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por Ana Paula Quadro Gomes (UFRJ)

Christopher D. Kennedy, hoje professor e chefe do Departamento de Linguística da Universidade de Chicago (EUA), tornou-se referência para semanticistas, sintaticistas, pesquisadores de semântica lexical e linguistas em geral ao defender a tese ***Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison*** (Projetando o Adjetivo: a Sintaxe e a Semântica da Comparação de Grau), em 1997. Nesse trabalho, publicado em 1999, Kennedy apresenta o estado da arte da linguística sobre as expressões de grau das línguas naturais e propõe uma nova análise semântica para os adjetivos de grau, a qual dá conta de sua distribuição sintática. Sua análise inclui objetos como grau e escalas na ontologia das línguas naturais, associando a semântica de expressões de grau, num tratamento composicional, à sua configuração sintática. Um adjetivo de grau é analisado como uma expressão que denota uma relação entre uma entidade e o grau de uma propriedade. Todo adjetivo de grau projeta uma camada funcional que tem por núcleo um operador de grau não vozeado, e em cujo especificador os intensificadores, que são tratados como modificadores de grau, são alojados. Outra publicação de Kennedy muito citada é o artigo escrito em parceria com McNally, publicado em 2005, que explica a distribuição complementar entre os intensificadores do inglês *much*, *well* e *very*, quanto aos adjetivos participiais com que se combinam. Assumindo que os adjetivos de grau apresentam a mesma sintaxe, essa distribuição complementar não pode ser explicada estruturalmente. Porém, associando a cada grupo de adjetivos tipos de escala diferentes, fica explicada a distinção na seleção semântica de cada intensificador. Essa abordagem distingue escalas abertas de fechadas (em um extremo ou em ambos), e parâmetros de comparação relativos de absolutos, levando a uma distinção semântica de base empírica entre vagueza e imprecisão. Mas a semântica de graus não trata apenas de adjetivos. Exemplos típicos de construções de grau são as orações comparativas, equitativas, exclamativas, consecutivas etc. No domínio verbal, há gradação na progressão de um episódio em direção à sua culminância; na incrementalidade que conduz, pela relação entre as partes do argumento incremental e subeventos, à telicidade ('comer uma maçã'); e em verbos de telicidade variável (os *degree achievements*), que podem denotar eventos contendo um ponto de culminância ou não (como 'esquentar', 'esfriar' etc.). No domínio nominal, a quantidade de indivíduos e o volume de substâncias também podem ser tratados como uma escala de graus. Todos esses desdobramentos da semântica de graus foram explorados nas pesquisas de Kennedy.

Além de sua extensa produção em pesquisa linguística, e de sua atuação no ensino, o que chama a atenção em Chris Kennedy é sua versatilidade, ou a generosa abertura de seus interesses, que não se restringem à língua natural. Por exemplo, ele é também autor de canções de rock (já teve uma banda, na qual tocava guitarra), e comentarista convidado na Conferência sobre Discórdia Moral, realizada

pela Faculdade de Direito da Universidade de Chicago, e em encontros da Sociedade Americana de Filosofia. A curiosidade move o seu trabalho de cientista. Podemos dizer que Kennedy se interessa pelo significado, em sentido amplo.

Esta entrevista foi realizada durante sua vinda à UFRJ, para participar do IX Workshop on Formal Linguistics, em agosto de 2012.

EntreviSta: The advent of the Degree Semantics has offered a formal explanation for phenomena (until very recently) pointed out by many as "proving" the impossibility of framing language meaning by means of a formal theory, given the vagueness and imprecision of some adjectives. For instance, how could anyone possibly assign a steady meaning to an adjective like "hot", if the temperature of "hot water" could vary indefinitely (distinct temperatures are related to "hot water" for giving the baby a bath, for making coffee, swimming at beaches, drinking water in summer, sterilizing knifes etc.)? Your PhD dissertation (1997) was a major contribution to override the resistance to treat adjective meanings (and other apparently imprecise denotations) in formal semantics. You have explored expressions of comparison, amount and degree, and have also worked on vagueness. How do you evaluate the power of the research about degree expressions as a tool to investigate which structural and typological features of language can be explained in terms of meaning?

Chris Kennedy: I think that the real triumph of degree semantics has been to provide a framework for explaining the syntactic and semantic properties of a complex array of constructions and patterns that gradable predicates of all lexical categories – adjectives, nouns, verbs, adpositions – participate in. I am thinking not only of comparative constructions here (though these are the most well-studied), but also superlatives, expressions of sufficiency and excess, expressions of quantity, measure and amount (including various kinds of partitive constructions), expressions of change of state verbs, and so forth. These constructions are not necessarily uniform either within or across languages, but degree semantics has provided a framework for investigating how certain shared aspects of meaning – such as establishing a relation between objects and degrees, or the structural properties of scales and degrees themselves – are expressed in natural language.

