(Non-)identity statements are ambiguous between a type/kind and a token/individual interpretation (Heim 1985; Lasersohn 2000; Nunberg 1984; Wetzel 2006; among many others):

(1) Enzo owned a different car than I used to own
   a. True if Enzo and I owned different models (type reading)
   b. True if Enzo and I owned two different Ferraris (token reading)

In Greek, non-identity can be expressed by diaforetiko/‘different’ ((2)a) or periphrastically by ena allo/lit. ‘one other’ in what will be called the ‘ena allo’ construction ((2)b).

(2) The ena allo construction
   a. O Giannis agorase ena diaforetiko biblio
   b. O Giannis agorase ena allo biblio
      the John bought a(n) other book
      ‘John bought a different book’

There is a minimal permutative variant of ena allo which resolves the ambiguity. The allo ena/lit. ‘other one’ frame (3)b only admits the token/individual interpretation:¹

(3) a. O Giannis agorase ena allo biblio
    the John bought a(n) other book
    ‘John bought a different book’ (*type reading/ªtoken reading)
   b. O Giannis agorase allo ena biblio
    the John bought other a    book
    ‘John bought another book/one more book’ (*type reading/ªtoken reading)

(4) a. How are the meanings underlying the type-token contrast best characterized semantically?
   b. Are the ena allo and the allo ena construction systematically related? If yes,
      i. Does allo contribute a constant meaning component to the two variants?
      ii. Are similarities in meaning the result of a shared derivational history, or exclusively due to convergence of semantic and/or lexical properties of the individual parts?

(5) Polysemy Hypothesis

Meanings of lexically under-specified elements are structurally determined (e.g. Borer 2005). The type-token contrast manifested by the Greek ena allo/allo ena alternation is the result of systematic polysemy that is disambiguated by structure.

Outline:
- Spelling out the Polysemy Hypothesis
- Arguments against Polysemy Hypothesis
- Additive particles
- Towards a typology of non-identity
1. POLYSEMY HYPOTHESIS

1.1. TYPES, KINDS AND GEN

What is the best semantic characterization of the type/kind reading of (6)?

(6) John bought ena allo a different book

Types as kinds: Types (e.g. the letter P) are individuation conditions for tokens (p, P, ®, ...) and can be conceived of as individual concepts. Natural kind terms (cat, table, ...) have been analyzed as individual concepts, too (Chierchia 1995, 1998). Kinds are functions from situations to maximal (plural) individuals of partially ordered individual domain:

(7) \begin{align*}
\text{properties} & \rightarrow \text{kinds} \\
\text{a. ['']} & = \lambda P_{<s,et}:\lambda \text{x} \cdot P(s)(x) \\
\text{b. ['book']} & = \lambda \text{x} \cdot \text{book}(s)(x)
\end{align*} 

(Chierchia 1995)

(8) \begin{align*}
\text{kinds} & \rightarrow \text{properties} \\
\text{a. ['']} & = \lambda d_{<s,et}:\lambda \text{x} \cdot \text{d}(s) \\
\text{b. ['book\_kind']} & = \lambda \text{x} \cdot \text{book\_kind}(s)
\end{align*}

‘for every situation, the maximal book individual in that situation’

Problem I: Kinds do not directly combine with determiner denotations.

(9) \begin{align*}
\text{a. John bought ena allo book} \\
\text{b. [one]_{<et,¹\<t,et} \times \lambda \text{x} \cdot \text{book}(s)(x)_{<se}}
\end{align*}

(type mismatch)

Problem II: Type reading of (6) does not require natural kinds with essential properties.

