

BOOK REVIEWS

ILHA DO DESTERRRO

REVIEWS/RESENHAS

Semântica, by Gennaro Chierchia. Rodolfo Ilari, Luiz Arthur Pagani e Lígia Negri. Campinas: Editora da Unicamp e Londrina: EDUEL.2003

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Há vários livros de introdução à semântica disponíveis no mercado para o estudante da área de letras que tem comando suficiente de inglês para dar cabo de no mínimo umas trezentas páginas de texto sobre um tema complexo. Infelizmente, é preciso reconhecer que essa não é a realidade da universidade brasileira: a barreira da língua estrangeira ainda dificulta muito o caminho acadêmico de grande parte dos alunos. E mesmo com toda a indústria de introduções à lingüística formal em línguas estrangeiras (inglês principalmente), ainda são poucos os que estão disponíveis em português. Quanto às introduções escritas em português, ainda dá para contá-las nos dedos de uma mão.

Essa situação, que vale para todas as áreas da lingüística formal, parece criar uma responsabilidade a mais para o pesquisador que deseja divulgar essas abordagens: além da pesquisa em si, é

preciso pensar também em colocar mais títulos à disposição do público universitário. Obrigações acadêmicas à parte e pensando a curto prazo, a maneira mais eficiente de se fazer isso provavelmente é a tradução.

Esse cenário já bastaria para fazer a publicação de uma introdução à semântica escrita por um pesquisador de grande projeção como Chierchia um acontecimento bem-vindo e digno de nota na comunidade lingüística brasileira. Livros como o manual de GC contribuem para a formação de novos pesquisadores nessa sub-área e também para informar e manter a par aqueles que pesquisam em outras sub-áreas. Uma necessidade premente num campo em que o que mais se discute são as chamadas interfaces.

Uma manual de introdução a uma disciplina acadêmica pode ser equiparado a um guia de viagem (...no caso da semântica, a outros mundos possíveis?). Um bom guia de viagem deve dar uma idéia geral do lugar, ajudar a escolher pouso, etc., e preparar o viajante para conhecer e explorar seu destino independentemente. Assim também um 'manual de viagem a mundos possíveis' deve orientar o viajante sobre os caminhos, equipar-lhe com um mínimo de material adequado para o terreno e informá-lo de onde ele consegue, durante sua viagem, o resto do equipamento para quando seu percurso passar por terrenos mais acidentados.

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Não é fácil fazer tudo isso. E ainda se tem que equilibrar essas três funções em um espaço relativamente pequeno. No caso do manual de GC, parece que a primazia foi para a primeira função: dar uma idéia geral do terreno.

Esse é provavelmente o motivo que mais bem adequa *Semântica* à nossa realidade universitária. Dos vários manuais de semântica disponíveis em línguas estrangeiras vários foram escritos por pesquisadores de destaque. Por exemplo, Partee, Kamp, Dowty, Peters, Heim, Kratzer, Larson, van Benthem, Stockhof, de Swart, Landman, Bach. Todos são nomes ligados tanto por estudos influentes em uma área ou outra quanto a manuais de semântica de nível e tendências diferentes. Dentre esses todos, o *Semântica* de GC é um dos poucos que não pressupõem conhecimento prévio de outras partes da teoria lingüística e que não se destina a uma vista de uma abordagem em particular dentro das abordagens formais.

Para uso acadêmico em nossa realidade universitária, isso é uma vantagem que, junto com o estilo informal e *user-friendly*, faz o livro ser potencialmente proveitoso e agradável também aos não semanticistas e alunos com predileção para abordagens não formais à linguagem. Ou seja, *Semântica* pode ser uma ferramenta valiosa para conseguir fazer a dupla mágica de informar-sem-traumatizar o aluno interessado em literatura ou análise do discurso sobre abordagens formais.

A seguir falo do conteúdo de cada um dos dez capítulos em que GC dividiu o manual.

O primeiro capítulo é *Semântica e Gramática Universal*, onde GC apresenta os argumentos clássicos de Chomsky pela existência da Gramática Universal, apresenta as três grandes abordagens semânticas (denotacional, representacional e pragmático-social), fala da herança lógica da semântica e situa o estudo da linguagem dentro de um quadro da teoria computacional da mente.

No segundo capítulo, GC – um tanto inovadoramente – aborda os quantificadores generalizados para exemplificar que tipo de objetos a semântica denota e também para mostrar um exemplo de universal lingüístico. Esse capítulo inclui também uma noção de teoria de conjuntos para que o estudo dos QG, quantificadores generalizados, possa prosseguir. (Essa estratégia será uma constante através do resto do livro: as ferramentas formais são apresentadas com pouco detalhamento técnico e sempre depois de serem motivadas pela análise de fenômenos empíricos).

