an open series; the placement of values « above » and « below » this norm ; the contrasting of specific gradable values which belong to the same class; the establishment of continuity between such contrasting values by means of intercalations; and certain implicit directional notions (upward [note 3], e. g. *good:better, bad:worse*; downward [note 3], e. g. *good: less good, bad: worse*; contrary, e.g. *good-better; bad-worse*). […]
> Logically, as mathematically, *b increased from a = b decreased from c*. Psychologically, however, and therefore also linguistically, the explicit or implicit trend is frequently in a specific direction. It is this tendency to slip kinaesthetic implications into speech, with the complicating effects of favorable affect linked with an upward trend and of unfavorable affect linked with a downward trend, that so often renders a purely logical analysis of speech insufficient or even misleading.

> [note 3 : "Upward" and "downward" are used in the sense of "in the direction of increase" and "in the direction of decrease" respectively. This purely notional kinaesthesis may be, and probably generally is, strengthened by a concomitant spatial kinaesthesis.] (Sapir 1944: 103-104)

Thus Sapir takes into account pragmatic factors and includes positive and negative affective reactions in his directional approach to grading (Sapir 1944: 108-109), so that logical judgments of "less than" and "more than" take on linguistic interpretations (which are context-dependent) in terms of disappointment or satisfaction according to whether the scale goes downwards or upwards:

> Ordinarily, the affective valuation involved in such statements does not clearly rise in consciousness because "more than" and "less than" pool the energies, as it were, of the grading process itself and the approval or disapproval of increase (growing exhilaration, growing fatigue) or decrease (growing relief, growing fatigue). (Sapir 1944: 110)

In Culioli's Théorie des Opérations Enonciatives (hereafter TOE), cognition is not separated from affect (Culioli [1986], PLE, 1990 : 85), and the focus is not so much on logical judgments as on underlying enunciative operations made accessible through linguistic markers in utterances. Like Sapir, Culioli distinguishes between different levels of representation (Culioli [1987] PLE, 1990 : 21-24 ; 41 ; [1986] PLE, 1990 : 129-130 ; [1989], PLE, 1990 : 179 in English), but he considers that linguistic occurrences (« les observables ») come first as a means to trace back mental operations, as is illustrated by the title of one of his founding articles, « La linguistique : de l'empirique au formel » (Culioli [1987] PLE, 1990) and is defined thus: « l'activité de langage appréhendée à travers la diversité des langues (et à travers la diversité des textes, oraux ou écrits) » (Culioli [1987] PLE, 1990 : 14 ; 19):

> I shall define linguistics as the science whose goal is to apprehend language through the diversity of natural languages. […] Language, which is a meaningful representational activity, is only accessible through texts, that is, through patterns of markers which are themselves traces of underlying operations. (Culioli [1978], PLE 1990: 72)

Culioli has worked out tools of metalinguistic representation, either taken from ordinary language and given the status of stable, explanatory metaterms, or borrowed from logic, mathematics and psychology.

Sapir situates the judgments of grading and categorizing on the psychological level, and Culioli comes close to this kind of representation ("the process of categorization" [1978], PLE 1990 : 69) when he refers to « l'activité symbolique de l'espèce humaine » from a threefold point of view in relation to mathematics (Gonseth), Gestalttheorie (Koffka), (Culioli 1985 : 27), and prototype semantics (Rosch), which are at the origin the metalinguistic system of representation called the "notion" and the "notional domain" based on an abstract topological representation (Culioli 1985 : 30) consisting of zones, dynamically oriented, delimited by operations of identification to or differentiation from a standard called the "type" (Culioli 1985 : 25-45 ; Desclés in Culioli 2002 : 248-250)[34]:

[34] In French: Le domaine notionnel associé à la notion comprend trois zones, l'Intérieur, qui comporte les occurrences conformes à l'occurrence typique (« vraiment *p* »), l'Extérieur, qui construit le fermé de l'Intérieur par altérité radicale (« vraiment pas *p* »), avec entre les deux la Frontière, qui inclut des occurrences qui ne sont pas totalement conformes au type (ou centre organisateur) sans être pour autant situées à l'Extérieur (« pas vraiment *p* ») ou des occurrences qui ne sont pas totalement situées à l'Extérieur sans pouvoir néanmoins entrer

> Dans l'activité symbolique de l'espèce humaine, la construction de ce qu'on a appelé « prototype » semble fondamentale, innée : tout être humain, en présence d'événements qui peuvent à première vue apparaître comme disparates, les trie de telle manière qu'il a des occurrences qui peuvent être identifiées à un type, qu'il s'agisse de couleurs, d'actions, de phénomènes extrêmement divers. Toute une partie de notre activité cognitive est fondée sur cette capacité à savoir isoler certaines propriétés pertinentes qui nous permettent de ramener des événements en apparence disparates à des types qui vont nous permettre ensuite de construire des représentants abstraits détachés de la réalité. En fait il ne pourrait pas y avoir d'activité symbolique sans cette capacité. On parle donc dans ce cas de prototype : 'proto' signifiant premier, primordial, typifiant. J'emploie plus volontiers le terme de 'type', mais quand je parle anglais, j'emploie le terme 'prototype'. Mais la notion de 'type' se retrouve chez Gonseth, mathématicien suisse qui a publié *Mathématique et réalités* vers 1925-1930. De même vous retrouvez la notion de type dans la Gestalt, en particulier dans le livre de Koffka : *Principles of Gestalt Psychology*. […]
> La notion d'occurrence est occurrence de. C'est lié à la notion de types. Un type n'est jamais fini d'être élaboré. Il y a toujours en fait typification. Nous faisons toujours comme si nous avions des types stabilisés et en fait, ils sont toujours soumis à cette régulation qu'est l'activité de langage. Ce peut être la régulation d'autrui ou la sienne propre. Un type historiquement réalisé, pour une communauté donnée, à un certain moment n'est pas stable cependant. (Culioli 1985 : 27)

In Culioli's article *The Concept of Notional Domain* ([1978], PLE 1990), there are two references made to the "prototype":
« Mervis, C. B. & Rosch, E., 1981, "Categorization of Natural Objects", *Ann. Rev. Psychol.* 32, 89-115. » and « Rosch, E., 1977, « Human Categorization », in Warren, N. (ed.), *Studies in Cross-Cultural Psychology*, London, Academic Press. » In the following quotation he defines the notion and the operations of categorizing:

> A notion can be defined as a complex bundle of structured physico-cultural properties and should not be equated with lexical labels or actual items. Notions are representations and should be treated as such; they epitomize properties […] derived from interaction between persons and persons, persons and objects, biological constraints, technical activity, etc.
> Notions are apprehended and established through occurrences (enunciative events) which involve: distinguishing phenomenal instances, identifying properties and assessing their distance from one another, gauging the degree and the kind of similarity, deciding whether to keep the occurrences qualitatively separate or to categorize them as equivalent relative to a type (typification is not restricted to the human species). It

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à l'Intérieur (« pas vraiment pas *p* »). Cette zone frontière indique alors que l'occurrence notionnelle régulatrice est construite comme un attracteur (sur la distinction « type/attracteur » cf. Culioli 1985: 38-39 ; [1991] PLE, 1999: 11-13 ; [1992] PLE, 1999: 127), par rapport auquel plusieurs orientations sont possibles : d'une part, vers le centre du domaine notionnel, qui est alors orienté vers un point de fuite dénotant l'idée de la notion « par excellence », compatible avec l'expression de l'intensité ; vers l'Extérieur, d'autre part, où il est de moins en moins question de la conformité à la notion en question. Identifier/différencier suppose au préalable la comparaison de plusieurs éléments qu'il convient de trier et de classer, mais ce n'est pas toujours l'opération de gradation/comparaison qui importe même si elle est première, c'est souvent le résultat de l'identification-différenciation qui compte, et qui implique une opération de centrage, permettant précisément d'éliminer tout ce qui est autre, faiblement ou radicalement.