(10) \begin{align*}
\text{a. The (#green) Coke bottle has a narrow neck} & \quad \text{(Carlson 1977, attributed to B. Partee)} \\
\text{b. John bought a different green car. He bought a Puch.} & \quad \text{(*type reading)}
\end{align*}

Types by GEN: A widely used variant of \$ is the genericity operator GEN (Krifka et al. 1995):

(11) John GEN runs

Kratzer (2009): situations and individuals are closed under sum formation by \(<_p\) and related by join homomorphism between \(D_s\) and \(D_e\). Individuals are parts of situations. An attempt at a formulation of GEN (NB: most likely too weak, too much stuff in protasis):

(12) \[\text{[GEN]} = \lambda P_{<s,et}:\lambda \text{x} \forall s'[s' \leq_s s \land x \leq_p s' \land C(s') \rightarrow P(s')(x)]\]

(where C denotes a contextually fixed resource variable)

(13) \[\text{[John GEN runs]} = \lambda s' \forall s'[s' \leq_s s \land \text{john} \leq_p s' \land C(s') \rightarrow \text{run}(s')(\text{john})]\]

‘situations in which John is running in all salient parts of s which include John’

(14) Conjecture

\begin{align*}
\text{a. Natural kinds are derived by } \wedge \text{.} \\
\text{b. Type-kinds are derived by GEN ((12) or some improved version thereof).}
\end{align*}

Consequence I: Natural kinds and type-kinds are related to generic statements, yet not by identical means, generating a three-way distinction. This is desirable since GEN makes it possible for episodic stage level predicates to combine with kinds (Carlson 1977; Paola Menendez-Benito, p.c.).

(15) \begin{align*}
\text{a. Dinosaurs [GEN ate Kelp]_SL} & \quad \text{(Carlson 1977: ex. (74))} \\
\text{b. Dinosaurs\_kind [are extinct]_IL}
\end{align*}
This setup predicts a contrast between (16)a and (16)b (judgements?):

(16) a. Aggressive dinosaurs [GEN didn’t eat Kelp]SL  
(b. Aggressive dinosaurs [are extinct]SL  

Consequence II: GEN leaves type of its argument intact (<s,et>, whereas 1 results in nominalization. Thus, GEN may act as predicate modifier. 2 Type reading is result of GEN applying to (allo) NP:

(17) a. [[GEN [NP book]]] = λsλx∀y[P(s)(x) ∧ P(s)(y) ∧ x ≠ y]  
b. [[a [NP book]]] = λQ<et>,λs∃x∀y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y ∧ Q(s)(x)]

1.2. A STRUCTURAL ANALYSIS OF THE ENA ALLO/ALLO ENA CONTRAST

1.2.1. Analysis of token readings: Assume working hypothesis for allo/‘different’ in (18); token readings are then derived as in (19).

(18) [allo/‘different’] = λP<et>,λsλx∃y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y]  
(19) John bought ena allo book  

a. [[allo [NP book]]] = λsλx∃y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y]  
b. [a [allo [NP book]]] = λQ<et>,λs∃x,y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y ∧ Q(s)(x)]

c. λs∃x,y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y ∧ John bought x in s]  

‘set of situations which include two different books and John bought one of them’

The allo ena variant of the token reading is derived by syntactic permutation, i.e. left ward movement of allo. Movement is later undone in semantics/syntax:

(20) John bought allo ena t₁ book  

1.2.2. Analysis of types/kinds: Type reading is the result of construing allo NP within the scope of GEN.

(21) John bought ena allo book  

a. [[[DP GEN [NP allo book]]] = λsλx∀y[book(s)(x) ∧ book(s)(y) ∧ x ≠ a]]

b. [a [[DP GEN [NP allo book]]] = λQ<et>,λs∃x∀y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y] ∧ Q(s)(x)]

b. λs∃x[∀y[book(s)(x) ∧ book(s)(y) ∧ x ≠ y] ∧ John bought x in s]  

‘set of situations which includes two book types, a token of one of which John bought’

1.2.3. No type reading for allo ena: Assume GEN is located below the position of enal/‘a’ (follows from logical type of expressions). Thus, GEN may not apply to allo if allo precedes ena:

(22) allo...[GEN... allo... NP  

→ allo ena frame lacks type reading because scope order GEN > allo contradicts surface order.