O capítulo 3 trata de sintaxe, um assunto que nenhuma proposta de semântica pretende ficar alheia. Nesse capítulo GC retoma e desenvolve um pouco mais idéias centrais dos princípios e parâmetros que tinham sido apresentadas no capítulo primeiro. Ele começa por competência e desempenho, vai para estrutura sintagmática e chega até teoria X' e interpretação de constituintes deslocados.

No capítulo 4 – Nexos de Significado – GC estende os argumentos de competência sintática para a semântica e apresenta noções como as de consequência, validade, contradição, analiticidade, sinonímia, pressuposição, acomodamento, anáfora e exemplifica como elas são usadas no estudo do significado. Nesse capítulo GC apresenta ainda a noção de valor de verdade, também vagueza e ambigüidade.

O capítulo 5 – Uso e Significado – para colocar em uma forma breve demais, trata do que poderia ser chamado interface semântica–pragmática (NB, GC não usa esse termo). Aqui são tratadas noções como *ato locutivo*, *ilocutivo* e *perlocutivo* e entre outras coisas são apresentadas as implicaturas de Grice (1975).

A partir do capítulo 6 – Predicados e Modificadores – há mais especificidade e exigência técnica. Nesse capítulo GC retoma noções apresentadas nos capítulos anteriores para mostrar como a estrutura semântica de uma sentença se articula. Basicamente, esse capítulo toma a teoria X' apresentada no capítulo 3 e atribui a esse mecanismo sintático uma interpretação semântica composicional, usando as noções introduzidas na apresentação dos quantificadores generalizados e no capítulo 4 sobre nexos de significados.

Uma vez que familiarizou o leitor com a estruturação sintática e semântica da sentença, Chierchia usa o capítulo 7 para retomar os determinantes com um pouco mais de profundidade. Esse ca-

pítulo apresenta a noção de quantificação e relaciona problemas de interpretação de sentenças ao escopo dos determinantes. Chierchia usa a metáfora do 'movimento de constituintes' e de modo geral procede a construir uma semântica que 'roda' em uma sintaxe cujas propriedades gerais são as da sintaxe gerativa, versão P & P, Princípios e Parâmetros. Essa não é de forma alguma a única alternativa que a semântica atual oferece, mas é provavelmente a mais prática. E, além disso, GC cobre uma boa quantidade de fenômenos empíricos para um manual e os mantém sempre em primeiro plano sem se perder em questões infra-teóricas. O capítulo, assim como o livro todo, permaneceria útil mesmo para quem decidiu estudar abordagens semânticas que não comungam com o gerativismo.

O fenômeno que dá o título do capítulo 8 – *Intensionalidade* – é apresentado empiricamente através da análise das sentenças encaixadas. GC mostra porque tudo o que ele tinha construído até então falha quando se toma sob foco as sentenças encaixadas e a partir daí introduz os conceitos de intensionalidade, extensionalidade, proposições e mundos possíveis. A segunda parte do capítulo mostra como essas novas ferramentas possibilitam também o estudo e melhor compreensão dos fenômenos modais. Aqui GC apresenta os tipos de modalidade aléticas, doxais e também modalidades *de re* e *de dicto*.

O capítulo 9 – *Eventos* – apresenta a noção de eventos em relação a alguns

domínios conexos como as classes acionais (dos verbos, como em Vendler 1967, por exemplo), aspecto e semântica dos advérbios. A noção de evento é o tema central. GC defende a inclusão dessa noção na bagagem do semanticista e mostra o ganho empírico que ela possibilita. Primeiro possibilita ver o tempo como uma operação sobre o predicado de evento; segundo, possibilita ver os advérbios temporais como modificadores desse mesmo predicado, equiparando-os assim a outros tipos de modificadores.

O capítulo 10 volta às pressuposições. GC retoma com mais detalhe o fenômeno da projeção e usa-o para mostrar uma limitação do sistema na forma que ele vinha apresentando até aqui. Mais especificamente, GC mostra que a semântica veri-funcional na forma que ele apresentou não está preparada para capturar a projeção das pressuposições. Ele apresenta então alguns ajustes no sistema que acabou de erigir. Esses ajustes mudam bastante as propriedades do sistema e oferecem a promessa de capturar o lado mais dinâmico do fenômeno lingüístico.

Algumas características gerais de *Semântica*: O estilo do livro é agradável. Segundo o próprio GC, na introdução, o livro foi escrito num pidgin do 'alto' estilo da linguagem acadêmica italiana (onde ele cresceu) e da linguagem "to the point" do estilo acadêmico americano (onde ele trabalhou): o resultado é bem-vindo e os tradutores souberam conservá-lo.