> should be obvious that notions have a status of predicable entities and could be described as unfragmented solid wholes; but they are apprehended through occurrences, i.e. distinguished through separate events, broken down into units (actually localized in the physical world, or imaginary) with variable properties. Through a process of abstraction, we thus pass from phenomenal occurrences to abstract occurrences. (Culioli [1978], PLE 1990: 69-70)

The process of typification is also present in Sapir's paper on grading (1944 : 94), especially when he takes the example of the word « house » to define grading, in reference to phenomenal occurrences with distinctive properties in terms of « more than » and « less than », identified relative to a bundle of constitutive features (the abstract typical occurrence of what a house is); as a consequence the designation « house » (the linguistic occurrence) may be identified to the type (in Culioli's topological terms) or have to be qualified otherwise by means of another more appropriate word, either located in the boundary ("toy") or in the exterior ("shack") when the type acts as attractor:

> No two houses are exactly identical in size nor are they identical in any other feature that can be predicated of them. Any two houses selected at random offer the contrast of "more" and "less" on hundreds of features which are constitutive of the concept "house". Thus, house A is higher but house B is roomier, while existent C is so much smaller than either A or B that it is "less than a house" than they and may be put in the class "toy" or at best "shack". (Sapir 1944: 94)

Culioli insists on the importance of those crucial mental operations in the *Notes du séminaire de D. E. A. 1983-1984* (1985):

> Lorsque vous avez des occurrences phénoménales, vous les ramenez à un type qui est le prédicat par excellence qui représente presque l'archétype platonicien. Nous avons tous en nous à un moment donné, comme inhérent à notre activité mentale, ce besoin, cette nécessité de ramener à un centre, à un type. Pour ce qui est du domaine notionnel, vous n'avez pas d'occurrences qui ne soient ramenées à ce centre organisateur (c.o.) de telle manière que vous disiez : « c'est interchangeable, i.e. indiscernable qualitativement », ou bien « c'est qualitativement différent », ou bien « c'est comparable ». Nous abordons ici le problème de la construction de la frontière i.e. de ce qui a des propriétés qui vont appartenir à deux parties qui d'ordinaire sont opposées. (Culioli 1985 : 30)
> L'opération qui découle de la première, à savoir ramener à un c.o., c'est l'opération d'identification et de différenciation […]. C'est une opération ou ensemble de propriétés primitives. C'est l'activité de tri, avant même la classification. (Culioli 1985 : 31)
>
> Nous savons que lorsque nous employons un terme pour désigner, nous le centrons toujours : il est toujours ramené à une valeur que l'on peut considérer comme prototypique, à quelque chose de typifié ; quand nous disons : « est-ce que tu as vu l'objet rouge là-bas sur la table ? » cela veut dire : « l'objet typique d'un rouge typique sur la table typique. » (Culioli 1985 : 35-36)
>
> Le centre, c'est le minimum d'accord qu'il peut y avoir entre les interlocuteurs ; et à un moment donné nous allons avoir cette désignation qui a cette propriété d'être ramenée à un centre. (Culioli 1985 : 36)

> Ça porte aussi sur des divisions fondamentales comme bon ou mauvais. Nous aurons toujours une relation à la valuation liée à un phénomène de bon-mauvais / attractif-répulsif / bénéfique-maléfique. Le degré neutre, l'indifférence, peut jouer, ce sera le degré 0. Tout ce que nous savons, c'est que chez tout être humain, cette tendance à construire des espaces centrés existe. Normalement, nous construisons un espace de telle manière qu'il ait un centre, qu'il y ait des bords, un gradient. (Culioli 1985 : 36)