Question: Given that allo is flexible in its position, why can allo not move across GEN?

Answer: In movement analyses of interpretive phenomena (Diesing/Kratzer), displacement across GEN (or existential closure) is never undone. Thus, movement is only compatible with token readings.
1.3. Individual Level vs. Stage Level Modification

Analysis is supported by its ability to capture variation across an additional dimension, the distribution of NP-internal Individual Level (IL) vs. Stage Level (SL) predicates.

NP-internal GEN: IL predicates have been analyzed as generics (Chierchia 1995; Larson 1998):

\[
[Mary \text{ is [GEN intelligent]}] = \lambda s \forall s' [s' \leq_p s \land \text{mary} \leq_p s' \land C(s') \rightarrow \text{intelligent}(s')(\text{mary})]
\]

Larson & Takahashi’s (2007) on NP-internal modifiers: cross-linguistically (Engl., Turkish, Korean, Japanese, Chinese), IL modifiers occur closer to the head noun than SL modifiers.

\[
a. \quad \text{[Sigara iç-mek-te ol-an]}_{\text{SL}} \text{[mühendis ol-an]}_{\text{IL}} \text{ adam} \quad \text{(Larson and Takahashi 2007, ex. (24))}
\]

\[
\text{[cigarette smoke-ing be-REL][engineer be-REL] man}
\]

\[
\text{‘the man who is an engineer who is smoking’}
\]

b. *\text{[mühendis olan]}_{\text{IL}} \text{[sigara içmekte olan]}_{\text{SL}} \text{ adam}
\]

Distribution of IL readings is regulated by the position of the modifier relative to GEN:

\[
{\text{DP}} \ldots \text{[SL-modifiers} ... \text{[GEN... [IL-modifiers... [NP...}
\]

NP-internal IL vs. SL contrasts: The ena allo alternation partially disambiguates the IL/SL-distinction. Interestingly, it is now the ena allo variant that bleeds one of the readings (compare to (3)).

\[
a. \quad \text{Vrikan allo ena orato astro} \quad \text{(*individual level/\ast stage level)}
\]

\[
\text{found other a visible star}
\]

\[
\text{‘They found another visible star’}
\]

IL-context: Using advanced technology, astronomers identified a star that can in principle be observed from earth (IL) but is not currently visible due to light pollution. (26)a expresses the proposition that another such object was found.

SL-context: External conditions have improved. Astronomers now found a star that is directly visible (SL) from earth. According to the SL-reading of (26)a, they came upon one more star with these properties.

\[
b. \quad \text{Vrikan ena allo orato astro} \quad \text{(*individual level/\?\ast stage level)}
\]

\[
\text{found a(n) other visible star}
\]

\[
\text{‘They found another visible star’}
\]

\[
\begin{array}{ccc|ccc}
\text{ena allo visible} & & \text{allo ena visible} \\
\text{Type} & \text{Token} & \text{Type} & \text{Token} \\
\hline
\text{a. IL} & \text{ok} & \text{ok} & \ast & \text{ok} \\
\text{b. SL} & \ast & \ast & \ast & \text{ok} \\
\end{array}
\]

Analysis: SL/IL contrasts reflect NP-internal position of orato relative to GEN.

Assumptions

a. Greek NPs are structured as in (29).

b. allo is closer to GEN than orato. \hspace{1cm} \text{(stipulated)}

c. allo\_token optionally moves across ena.

d. Modifiers in the scope of GEN are assigned an IL-interpretation. (Larson, Diesing/Kratzer)
(29) Fragments of the architecture of Greek DPs

(30) ena allo orato astro

a. Type IL (3): allo and orato below GEN
b. Token IL (2): allo above GEN, orato below GEN
c. *Type SL: allo below GEN, orato above GEN: contradicts word order or (28)b
d. *Token SL: allo above GEN, orato above GEN: impossible because of (28)b