Os capítulos são muito bem organizados. Todos têm resumos e introduções que os interligam entre si e põem claramente tanto as principais questões que foram desenvolvidas quanto as que ficaram em aberto. Além do texto expositivo principal há exercícios. Eles variam de fáceis a médio, não há lista de respostas, e ela é realmente dispensável. O texto principal é também enriquecido com fichas de leitura. Algumas delas simplesmente retomam o assunto tratado no corpo do texto principal e apresentam-no de maneira formal. Por exemplo, a ficha 7.2 (p. 418) chama-se *Lógica Predicativa com Quantificadores Generalizados*, abreviado por LP_{GC} , e é simplesmente a especificação formal dessa linguagem cujo conteúdo GC vinham apresentando didaticamente ao longo do capítulo. Há outras fichas que são extensões do assunto do corpo de texto principal, por exemplo, a ficha 6.4 se aprofunda na semântica das variáveis resumindo o chamado 'artigão' de Tarski (1956).

Um ponto importante ao se adotar qualquer manual é sua adequação aos propósitos do curso e ao nível de conhecimento prévio que os alunos têm do assunto. Sobre isso, é bom lembrar que *Semântica* foi escrito para uso na graduação, logo, entre outras coisas, para um público que não está necessariamente interessado em pesquisa lingüística. Já disse acima, que, devido ao estilo e à abordagem generalista esse livro é uma ferramenta valiosa para apresentar a semântica sem inflingir 'traumas' nos alunos, que dentro de alguns semestres

podem ser professores ou mestrandos em literatura ou análise do discurso. Ao mesmo tempo em que faz isso, ele cobre mais que minimamente o conteúdo que um futuro pesquisador em semântica precisa saber quando de sua admissão.

Perceba, porém, que, até aí, estamos supondo que nossa realidade universitária é semelhante à de um país europeu como a Itália. A nossa é provavelmente muito mais heterogênea. E, durante pelo menos alguns anos, o livro de GC será também adequado para uso na pós-graduação, onde ele poderá ser usado com o mesmo proveito.

Dada essa situação, seria omissão não dizer também que, para uso na pós-graduação, *Semântica* não dá bagagem suficiente para quem quer pesquisar um fenômeno linguístico numa abordagem formal. O aluno que tiver passado 'só' por seus dez capítulos com o maior dos afincos não lê, por exemplo, um paper da *Linguistics and Philosophy* ou da *Natural Language Semantics*.

Assim, se o destino de *Semântica* aqui no Brasil for servir de base na pós-graduação será necessário estar preparado para complementar a leitura nos pontos mais relevantes seja lá o que se estiver estudando. Isso acaba pondo em evidência um ponto fraco do livro. Há uma certa falta de sistematicidade e de especificidade na remissão às leituras relevantes de nível avançado.

GC faz isso de duas maneiras: menciona a literatura avançada no próprio texto e inclui os títulos principais sobre cada

assunto numa lista no fim de cada capítulo. Por exemplo a lista no fim do capítulo 8 – *Intensionalidade* – é: **Proposições como tipos de eventos:** *Austin (1961); Barwise and Perry (1983); Ramsey (1927);* **Proposições como representações:** *Davidson (1974; 1984); Field (1978); Fodor (1975; 1994)* etc.

Essas listas no final dos capítulos sempre incluem os exemplos mais importantes sobre cada tema. Mas isso é pouco. GC poderia ter dito em uma ou duas linhas o que, exatamente, sobre, digamos, proposições como tipo de evento, o leitor vai encontrar em Austin (1961). O leitor que quer uma idéia geral sobre isso deve ir direto ao texto do lógico e 'proto' *model-theorist* Ramsey (1927). Barwise & Perry (1983) é um livro fácil para quem está estudando semântica pela primeira vez no manual de GC ou pressupõe conhecimento técnico de teoria de modelos? Cabe ao professor dar todas essas orientações, de forma que a lista que GC fornece acaba não fazendo muita diferença.

Quanto à menção no próprio corpo de texto, GC poderia ter se disposto a fazê-lo mais regularmente. Isso é uma característica importante para diferenciar um bom manual de um que seja excelente. O capítulo sobre nexos de significado é especialmente pobre nesse respeito. Há só três remissões no corpo do texto: ao nome de Grice (não a um escrito em particular); a Frege (1918) sobre conteúdo e força; e a um argumento devido a Wittgenstein (de novo, o nome). A obra de Grice aparece novamente, dessa vez

com remissão, quando GC trata das implicaturas no capítulo 5. Isso ilustra exatamente o ponto que estou querendo mostrar: falta regularidade às remissões. Alguns outros exemplos pontuais, no capítulo sobre eventos, GC remete as classes acionais a Vendler (1967), mas não remete o paradoxo do imperfeito a Dowty (1979). No capítulo 2, propriedade da conservatividade não é atribuída a Barwise and Cooper (1981); esse texto figura genericamente na lista do fim do capítulo, onde falta uma remissão a um texto introdutório detido mas acessível aos quantificadores generalizados.