> L'intensionalité est construite à partir de la fragmentation empirique, car c'est nous qui fragmentons, c'est nous qui désignons ; d'un autre côté ce découpage se fait parce que nous avons tendance à 'typer' et que vraisemblablement nous avons des prototypes. Cette tendance est une propriété de l'espèce humaine – il y a aussi quelque chose qui est du domaine de l'acquis, mais fondamentalement je suis obligé de le poser comme 'primitif'. Pour parler d'identification, il faut bien que j'extraie un point et que je le compare aux autres. Il est donc plus simple de dire : i, j, k, même si ces points ne sont pas qualitativement distinguables. (Culioli 1985 : 37)

> Ce qu'on appelle 'président', ça renvoie à la représentation, normalement partagée par toute personne sensée, de « être président ». Toute occurrence va être identifiée à toute autre occurrence, j'aboutis là à un domaine centré. Tout le domaine peut être ramené à ce centre éventuellement, ou bien ce point est dilaté de telle manière que toute occurrence étant identifiée, vous avez toute occurrence qui est dans le voisinage de la valeur typique. Vous n'avez alors pas de « plus », pas de « moins ». Imaginons que nous mettions un gradient là-dessus : « moins président », « président », « davantage président ». Dire que je ne peux faire cette opération, ça veut dire en fait : j'ai affaire à un ouvert, i.e. j'ai affaire à ce qui est la propriété typique sans aucune altération et dans ce cas tout le domaine correspond à « être président », rien d'autre. (Culioli 1985 : 41-21)

What is at stake is the « problème du même » (Bresson in Culioli [1981] PLE, 1990 : 65) qui « apparaît très tôt, bien avant le langage »[35], Bresson referring to Rosch's papers on the process of categorization. Culioli himself claims that « le type présente des parentés avec la notion de prototype qui a cours en psychologie cognitive à la suite des travaux d'E. Rosch » (Culioli [1991] PLE, 1999: 12), even if he prefers to use the metaterm « type » in French, as already stated in the *Notes du séminaire de D. E. A. 1983-1984* (1985: 27) for the following reasons:

> Toutefois je distingue type
> - de prototype qui renvoie plutôt à l'activité symbolique et cognitive en amont du langage. Il s'agit de l'activité fondamentale et innée qui conduit à isoler des propriétés ou des événements disparates, puis à construire des représentants abstraits et détachés de la réalité. Un type est exhibable *énonciativement*, mais un prototype n'est pas nécessairement désignable ;
> - de stéréotype que stabilisent des activités culturelles et anthropologiques. Les types ne sont pas stables si on les considère dans une dimension historique ;
> - d'archétype, au sens où Jung entend le terme. (Culioli [1991] PLE, 1999: 12)

[35] See Sapir (1944: 95): « it is very important to realize that psychologically all comparatives are primary in relation to their corresponding absolutes (« positives ») ».

Annex 3

Positive degree

Sapir refers to positive degree in terms of "implicitly gradable but ungraded" (1944: 94). Therefore the noun "house" is described as "a gradable but ungraded absolute", and when used in the plural the term "absolutes" is equated with "positives" (1944: 95).

Traditionally positive degree is synonymous with positive grade – grade being derived from French *grade* ("marche", "échelon", "degré"), which is itself derived from Latin *gradus* ("step"). Both terms are used grammatically to refer to the processes of grading and comparison. Thus positive degree is one in a set of three grades related to various linguistic means of expressing degree. In the *OED*, degree has a grammatical sense ("8. *Grammar*") which is "a technical application of sense 6", i.e. "a step or stage in intensity or amount; the relative intensity, extent, measure, or amount of a quality, attribute or action", which in turn is "often closely related to sense 2", i.e. "2. *Fig*. a. a step or stage in a process, etc., *esp.* one in an ascending or descending scale; b. by degrees: by successive steps or stages, by little and little, gradually":

> 8. *Grammar*. Each of the three stages (POSITIVE *v*., COMPARATIVE *adj*. and *n*., SUPERLATIVE *adj*. and *n*.) in the comparison of an adjective or adverb. (*The Oxford English Dictionary* online)