(31) impossible (word order)

no SL-readings

(32) allo ena orato astro

a. Token IL (1): allo above GEN (moves to the left of ena), orato below GEN
b. Token SL (2): allo above GEN (moves to the left of ena), orato above GEN
c. *Type IL: allo and orato below GEN: allo\textsubscript{type} can’t escape GEN by movement
d. *Type SL: allo below GEN, orato above GEN: allo\textsubscript{type} can’t escape GEN by movement

(33) impossible (word order)

no type readings
**Prediction:** Given (28)b, the order in (34) is expected to be unattested.

(34) *ena orato\textsubscript{IL} allo\textsubscript{type} astro

**Corollary of analysis:** GEN cannot be optional, as this would admit token SL reading (30)d. Thus, it must be possible to insert non-generic NPs above GEN. (This consequence applies to all structural GEN analyses of IL/SL contrasts, such as Larson & Takahashi 2007; Larson 1998).

1.4. **A FURTHER TEST FOR POSITION RELATIVE TO GEN**

*believe, judge* and *consider* embed IL expressions but resist combination with SL predicates (Dikken, Larson & Ludlow 1997: 32).

(35) a. Max considers/believes Bill altruistic/intelligent. \((\text{compatible with IL})\)
b. *Max considers/believes Bill available/on the boat. \((\text{incompatible with SL})\)

(36) a. Theoro ton Petro eksipno ‘I consider the Peter intelligent’ \((\text{compatible with IL})\)
b. *Theoro ton Petro stin barka ‘I believe the Peter on the boat’ \((\text{incompatible with SL})\)

**Observation:** The small clause frame excludes token readings.

(37) I consider Bill a different enemy \((^{*}\text{type IL}/^{*}\text{token IL})\)

a. I consider Bill to be a different type of enemy
b. *I consider Bill to be an enemy and an individual different from that enemy

→ The *consider* frame singles out *type IL readings*, i.e. elements in the scope of GEN. As seen above, only the *ena allo* constructions fits that profile (\(^{ok}(30)a\) vs. *(32)c).

**Prediction:** *theoro/*‘consider’ can embed *ena allo*, but not *allo ena* frame.

(38) a. Theoro ton Sirio ena allo orato astro ‘I consider Sirios a different visible star’ \((^{*}\text{type IL}/^{*}\text{token IL})\)
b. *Theoro ton Sirio allo ena orato astro ‘I consider Sirios another visible star’ \((^{*}\text{type IL}/^{*}\text{token IL})\) \((\text{for contexts see (26)})\)

(39) **Interim summary**

The findings above support the assumptions that

a. the *ena allo/allo ena* alternation is structurally disambiguated and that
b. word order tracks hierarchy.

2. **WHY THE POLYSEMY HYPOTHESIS FAILS**

There are various problems for the polysemy hypothesis that make it unlikely to succeed:

- Relation between kinds and types is blurry and lacks a better ontological foundation. Also: what exactly are the meaning differences?
- Semantics of GEN is imprecise.
- Various aspects of analysis are not made explicit: mapping kinds-IL-SL, semantics of *allo*...

Apart from that, there are at least three empirical problems.
2.1. Problem I: Complementation

Just as in English, *different* in Greek selects either a prepositional phrasal complement (*apo*) or a full clausal complement introduced by a free relative marker (*ap’o,ti*; see e.g. Merchant 2006):

(40) O Giannis agorase *ena diaforetiko* biblio apo ti i Maria/\textit{ap’o,ti} i Maria
\hspace{1cm} the John bought a different book \hspace{0.5cm} than,\textsubscript{p} the Mary\textsubscript{ACC}/\textit{than},\textsubscript{c} what the Mary\textsubscript{NOM}
\hspace{1cm} ‘John bought a different book than Mary’

While *ena allo* optionally selects a comparative complement ((41)b), *allo ena* NP is intransitive ((42)):