That said, I do not think that degree semantics has really helped solve some of the deeper questions about meaning that you point to, such as the problem of vagueness, or even the analysis of some of the expressions I mentioned above, such as intensifiers. It's true that we can assign a fixed meaning to a word like 'hot' (as, say, a relation between objects and temperatures), but this makes it all the more puzzling that we can never say exactly what 'hot' means when we say "It's hot out today"! It's great that we have made so much progress understanding the compositional semantics of truly complex (and important) sentences like "It will be hotter over the coming years than scientists once predicted that it would be", but (within formal semantics, at least), there hasn't been a lot of attention to simpler sentences like "it's hot", and what the properties of vague predicates in general imply, at a foundational level, for theories of meaning.

EntreviSta: In a paper written with McNally (2005, The syntax and semantics of multiple degree modification in English), "the general empirical claim" is that "degree modification is syntactically and semantically diverse: the class of degree expressions is subdivided both according to the semantic effects of its members and according to the extent to which they permit, and participate in, multiple layers of modification". Some researchers see the mismatch between syntax and semantics as a failure.

Jacobson (2002, p. 609) says that "…there is a clear elegance to a system in which the grammar builds (i.e. proves as well-formed) syntactic objects in parallel with assigning them an interpretation, an elegance which is lost if the grammar contains two entirely separate systems, one of which (the syntax) must 'run' first because the other (the semantics) works on its output." What is your view about the question of how the syntactic and semantic components interact in human languages? Is a one-to-one correspondence between surface strings and meaning attainable? Is it desirable?

Chris Kennedy: Maybe I should clarify the point made in the 2005 paper first. Louise McNally and I were not arguing against a tight fit between the syntax and semantics in that paper. Instead, we were simply pointing out that the class of expressions which are typically labeled "degree words" is heterogeneous. Within that broad class, we identified three subclasses which (we argued) are distinguished both in their semantic contributions to the meaning of a sentence containing a scalar expression like a gradable adjective (roughly, whether they manipulate the scalar properties of the expression, whether they introduce or saturate a degree argument, or whether they constrain a contextual parameter), and, in a corresponding way, in how they combine syntactically with a scalar expression. So the general proposal in that paper about degree words is very much in line with the program that Jacobson articulates, and my own view of the syntax-semantics interface is certainly one that takes kind of approach as a starting point. Whether it can be maintained is, of course, a question that remains to be answered, and is one that we can answer only by careful analysis of a lot of complex constructions in a lot of languages. I do think that degree words provide a particularly good empirical domain for asking these questions, precisely because we see both semantic and syntactic heterogeneity, both within and across languages. Though one thing that makes work in this area difficult – and something that must be kept in mind when doing research in this area – is that there are often different ways of achieving the same results truth-conditionally. For example, intensification can be achieved either by restricting a degree argument of a gradable adjective to fall within a certain range on a scale, or by modulating the contextual parameters against which a vague predicate is evaluated in a way that ensures that the predicate applies only to a more and more restricted subset of its domain.

EntreviSta: Your research covers degree expressions of distinct categories, such as adjectives, intensifiers, numbers (expressions of quantity in the nominal domain), degree achievements, event completeness, etc. How pervasive are Scale Structures? Are there degrees in all domains? How far do the similarities between all the domain structures go? Do you agree with Violeta Demonte about her claim that scales (therefore, degrees) are primitives of the human cognitive system? Is the logic of scales in human mind independent of language?

Chris Kennedy: Well, work by cognitive psychologists on analog magnitude representations of quantity tells us that the logic of scales (or something very similar to it) definitely exists independently of language in the minds of both humans and other creatures. And I assume that the mental representations involved in thinking and reasoning about number, quantity, degree and so forth are engaged when we talk about these things. But whether the structure of the mental representations is exactly the same as the structure of the formal representations that semanticists use to model the grammatical properties of the expressions we use when we talk about these things is another question. I certainly hope that as our semantic theories get better, they will allow us to ask more sophisticated psychological questions about these topics, and I also think that "psychological plausibility" is an important evaluation metric for semantic theories. But I also think that the first job of a formal semantic theory is to account for the linguistic data, and in a way that maximizes explanatory adequacy relative

to the observed linguistic patterns. So we can ask the question of whether there are degrees in all domains already on the basis of this kind of judgment, independently of questions about degrees in the cognitive system. If, for example, we gain a better understanding of the grammar of modified and unmodified numerals by giving them a degree-theoretic analysis than by giving them an analysis as quantificational determiners, that provides some reason to believe that degrees are part of the nominal system.