Degree and grade are therefore associated with gradable words, as shown by the definition of "gradable": "1. Capable of being classified by grade; 2. *Grammar.* Of a word (esp. an adjective) or quality denoted by it: that admits of comparison or of qualification with respect to degree" (*The Oxford English Dictionary* online). A general definition is given in Dubois *et al*. which echoes that of the *OED*: "Les degrés de comparaison sont des indices affectés à un adjectif (ou un adverbe) qui représentent une qualité susceptible d'être plus ou moins élevée, plus ou moins intense" (Dubois *et al*. 1994 : 98). Such comparison/degree markers ("indices") may be unmarked as is the case with positive degree. In fact, it equates with "the base form of the item" (adj. *high, complex*; adv. *soon, comfortably*) as opposed to inflectional or periphrastic comparison: "*higher, highest*; *more complex, most complex*; *sooner, soonest*; *more comfortable, most comfortable*" (Quirk *et al.* 1985: 458). In this use "the absolute" is synonymous with "positive" degree/grade, as already stated in Sapir's quotation above (1944: 95). It is independent of "the three types of comparison" described by Quirk *et al*. (1985: 458) in the following terms: "(a) to a higher degree; (b) to the same degree; (c) to a lower degree" – which refer to what Dubois *et al*. (1994: 98) call "degré relatif": "le degré peut être envisagé […] par comparaison avec d'autres êtres ou objets":

> On exprime le degré d'une qualité (adjectif) ou d'une modalité (adverbe) par […] le *comparatif* (qualité donnée comme remarquable en soi, ou plus ou moins élevée, ou égale par rapport à d'autres), le *superlatif* (qualité donnée comme supérieure en absolu ou supérieure ou inférieure par rapport à d'autres). (Dubois *et al*. 1994: 98)

The "positive" thus corresponds to the degree of a quality expressed in itself:

> Le degré peut être envisagé en lui-même, indépendamment de toute comparaison avec d'autres êtres ou objets (*degré absolu*). […] On exprime le degré d'une qualité (adjectif) ou d'une modalité (adverbe) par le *positif* (qualité énoncée telle quelle). (Dubois *et al*. 1994: 98)

Hence the absence of explicit degree modification of the quality in question, as also stated by Riegel et al. (2009: 619) as far as degrees of intensity are concerned: "En emploi non modifié, l'adjectif n'est pas marqué relativement au degré de la qualité qu'il dénote. Ce degré dit *positif* constitue en fait le degré *neutre* de l'évaluation des adjectifs."

Note that positive degree may be marked in other languages such as Chinese, as has been stated both by Culioli and by Kennedy & McNally:

> En position d'attribut, un tel prédicat (*grand* par exemple) induit nécessairement une valeur comparative (**x** est grand – par rapport à **y**, à ce que je souhaitais, etc.), c'est-à-dire une relation d'occurrence à occurrence (il s'agit d'occurrences abstraites). Si je veux supprimer cette relation de comparaison, j'emploierai *hen* (« très »), qui, ici, ne se « traduira » pas, si l'on utilise le français comme métalangue (mais une glose en chinois aboutirait à la même constatation) : on rendra donc par *grand* (sans plus) et non par *très grand*. Il est clair que *hen* est le marqueur de centrage (suppression du gradient) et bloque donc toute relation d'occurrence à occurrence. (Culioli, [1987], PLE, 1990: 119-120)[36]

Kennedy & McNally (2005: 350) refer to Mandarin, in which "the positive form is morphologically marked", to justify their analysis: "we assume that unmodified APs actually contain a null degree morpheme *pos* (for POSITIVE FORM) whose function is to relate the degree argument of the adjective to an appropriate standard of comparison."

