Universiteit Leiden | Leiden University Centre for Linguistics Humanities

In memoriam

This page commemorates Martin Honcoop.

Martin Honcoop graduated in Linguistics at Leiden University in 1992. There he got his PhD in Linguistics in 1998. He was an assistant professor at UCLA from 1998 to 1999.

Martin died in May 2000, at the age of 31.

LUCL cherishes his memory.

On this page, you can find the downloadable text of his beautiful dissertation *Dynamic Excursions on Weak Islands* and of several articles. There is also a summary of the dissertation and a bibliography to be found here.

Below are the three versions of Martin's dissertation. The PS and WPD (WordPerfect 8) versions have small ((typo)graphical errors; the PDF version has been re-edited and should be impeccable.

Dissertation (PDF)
Dissertation (PS)
Dissertation (WPD)

Here is the summary of Martin's dissertation, *Dynamic excursions on Weak Islands* (1998), by his own hand.

In this thesis, we have studied the phenomenon of Weak Islands from a formal semantic perspective. Weak Islands are contexts that are transparent with respect to some, though not all quantificational dependencies that involve an operator and a variable-expression. Given contrasts such as the ones observed in (1) and (2), we thus know that *whether*-clauses and universal negative quantifiers for example constitute Weak Islands. The phenomenon of Weak Islands poses the following basic

questions. Firstly, what is the proper characterization of those expressions, such as the *wh*-adverb *how*, that are sensitive to Weak Islands? Secondly, what is the proper characterization of those expressions, such as *whether* and *no mechanic*, which create Weak Islands? Finally, why is it that the first class of expressions cannot be combined in the required way with the second class of expressions?

(1) a Which man did you wonder [whether to invite _]?

b *How did you wonder [whether to fix your car _]?

(2) a Which car has [no mechanic fixed _ yet]?

b *How has no mechanic fixed my car _ yet]?

The most powerful and successful theory of Weak Islands to date is the one developed by Szabolcsi & Zwarts (1993) which is couched in the framework of algebraic semantics. As was explained in detail in Chapter 1, this theory offers the following answers to the three major issues raised by the phenomenon of Weak Islands. Firstly, the expressions that are sensitive to Weak Islands are those that range over algebraically impoverished domains. Secondly, the expressions that create Weak Islands are those that are semantically associated with at least some Boolean operations (meet or complement) that cannot be executed in the algebraic domains the elements of which island-sensitive expressions range over. Finally, the first class of expressions cannot be combined in the required way with (that is, scope over) the second class of expressions since in general, if a scopes over b, then the Boolean operations associated with b must be executed in a's denotation domain. We concluded this chapter by observing that a substantial number of expressions that create Weak Islands also have a particular dynamic effect: any simple indefinite contained in their scope cannot bind a pronoun outside of their scope. Compare for example (1) and (2) above with (3). The phenomenon illustrated in (3) is called *inaccessibility*.

(3) a *John wonders whether this shop has a bike$_i$. He saw it$_i$ last week.

b *Nobody has a bike$_i$. It$_i$ was stolen last week.

Correlations such as these strongly suggest that in addition to the constructions discussed by Szabolcsi & Zwarts (1993), there is a significant set of Weak Island effects that are best accounted for by making use of the tools of Dynamic Semantics, as espoused by Groenendijk & Stokhof (1989,1990,1991) and Chierchia (1992,1995). The main contribution of this thesis consists in carefully developing a theory of Weak Islands which refers to dynamic aspects of meaning, rather than static algebraic ones. To set the stage for an alternative dynamic approach to Weak Islands, we presented in Chapter 2 a version of Dynamic Semantics which departs only in minor respects from Groenendijk & Stokhof's (1989,1990) Dynamic Montague Grammar and the system of Dynamic Semantics developed by Chierchia (1992,1995). Special attention was paid here to certain issues that arise in connection with quantificational adverbs, plural anaphora and collective versus distributive predication. Having thus established our point of reference, we set sail. During our dynamic excursions on Weak Islands, we came across the following three basic questions and provided the following answers:

Question I. *Why are all split constructions sensitive to Weak Islands, where split constructions are structures in which a quantificational expression must bind a simple indefinite as its restriction even*

though it does not form a constituent with it?