From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure by Eve Sweetser. Cambridge University Press: Cambridge. 1990

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One might ask whether there is any other way to define cognitive semantics than by its opposition to truth-conditional semantics, or any variant of it for that matter. Indeed, objectivistic philosophy has provided the background to cognitive semantics, which in turn has raised serious questions about its reliability to deal with natural language. What has been called “the second generation of cognitive science” (Lakoff & Johnson,

1999), arose from empirical work in many different fields, challenging virtually every aspect of “objectivistic semantics” (Lakoff & Johnson, 1980; Lakoff, 1987)¹, from which some major contributions are mentioned by Sweetser:

A – Berlin and Kay’s work (1969) on color terms strongly made the case for the way physiology underlies semantic regularities (undermining the myth of a subject-free semantics).

B – Rosch’s work (1973; among others) on basic-level categories suggests that we most often categorize in terms of prototypes of various forms and also that feature-set categories are rather rare; moreover, these prototypically based categories depend deeply on perceptual and interactional factors.

C – Fillmore (1985, among others) launched an argumentation against the autonomy of word meaning, providing evidence that words are defined against a background of assumptions (of various kinds), called frames, and further, that word meaning is prototype-based.

It must be added that although these findings pointed out by Sweetser were mostly at odds with formal semantics in its objectivist flavour, formality is also a posterior goal in this cognitivist tradition (See Langacker, 1999). In fact, there have been some attempts to formalize descriptions of Cognitive Linguistics (CL; e. g., the NTL research group²), the difference being one of focus and priority: cognitive linguists and semanticists tend to ground meaning and language

on bodily factors, independent of how they might be formalized later on. That means formalization is not an aprioristic constraint on accounting for language phenomena.

The final blow to objectivistic approaches came with *Metaphors We Live By* (Lakoff & Johnson, 1980), a major work which has been guiding the cognitive field, including Sweetser's book. Not only is semantics dependent on human cognition and experience, but this very cognition and experience, and hence the semantics (of a natural language), are metaphorically structured. A large amount of data supported the idea that metaphors are a way of structuring one conceptual domain in terms of another and therefore allow the systematic transfer of linguistic expression from one lexical field to another, as well as the use of reasoning from one (more concrete/bodily) domain of experience to think about another (more abstract) and, consequently, one also experiences one domain of experience in terms of another.

Sweetser's *From Etymology to Pragmatics* (1990) draws on this cognitive tradition. And interestingly enough, the opposition to the central tenets of (objectivist) formal approaches of language provides a guiding purpose to tie together the many issues treated in this book. The case studies in the book persuasively throw doubt on virtually every tenet of truth-conditional semantics (as one instance of objectivistic semantics), as Sweetser understands it. In the "truth-conditions" approach to lan-

guage, according to her, "meaning is a potentially mathematizable or formalizable domain" (p. 12), hence the attempt to strictly separate levels of analysis (syntax, semantics, pragmatics), as well as language and cognition. Competing with the formal approach, there is a strong subjectivist approach which claims that "meaning is a morass of culturally and historically idiosyncratic facts from which we can salvage occasional linguistic regularities" (p.12). Subjectivists grant that experience and cognition structure meaning, but because experience is supposed to be varied, it would be hard to make any strict generalization.

Though she makes no direct objection to formalization *per se*, Sweetser does not take it as an aprioristic criterion for meaning analysis. This is a task which can be pursued later on and, as stated above, has been pursued by some research groups. A strong ability for prediction, strict levels of analysis and autonomy of levels are not premises to be taken for granted. Quite the contrary, it has already been mentioned that a series of studies shows that cognition and experience motivate language structure and the emergence of meaning. In the course of the book, further evidence for these claims is provided. As for the structure of experience, the author points out that it is not as random and whimsical as initially believed. For one thing, we all have – other things being equal – the same bodily structure and therefore have the same basic (cognitive) experiences: culturally and historically idiosyncratic

facts must be regarded against a background of extensive basic bodily experiences. Furthermore, linguistic meaning is not that chaotic: “the apparently disorderly domain of linguistic meaning can often be shown to be structured around speaker’s understanding of a given cognitive domain” (p. 12).