The term "absolute" can take on different meanings; it may even refer to explicit degree markers (such as VERY) which express high degree and then it equates with "absolute superlative" (see Riegel et al. 2009: 620) or it may denote high degree as already semantically inscribed in the meaning of such words as "excellent", "immense" and "absolute" itself (see Rivara 1993: 41 about the denotation of imaginary endpoints that, however, have no definite upper limit, being viewed as imaginary, and Riegel et al. 2009: 621). It has therefore not been retained in the present paper.
On the other hand, in the phrase "positive degree/grade" the adjective "positive" must not be understood as referring to polarity, i.e. positive form vs. negative form. That is the reason why Huddleston & Pullum (2002: 1161-1162) prefer using the phrase "plain grade" instead of "positive grade" as they wish to use "positive" in the restricted sense "where it contrasts with 'negative'" (note 39, page 1162); they also criticize the use of "absolute" as being "semantically inappropriate" and remind the reader of the fact that "absolute comparative" is "a traditional term for a comparative in which the secondary term is left unexpressed, as in *This is* <u>*cheaper*</u>" (note 39, page 1162).

Huddleston & Pullum (2002: 1161-1162) claim that "the system of grade" is made up of "plain" forms which contrast with "comparative" and "superlative forms". In this context, they state that it "is not a matter of different degrees ordered on a scale". On that matter, Riegel *et al*. (2009: 618-619) also distinguish between intensity and comparison, more explicitly than in Dubois *et al*. (1994: 98) quoted above:

> Dans son organisation de la réalité, le français distingue deux échelles, selon que la variation est considérée en elle-même ou en rapport avec un élément extérieur qui lui

[36] See Annex 2.

> sert d'étalon. Des formes et des constructions spéciales expriment ces deux types d'évaluation lorsqu'ils sont appliqués aux propriétés dénotées par les adjectifs :
> • Degrés d'intensité
> Dans *La soupe est un peu, assez, très, trop chaude*, la qualité exprimée par l'adjectif *chaude* est appréciée en elle-même et saisie à différents degrés d'intensité répartis sur une échelle : faible, moyenne (normale) ou élevée (forte, extrême).
> • Degrés de comparaison
> Dans *La soupe est plus / moins / aussi chaude* que a) *le café* b) *salée* c) *hier soir* d) *chez Yvonne*, le degré de la qualité dénotée par l'adjectif *chaude* est apprécié par comparaison avec d'autres éléments de référence : un autre aliment (*le café*) partageant la même propriété, une autre propriété (*salée*) attribuée au même élément, ou encore la même qualité (*chaude*) rapportée au même élément (*la soupe*), mais dans des circonstances temporelles (*hier soir*) ou spatiales (*chez Yvonne*) différentes.
> • En emploi non modifié, l'adjectif n'est pas marqué relativement au degré de la qualité qu'il dénote. Ce degré dit *positif* constitue en fait le degré *neutre* de l'évaluation des adjectifs. (Riegel *et al*. 2009: 618-619)

As a consequence, though positive degree (or plain grade) is syntactically unmarked either in degree or in comparison, it is compatible with a type of semantic grading inscribed in the notional properties of adjectives, and also adverbs, verbs and nouns (see Whittaker 2002: 87-141 on syntactic grading, more particularly 128-140 about word classes other than adjectives, and 143-170 on semantic grading, for French). For example, the adjective *tall* refers to a size which is superior to the average even when it is used without a degree adverb (*very tall*) or inflectional comparative and superlative forms (*taller, tallest*).