The generalization alluded to in this question was referred to in Chapter 3 as the *Intervention Generalization*. We argued there that the various constructions covered by this generalization constitute the paradigm case for a dynamic, rather than an algebraic approach to Weak Islands. The Intervention Generalization can be stated as in (4):

(4) The Intervention Generalization

* ... [M Q_i ... [Weak Island Operator ... [indefinite D_i NP] ...] ...] ...

The Intervention Generalization can be straightforwardly derived from the system of Dynamic Semantics presented in Chapter 2. Dynamic Semantics insists that the semantics of all simple indefinites be uniformly represented in terms of existential quantification. To account for the well-known chameleontic nature of simple indefinites, Dynamic Semantics seeks refuge in an operation called Existential Disclosure (ED; cf. Dekker 1990,1993a,b). ED is a fully compositional procedure which enables us to address an indefinite as though it acts as a restricted variable in the semantics. Since the indefinite in structures which conform to (4) needs to be (dynamically) bound by *Qi*, we must apply ED to it. For ED to be applied properly, the indefinite which needs to be disclosed must bind a variable which occurs outside of its syntactic scope. It is now predicted that any (semantically sensible) application of ED is conditioned by inaccessibility, a restriction which governs the well-formedness of anaphoric links between a variable expression and a non-c-commanding antecedent (cf. 3 above). By tentatively generalizing our earlier observations concerning the correlation between the class of expressions which create Weak Islands and the class of expressions which induce inaccessibility, we have explained the Intervention Generalization. Since ED cannot yield a semantically coherent interpretation for the relevant constructions, due to the inaccessible domain for dynamic anaphora created by *Operator*, the structures conforming to (4) will be ruled on semantic grounds. Along these lines, the ungrammaticality of the examples in (5) and (6) receives a natural explanation:

(5) a *Wat$_i$ hebben hoogstens drie studenten voor een$_i$ boek gelezen?
"What kind of book did at most three students read?"

b *Wat$_i$ hebben precies drie studenten voor een$_i$ boek gelezen?
"What kind of book did exactly three students read?"

(6) a *Nobody$_i$ gave at most three beggars a$_i$ red cent

b *Nobody$_i$ gave exactly three beggars a$_i$ red cent

We have thus seen that a dynamic approach offers the following answers to the three basic questions raised by Weak Islands, mentioned in the above. Firstly, the expressions that are sensitive to Weak Islands are those that need to dynamically bind an indefinite as their restriction, even though they do not form a constituent with it. Secondly, the expressions that create Weak Islands are those that induce inaccessible domains for dynamic anaphora. Finally, the first class of expressions cannot be combined in the required way with (that is, bind inside the scope of) the second class of expressions since in general, a cannot dynamically bind b if b is contained in an inaccessible domain for dynamic anaphora.

Question II. *Why do opaque or intensional contexts not constitute inaccessible domains for dynamic binding?*

A dynamic approach to Weak Islands is in trouble whenever an expression which induces an inaccessible domain for dynamic anaphora does not create a Weak Island. The following contrast, which involves the intensional verb *think*, therefore means red alarm.

(7) a Wat$_i$ dacht Jan dat hij voor een$_i$ monster had gezien?
"What kind of monster did Jan think that he had seen?"

b *John thought he saw a$_i$ photomodel yesterday. She$_i$ smiled at him.