Take the conceptual domain of perception verbs (and other expressions in the domain of perception as well), for example. In the second chapter, Sweetser sets out to show that it would be a mistake to analyse historical changes in meanings of perception verbs and polysemous senses separately from the cognitive (bodily) experiences that give rise to these meanings. Likewise, it would be a mistake to deny the role played by metaphor, on the (erroneous) grounds that it is a figure of speech and non-formalizable, etc. Her analysis, on the contrary, incorporates the basing of meaning on the cognitive experience which underlies the meaning of these verbs and expressions, as well as an account of metaphorical mappings responsible for historical changes in meanings and for polysemous senses.

Challenging the idea that meaning changes are whimsical and non-predictable, she observes that “certain semantic changes occur over and over again throughout the course of Indo-European and independently in different branches across an area of thousands of miles and a time depth of thousands of years” (p. 9). What she further realizes is that the phenomena ruling patterns of semantic

change (diachrony) are the same as those governing polysemous senses (synchrony). She provides a fair amount of data which show that verbs of vision – and other lexical items for that matter – come to be used in the conceptual domain of knowledge and intellection, across many branches of Indo-European languages (examples from p. 33, displayed as in the book):

**weid-* “see”

Gk. *eidon* “see”, perf. *oida* “know”
(> Eng. *idea*)

Eng. *wise*, *wit* (alongside the more physical *witness*)

Lat. *video* “see”

Ir. *fios* “knowledge”

As this and other examples show, this historical change is not random, nor specific to any singular Indo-European language. It is an instance of a widespread metaphorical mapping governing the meaning changes of words from the domain of vision to the domain of knowledge; that is, verbs and expressions from a bodily (more concrete) domain come to be used in the domain of knowledge. Moreover, she points out that this regular pattern of change is grounded on human cognitive experience³: “This metaphor is probably based on the strong connection between sight and knowledge, and also on the shared structural properties of the visual and intellectual domains – our ability to focus our visual attentions, to monitor stimuli mentally and visually” (p. 33).

Some of these developments give rise to ambiguous cases in synchronic data;

that is, we have both a physical (purely perceptual) alongside a mental sense (examples from Sweetser, pp. 33-34): *look down on, look up to, look forward to, look back on, overlook, look after* (Germanic roots) and *inspect, spectator, vista, view, survey, vision* (Latin roots); or they may lose their original perceptual sense: *oversee, hindsight, see to, foresee* (Germanic roots) and *suspect, respect, expect, retrospect, prospect, supervise, evident, etc.* (Latin roots). Not only did these lexical items (metaphorically) extend or change meaning historically, but so do lexical items of the domain of vision synchronically (sometimes in novel way) come to be used to refer to knowledge and intellection: *I see what you mean*; or think about this rather eccentric example: *I need a microscope to see what you mean*⁴.

Sweetser shows that this pattern of semantic change and polysemy grounded on a metaphorical mapping is not isolated. Other lexical items from the perceptual domain usually come to be used to refer to the mental domain. More interestingly, it is not the case that sense-perception lexical items can come to refer to each and every thing in the mental domain; rather, that the mappings are systematic, motivated, and partly predictable.

As mentioned above, it is not an accident that verbs and expressions of vision come to be used to express the ability of understanding specifically – a considerable part of our knowledge comes through vision. This reinforces the case

for the systematicity of the mappings, their motivation, and even predictability: if the metaphor exists, one can expect it is going to work this way. Further examples from other perception senses provide more evidence. As it happens, they are invariably used to mean something else in the mental domain; again, this is consistent across many languages.

Hearing, for example, often provides vocabulary (as well as reasoning!) to listening to/heeding/obeying.

Diachrony (etymology): Gk. *kluo* “hear”, Eng. *listen* / Dan. *lystre* “obey” (Sweetser, pp. 34-35).

Synchrony (polysemy): *You don't listen to me* (my example).

Again, there is motivation for why hearing comes to mean listening to/heeding/obeying, rather than, say, understanding: “The function of hearing *par excellence* is, of course, linguistic communication; and since it is our major communicative pathway, it is also our major means of intellectual and emotional influence on each other. ... Thus it is natural that physical auditory reception should be linked with heedfulness and internal ‘receptivity’ ... and hence also to obedience ...” (p. 41). That means, even if one cannot predict that this will happen in each and every language, it is not arbitrary either. Hence, it seems appropriate to say that this metaphor is “natural”, although not fully predictable.