Huddleston & Pullum (2002: 1161) claim that "the plain form differs from the others in that it does not express comparison" explicitly (also see Kennedy & McNally 2005 for more detail):

> Thus *Sam is <u>good</u>* does not explicitly compare Sam with anybody else. This is not to say, however, that there is no implicit comparison. Suppose Sam, Pat, and Kim are students and are being evaluated as to how good they are as students. Not all students are good students, so that saying that Sam is good, or a good student, involves some comparison with the standards of students in general. Such relativity is particularly evident in examples like *Jumbo is a small elephant*. This does not say that Jumbo is small in any absolute sense: we interpret it as saying that Jumbo is small relative to the standards applicable to elephants. Note, moreover, that it is possible to express comparison in accompanying phrases: *Sam is a good student compared with the others in the class*. The point remains, however, that the plain grade does not itself express comparison. (Huddleston & Pullum 2002: 1161-1162)

Rivara (1990; 1993) links the positive/plain use of adjectives – which he calls "absolute" – to implicit norms of comparison that apply both semantically and referentially: on the semantic level, the quality denoted by the unmodified adjective refers to a degree relative to a semantic scale grading upwards or downwards from an average value or dimension (which may correspond to a lexical item like *size* for example in the case of *tall*, or not); on the referential level, the norm attached to the dimension in question is context-dependent as it varies according to the class of referents denoted by the entity qualified by the unmodified adjective, and is thus not only an implicit norm, but also a relative norm. Rivara even extends such an analysis to degree modified adjectives:

> A première vue, les emplois dits (syntaxiquement) *absolus* des adjectifs (*grand*, mais aussi *très grand*) sont caractérisés par l'absence de référence à un comparant. Ils semblent véhiculer une information « absolue » (non relative à un repère).
> Pourtant, le simple fait que des adjectifs comme *gros* ou *grand* puissent s'appliquer à des types d'objets infiniment divers suffit à montrer qu'ils n'ont, en eux-mêmes, aucune valeur référentielle définissable ; *gros* dénote des dimensions fort différentes dans *gros chien* et *gros éléphant*. Il est donc clair que, dans leurs emplois absolus, les adjectifs graduables ont un fonctionnement de type *syncatégorématique* : ils ne sont interprétables que par rapport à un repère d'un type nouveau, qui ne peut être qu'une *norme implicite* propre à la classe dont fait partie l'objet déterminé par l'adjectif. Ils sont par là, comme on l'a dit, « implicitement comparatifs ». Un « gros chien » est ainsi un chien d'une taille supérieure à une certaine norme, qui ne peut être que la taille moyenne attribuée à la classe des chiens dans la communauté linguistique. (Rivara 1993 : 41)
>
> En position d'épithète, un adjectif évaluatif s'interprète toujours par référence à la norme applicable à la classe d'objets désignée par le nom. Ainsi, *un petit éléphant* est toujours un éléphant plus petit que la moyenne des éléphants, ce qui explique que l'on puisse dire *Un petit éléphant est (encore) un gros animal*. (Rivara 1990 : 94)
>
> De l'existence de ces normes évaluatives relatives à une classe d'objets, on peut conclure que, si le lexique des langues a la fonction, essentielle, d'identifier et de classer des catégories d'objets et d'activités au moyen d'un certain nombre de propriétés caractéristiques, les normes applicables à celles de ces propriétés qui sont graduables *font partie de la définition même de ces classes d'objets* : si l'on admet, par exemple, que le lexique du français renferme le concept de *« rue »*, parmi les traits définitoires des objets *rues* devra sans doute figurer une norme de largeur propres aux rues, et différente, par exemple, de celles des mots *avenue* ou *boulevard*. Ces normes quantitatives, qui n'ont pas d'expression objective explicite, manifestent la subjectivité du « découpage du réel » opéré par le lexique de chaque langue. (Rivara 1990 : 95)

See Rivara (1990) and (1993) – and Whittaker (2002, in particular 28-34 on Rivara 1990; 37-56 on adjectives and reference; 57-86 on referential grading) – on more detail about semantic scales, as well as Kennedy & McNally (2005).

Semantic scales can thus be considered as part of the bundles of physico-cultural properties that define notions (in the terms of Culioli's theoretical framework; see Annex 2). Though linked, grading and scaling should be dealt with on separate levels. Nevertheless Rivara (1993: 45-46) considers that semantic scales are compatible with Culioli's notional domain (in terms of an attracting centre and a gradient oriented towards it or away from it).