EntreviSta: At the bottom of your page, there are two questions: (1) "_Do you want to be a philosopher?" and (2) "_Do you want to be an astrophysicist?". If you were in the field of career adviser, how would you answer (in prose) the questions: (3) "_Do you want to be a linguist researcher?" and (4) "_Do you want to be a semanticist?"

Chris Kennedy: I think that linguistics is a really fantastic field of study, because it engages people with one of the richest and most central areas of human experience, and an area in which we see both great diversity and a huge amount of shared features across times and cultures, in a rigorous and analytical way. As for semantics, I think the most important thing is develop the ability to look down to the deepest levels of analysis and figure out whether what you're saying really counts as an explanation of how we link forms to meanings. It's very easy in semantics to say "the meaning of X is such-and-such", without really explaining how it is that the link between X and such-and-such is established, in which case we haven't really said anything at all.

EntreviSta: In one of your articles (2011), we read that "verbs that describe events in which one argument undergoes an incremental change have a scalar element as a basic component of their meaning, whose function is to represent the degree to which the object changes along a relevant dimension as a result of its participation in the event". Can you elaborate a little more on how telicity might be a question of degree?

Chris Kennedy: Well, the idea is not so much that "telicity is a matter of degree," but is rather that by giving a degree-theoretic analysis of this class of verbs, we end up with a semantic analysis of the larger structures in which they appear which correctly predicts whether such structures are telic or atelic in virtue of the semantic properties of their parts. And returning to one of the themes I mentioned above, we are able to explain similar patterns of behavior across verb classes that share the feature of describing incremental changes (such as changes in a property, changes in a location, or changes in the mereological structure of an argument), but differ in various other syntactic and semantic respects.

EntreviSta: You have showed that there are two kinds of degree adjectives, the absolute and the relative adjectives. You have also made the case about the connection between type of scales and the nature of parameters in comparisons. The use of such a connection to explain empirical facts such as the fact that very, much and well modify distinct groups of adjectives is very impressive. How does the distinction between imprecision and vagueness matter in language?

Chris Kennedy: That is a question of ongoing research. In fact, it is a matter of debate whether there really is a distinction between vagueness and imprecision in language. One of my current research projects is to find new ways of figuring out what the answer to this question is. I don't think that introspection will give us an answer, and I am also not fully confident that patterns of distribution

(of e.g. modifiers) will really answer it either, so I am collaborating with colleagues to find out if it can be answered using psycholinguistic techniques. The underlying intuition is that if the distinction exists, then even though the "phenomenology" of vagueness and imprecision are quite similar, they ought to be sensitive to slightly different contextual factors. This is because (on the view that these are distinct things), vagueness ultimately stems from lexical semantic properties of vague expressions that introduce context dependence, while imprecision stems from how we use (semantically precise) expressions in context. Vagueness should therefore pattern generally with other expressions that have context-dependent content in the way that it interacts with discourse representations, while imprecision should be more subject to general principles of knowledge and language use.

EntreviSta: How effective focusing on scalar predicates is in terms of tracking the subjective/ nonsubjective distinction? What makes a predicate subjective? What kinds of features constitute the peculiarities of the subjective? What remains to be done/seen/researched?

Chris Kennedy: These are questions for several doctoral dissertations and books! Let me just say that in linguistics, I think we can contribute to debates about subjectivity by figuring out the role (or lack thereof) that it plays in determining the grammatical properties of subjective predicates. Just as we have learned a great deal about the thematic role system, the tense and aspect system, and so forth by doing fine-grained lexical semantic analysis of different classes of verbs and exploring the way that lexical semantics interacts with grammatical behavior, I think that we can make the same progress in developing our understanding of subjectivity through a similarly fine-grained lexical semantic analysis.

EntreviSta: Quantifiers have been at the center of the investigation about how the interface between syntax and semantics works. Are they still attracting attention or has research moved on? How does phrases "projected" by a degree nucleus relate to quantifiers? What are the potential advantages of a degree-quantifier analysis of numerals, for instance?

Chris Kennedy: I think that there is still plenty to learn about the grammar of quantification, especially as researchers in semantics expand their attention beyond some of the more-studied Indo-European languages and take closer and more in-depth looks at other kinds of systems of quantification. And certainly I think that it is worthwhile to re-think classic analyses of some quantificational expressions in new terms, as our "semantic toolkit" gets bigger. Treating numerals as degree quantifiers, for example, provides a much simpler account of "split-scope" phenomena than is available without such an approach. (Since the numeral is an independent argument of the nominal projection, rather than a function over the noun meaning encoding both existential force and counting, there is nothing really to "split" in the first place.) At the same time, one needs to be careful when developing a new approach to a problem to fully explore its predictions, and figure out exactly where it improves on – or doesn't do as well as – previous analyses.