These examples indicate that there is a systematic, domain-specific metaphorical mapping governing the patterns of

meaning change and polysemy of words from the bodily (perceptual) to the mental domain: the mind-as-body metaphor. This is not to say the mappings are mathematically predictable and simple: there is no prediction on an individual basis; the only thing we can do is to say what is natural or likely and what is unnatural and unlikely to happen. In fact, Sweetser mentions, for example, that some mappings may go from the mental to the bodily (perceptual) domain. The same way, the domain-specific mappings are flexible. So, touching can also come to mean understanding, as in *grasping*. Again, this is motivated, rather than random; *grasping* can not be used to refer to each and every kind of understanding. Acknowledging these complexities, and a number of other **apparently** whimsical mappings, according to Sweetser, does not make the approach any less objective. On the contrary, as it takes into consideration the cognitive reality of these meaning changes and polysemy, more objectivity is achieved – cognitively-based objectivity.

Further evidence that strengthens the case for the mind-as-body metaphor is modality analysis, dealt with in chapter 3. Before I go on, let us put the metaphor another way⁵: “Systematic metaphorical connections link our vocabulary of the sociophysical domain with the epistemic and speech act domains” (p. 13).

Sweetser points out that polysemy and pragmatic ambiguity in modality (based on the metaphorical mapping above) is extensively crosscultural (existing in

Indo-European, Semitic, Phillipine, Dravidian, Mayan, Finno-Uric, among other families of languages). She also mentions some earlier works providing historical (Ehrman, 1966; Shepherd 1981), sociolinguistic (Shepherd, *ibid*) and psycholinguistic evidence (Kuczaj & Daly 1979; Shepherd, *ibid*) for the existence of polysemous use of modality – though she does not say whether they knew that polysemy is based on a metaphorical mapping. Her main discussion in this chapter, though, centers around the semantics of modal verbs in English.

The author sets about distinguishing the use of modal verbs in two different domains: a) in the sociophysical domain, which she calls “root verbs” (obligation, permission, ability); and b) in the internal (emotional, psychological) domain, which she calls “epistemic verbs” (necessity, probability, and possibility in reason). As one might expect, the mapping goes from the sociophysical onto the internal domain, and not the other way round.

The starting point to understand the otherwise chaotic use of modal verbs in English, according to Sweetser, is a force-dynamics view of modality (in terms of forces and barriers acting upon events), a concept she adopts from Talmy (1981, 1988), although she uses his ideas in a broader way: “... I prefer to view modality as basically referring to intentional, directed forces and barriers” (p. 52), rather than purely physical, as Talmy does.

Let us take a look at Sweetser’s ideas on the force dynamics behind some proto-

typical instances (author's italics and quotations), both in the sociophysical and in its counterpart in the epistemic domain:

1 - Permission/probability (prototypically the verb *may*⁶): expresses a "potential but absent barrier" (p. 52).

Ex.: a) root (permission in the sociophysical domain): *John may go*. ("John is not barred by (mine or some other authority) from going") (p. 61).

b) epistemic (probability in the epistemic domain): *John may be there*. ("I am not barred by my premises from the conclusion that he is there") (p. 61).

2 - Obligation/necessity (prototypically the verb *must*): expresses a "compelling force directing the subject toward an act" (p. 52).

Ex.: a) root (obligation): *You must come home by ten*. (*Mom said so*). ("The direct force (of Mom's authority) compels you to come home by ten") (p. 61).

b) epistemic (necessity in reasoning): *You must have been home last night*. ("The available (direct) evidence compels me to the conclusion that you were home") (p. 61).

3 - Ability/possibility (prototypically the verb *can*): "*can* denotes positive ability on the part of the doer; *may* denotes lack of restriction on the part of someone else" a "potential force or energy" (p. 53).

Ex.: a) root: *I can lift fifty pounds*. ("Some potentiality enables me to lift 50 lbs.") (p. 62).

b) epistemic: *You can't have lifted fifty pounds*. ("Some set of premises dis-enables me from concluding that you lifted 50 lbs.") (p. 62).

What Sweetser has shown is that there is **structural** similarity between the sociophysical and epistemic domains which motivates the metaphorical mapping. The counterparts (see Fauconnier, 1985) for sociophysical forces and barriers in the epistemic domain are premises, and for events they are conclusions or other acts of reasoning. Not everything maps as expected because the structure of the target domain (reasoning) must be preserved (the epistemic domain, for instance, has just one kind of force: premises). However, the mapping must be coherent with the topological similarity: forces and barriers map onto premises, and events map onto conclusions, not the other way round. In the same way, sociophysical obligation maps onto epistemic necessity, rather than onto possibility.

Sweetser claims further that this polysemy may manifest itself as pragmatic ambiguity and "pragmatic factors will influence a hearer's interpretation of a particular uttered modal as operating in one domain or the other ..." (p. 64), for instance, a) adding clauses expressing reasons for achieving a conclusion motivates an epistemic reading; and b) adding clauses expressing real-world forces motivates a root reading.