The general problem which intensionality poses for a dynamic approach to Weak Islands is addressed in Chapter 4. We argued there that this problem ceases to exist if we opt for an intensional version of Existential Disclosure (IED) which involves a free discourse marker ranging over CCPs. As desired, IED yields the same results in extensional contexts as Dekker's (1990) original formulation. However, on Groenendijk & Stokhof's (1989) compositional approach to modal subordination, IED in addition enables us to disclose an indefinite across (non-presuppositional) opaque domains if it is assumed that intensional verbs such as *think* (Cattell's 1978 volunteered stance verbs) introduce the CCP denoted by their complement clause as a discourse referent.

Question III. *What is the relationship between the Boolean properties of a given expression and its dynamic properties?*

This question was raised in Chapter 4 as well, where we investigated more generally the precise relationship between Szabolcsi & Zwarts's (1993) algebraic theory of Weak Islands and our own dynamic approach both in empirical and in theoretical terms. We first established that our dynamic account of the Intervention Generalization cannot be subsumed under Szabolcsi & Zwarts's approach. There is sufficient evidence which shows that the Intervention Generalization in (4) holds independently of the algebraic properties of Q_i's denotation domain. We furthermore saw that Szabolcsi & Zwarts's algebraic account of various Weak Island constructions cannot be subsumed under our dynamic approach either. This becomes particularly evident when we turn to semantic 'Relatived Minimality' effects where different extractees are sensitive to different interveners. Finally, we observed that there are Weak Island effects that may be accounted for either dynamically or algebraically. When taken together, these findings point to the following conclusion: neither the algebraic nor the dynamic approach to Weak Islands can account for the full range of intervention effects. Even though this might come as a shock at first, this is in fact the expected situation if both theories are concerned with clearly distinct aspects of meaning.

Still, the fact that virtually the same class of 'bad interveners' is singled out on both accounts strongly suggests that the two theories do not focus on completely independent levels of meaning. If so, then there should be a more general theory in which the essential features of both analyses are combined that can account for the whole gamut of Weak Island effects. It was with an eye toward this more general theory of Weak Islands that we then speculated on a relatively simple but effective procedure which enables us to compute the dynamic properties of a given expression on the basis of its Boolean

properties. In general, a quantifier Q is called (externally) dynamic (and therefore will not induce an inaccessible domain for dynamic anaphora) just in case for any CCP Φ, $\mathcal{Q}x$ (Φ) ≡ λ*p*Q′*x* (Φ(*p*)), where Q′ is the static counterpart of $\mathcal{Q}$ and *p* ranges over propositions, or equivalently, sets of assignments to variables. Suppose that the set of all sets of assignments to variables Π constitutes a (proper) join semilattice. This would follow if we removed $\varnothing_{<s,t>}$ (the empty set of assignments to variables) from pow(Ω), where Ω is the set of all assignments to variables. Recalling Szabolcsi & Zwarts's point concerning the connection between scope and Boolean operations, in order to construct the set of propositions denoted by λ*p*Q′*x* (Φ(*p*)), we must therefore perform the Boolean operations associated with Q′ in Π = pow(Ω) – $\{\varnothing_{<s,t>}\}$. If Q′ is associated with join, the denotation of λ*p*Q′*x* (Φ (*p*)) can be properly constructed. Assume furthermore the Compatibility Hypothesis: if assigning an (externally) dynamic denotation $[f]^{Dyn}$ to *f* is compatible with the Boolean properties associated with *f*, we should assign $[f]^{Dyn}$ to *f*. It is now correctly predicted that any expression which is associated exclusively with join denotes an (externally) dynamic function. Conversely, if Q′ is associated with meet and/or complement, we cannot construct a proper denotation for λ*p*Q′*x* (F(*p*)) since we assumed that P forms a (proper) join semilattice. This correctly predicts that any expression which is associated with meet and/or complement denotes a (externally) static function. To the extent that both the Compatibility Hypothesis as well as our specific assumption with respect to the algebraic structure of P can be solidified, we might have found a way in which the algebraic and dynamic approach to Weak Islands can be naturally integrated into a more general theory that can derive the full range of intervention effects.

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For additional information on Martin's work you can contact Crit Cremers at LUCL.

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