Pragmatics also has a major importance in this analysis when it comes to another mapping, now from the sociophysical domain onto the conversational domain. The following sentence, for example, can only be understood once this metaphorical mapping is posited, taking into consideration barriers in the conversational world:

Ex.: He may be a university professor, but he sure is dumb. (“I do not bar from our joint *conversational* world the statement that he is a university professor, but ...”). (p. 70, author’s italics and quotation).

Even though this part of the analysis is less extensive – she acknowledges the need for further investigation – it yields a further argument for the interplay between semantics and pragmatics, making the strict semantics/pragmatics improbable. Furthermore, works mentioned above show that the same phenomenon governing polysemy, and pragmatic ambiguity, underlies patterns of meaning change, and vocabulary learning: a metaphorical mapping from the sociophysical onto the epistemic domain.

Furthermore, Sweetser extends the same approach, based on metaphorical mappings, to deal with traditional topics of formal semantics, the ones supposed to belong to the most basic elements in language and so amenable to a logical description: causal conjunctions and *if-then* conditionals. Take the causal conjunctions: as Sweetser argues throughout chapter four, they⁷ are subject to usage in three different domains (content,

epistemic and conversational), just like modals and perception verbs. But unlike modals and perception verbs, the meanings of conjunctions are rather general and therefore apt to be used in different domains: they represent a typical case of pragmatic ambiguity – “a single semantics is pragmatically applied in different ways according to pragmatic context” – rather than lexical polysemy – “morpheme has several related semantic values” (p. 76).

Sweetser observes that utterances may be distinguished as having a content, epistemic or conversational status, and that this distinction is crucial to the analysis of the pragmatic ambiguity of conjunctions. A causal conjunction like *because*⁸, for instance, has a very general meaning and may be used in different ways, referring to causality in the content, epistemic, and conversational domain of the utterance. A sentence semantics which does not acknowledge this multileveled usage cannot account for certain linguistic phenomena, as the following examples show (Sweetser’s examples, p. 77; my parentheses):

(1) John came back *because* he loved her.

(His love causes his coming back; therefore, there is causality in the sociophysical world).

(2) John loved her, *because* he came back.

(The content of the second sentence causes someone to believe in John’s love; therefore there is a causality in the epistemic world).

(3) What are you doing tonight, *because* there's a good movie on.

(The content of the second sentence causes (or motivates, in other cases it may simply enable) the speaker to produce the speech act in the first sentence; therefore there is a causality in the conversational world).

Sweetser argues that this three-leveled view of utterances is not only necessary as a tool for explaining generalizations which would otherwise be missed, but it must also be postulated for utterances independent of the analysis of conjunctions: "it seems reasonable to talk about utterances as having a content, a speech-act force, and some kind of epistemic status" (p 82). Furthermore, she points out that there is cross-linguistic evidence showing a clear linguistic differentiation in referring to the three different domains. Ex.: Fr. "*Parce que*" (exclusively content conjunction) and "*puisque*" (p. 82) (epistemic and conversational conjunction).

The three-leveled analysis of conjunctions is not only an efficient tool for understanding the usage of conjunctions but it also further reinforces the case for the metaphorical mapping posited in the beginning of the book. It shows that the same metaphor (mind-as-body, or internal self-as-external self, or alternatively epistemic/conversational domain-as-content domain) accounts for patterns of historical change (chapter 2, bearing on etymology), lexical polysemy (bearing on lexical semantics), and prag-

matic ambiguity (bearing on sentence semantics and pragmatics).

Sweetser's book is above all a strong defense of the cognitive approach to language, widely supported by evidence stemming from various fronts: from etymology to pragmatics. Every case study argues the case for a cognitively oriented linguistics. A single metaphorical mapping – be it named body-as-mind, internal self-as-external self, or epistemic/conversational domain-as-content domain metaphor – underlies the analysis of many different phenomena: patterns of historical change and polysemy crosslinguistically (chapter 2, dealing with perception verbs), polysemy in English modals (chapter 3), and pragmatic ambiguity (chapter 4 and 5), dealing with conjunctions and conditionals.

In addition to ascribing metaphor a fundamental role (unthinkable in truth-conditional semantics), some other objectivistic tenets are challenged. First, Chapter 2 shows that etymology is not chaotic, no matter how un-deterministic it may be, and it is amenable to scientific study, one that is cognitively motivated. Second, the same chapter also makes the case for the interrelationship between synchrony and diachrony (the same phenomena observed in polysemy are found to have motivated past historic developments; so etymology is even more relevant to semantics, and semantics may provide tools to analyse patterns of historical change in meaning). Third, chapters 4 and 5 rule out a strict distinction between semantics and pragmatics

(pragmatic ambiguity lies in the fuzzy area between the two disciplines), as well as persuasively arguing that pragmatic factors influence semantics and syntax. Finally, this book also, maybe most importantly, offers a strong case for the relationship between language and cognition, as our understanding of language is at least partly grounded on our cognitive experiences and on cognitive understanding of the world, our socio-physical interactions and ourselves.

From Etymology to Pragmatics is a fine example of what has been done by researchers in the second generation of cognitive science, although its results may not have been predicted from any premises in this framework. Rather, in analysing, say, patterns of historical change in meanings of perception terms, Sweetser realized that they naturally fit in and are elegantly explained by the conceptual theory of metaphor. As cognitive linguistics has advanced over the last decade, some corrections or extensions were inevitably carried out, one example being Sweetser's book (to appear) on conditionals, which interestingly follows a suggestion in *From Etymology to Pragmatics* that Fauconnier's mental spaces (1985) should be used to explain the links between various domains. And its publication coincided with the launching of the monograph series Cognitive Linguistics Research as well as the journal Cognitive Linguistics, following a symposium held in Duisburg in 1989. The first monograph of the series, *Concept, Image, and Symbol: the Cognitive Basis of Grammar*, by

Langacker (1990), has also strongly influenced the field since then.

Similar works have since been done dealing with various linguistic issues in different languages, from which I shall mention a few random examples: a) on lexical semantics and morphology: Janda's (1999) case study of athematic 1 sg *-m* in the Slavic languages; b) on syntax and semantics: Sanders' (1999) work on subjectivity in epistemic modals in Dutch; c) on pragmatics: Langendonck's (1999) paper on markedness and prototypical speaker attributes; d) historical semantics: a whole Cognitive Linguistics Research monograph, organized by Blank and Koch (1999). In Brazil, cognitive linguistics is still embryonic, but it has been flourishing recently. Some recent works are: a) Leitão's work (1999) on conditionals; Novaes (2001) paper on iconicity of language; and my own ongoing research (doctoral dissertation) on ideological metaphors, meshing together cognitive semantics and critical discourse analysis, as well as several other dissertations nationwide, especially on metaphor analysis (among others, Lunardi's (2001) dissertation on linguistic prejudice in language teaching metaphors). Finally, Salomão has an extensive bibliography in CL ranging from more recent approaches to mental spaces, namely cognitive blendings (2001), to a more general assessment of the CL enterprise (2000).

If we look at the whole field of cognitive linguistics, the list may go on and on,

crossing language boundaries and specific disciplines. In fact, it is hard to choose some examples as there are so many of them. And although Sweetser's *From Etymology to Pragmatics* may not have influenced them directly, it certainly inspired work in the field by binding together so many different linguistic issues, as the name of the book suggests. And it sounds fair to say that this book – as well as Cognitive Linguistics – refers to a research tradition in its own right, despite its common definition relative to truth-conditional semantics and generative linguistics. After the publication of *As Metáforas da Vida Cotidiana*⁹ (Lakoff & Johnson, 2002), *From Etymology to Pragmatics* is another classic work in CL which more than deserves a Portuguese translation.

Notes

- 1 See Bittencourt, 2000, for a brief overview – in Portuguese - of the Cognitive Linguistics enterprise and its place in the second generation of cognitive science. For an authoritative account of major issues in Cognitive Semantics and Linguistics in a Brazilian publication, see Lakoff's interview in *Fórum Lingüístico*, 1998.
- 2 The Neural Theory of Language project is an interdisciplinary research group based at UC Berkeley and is mainly concerned with how the brain computes the mind. Among other stated goals, the NTL group seeks to create a notational (neurocomputational) language to help linguistic investigation and description.
- 3 And it is precisely this grounding on experience that causes this mapping to be regular and systematic.
- 4 This example was actually mentioned by Sweetser in a class at UC Berkeley in the Fall of 2003.
- 5 The name of the mapping is just a mnemonic, so there is some flexibility to rename it. In fact, at some other point she says that the metaphorical mapping involved is that of the internal self – the mind – being understood in terms of the external (sociophysical self) self – the body.
- 6 Observe that an overlap arises between *can* and *may* because positive enablement (*can*) may be viewed as a negated restriction/remotion of a barrier (*may*).
- 7 The same applies to other conjunctions as well, as discussed in the same chapter.
- 8 She provided examples showing that the three-leveled analysis works out for other conjunctions (like *since*, *although*, *and*, *or*, and *but*) as well.
- 9 Lakoff's paper *The Contemporary Theory of Metaphor* (1993) is a shorter updated version of the Conceptual Theory of Metaphor first proposed in Lakoff and Johnson (1980).

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