(41) a. *?O Giannis agorase *ena allo* biblio apo ti Maria
\hspace{1cm} the John bought an other book \hspace{0.5cm} than,\textsubscript{p} the Mary\textsubscript{ACC}
\hspace{1cm} ‘John bought a different book than Mary’

b. O Giannis agorase *ena allo* biblio \textit{ap’o,ti} i Maria
\hspace{1cm} ‘John bought a different book than Mary’

(42) a. *O Giannis agorase *allo ena* biblio apo ti Maria
\hspace{1cm} the John bought other one book \hspace{0.5cm} than,\textsubscript{p} the Mary\textsubscript{ACC}
\hspace{1cm} ‘Intended: ‘John bought another book in addition to the book that Mary bought’

\rightarrow *ena allo* and *allo ena* differ in their complementation properties. All things being equal, the two constructions are not derivationally related.

2.2. Problem II: Interpretation

_Different_ has various readings, in addition to its deictic interpretation (Beck 2000):

(43) John bought a different book (deictic; external in Carlson 1987)
\hspace{1cm} ‘John bought a book that is different from that book’

_Q-bound reading:_ quantificational antecedent distributes pairwise over individuals in the scope of _different_. German uses the designated form _anders_ - vs. _verschieden_ - for Q-bound interpretations.

(44) a. Every student bought a _different_ book (Q-bound; internal in Carlson 1987)
\hspace{1cm} \forall x,y[\text{student}(x) \land \text{student}(y) \land x \neq y \rightarrow
\hspace{1cm} \forall z[\text{book}(z) \land \text{bought}(z)(x)] \neq \forall z[\text{book}(z) \land \text{bought}(z)(y)]

b. *Jeder kaufte ein _anderses_ Buch
\hspace{1cm} ‘Jeder kaufte ein _verschiedenes_ Buch

In Greek, Q-bound interpretation (44)b is available for _ena allo_ (and _diaforetiko_) but not for _allo ena_.

(46) a. Kathe fititis agorase _ena allo_ biblio (all on Q-bound reading)
\hspace{1cm} ‘Every student bought a different book’

b. Kathe fititis agorase _diaforetiko_ biblio
c. *Kathe fititis agorase _allo ena_ biblio

(46)c also has a bound reading, but this interpretation lacks the strong reciprocal distinctness condition characteristic of (44)/(46)a. Only the weaker reading (46)c can be used to describe Scenario (47) below.

(47) Scenario: Assume that each student already owns _V_ by Pynchon. Then, Mary bought _A_ by Warhol, and John and Sally bought _It_ by King.
(48) \[(46)a\] = Every student x bought a book, and the book x bought was different from the
books that every other student apart from x bought
\[(46)c\] = Every student x bought a book that was different from x’s other books

NP-dependent readings emerge if with plural NP-hosts for different (Beck 2000 reduces this reading to a
reciprocal interpretation of different). German employs verschieden:

(49) a. John and Mary bought different books
   (all on NP-dependent reading)
b. *John and Mary bought a different book
c. \[\forall x,y[x,y \leq_p \text{john\&mary} \land x \neq y \rightarrow \\
   x \neq y \land z[\text{book}(z) \land \text{bought}(z)(x)] \neq z[\text{book}(z) \land \text{bought}(z)(y)]\]

‘The books that John bought are different from the books that Mary bought’

(50) a. *Hans und Maria kauften andere Bücher
   b. Hans und Maria kauften verschiedene Bücher

Greek NP-dependent readings are restricted to the ena allo frame and diaforetiko:

(51) a. ?O Giannis kai h Maria agorasan dio alla biblia
   (all on NP-dependent reading)
   ‘John and Mary bought two different books’
b. O Giannis kai h Maria agorasan dio diaforetika biblia
c. *O Giannis kai h Maria agorasan alla dio biblia

\[\text{\\rightarrow ena allo and allo ena differ in interpretation. Only ena allo supports Q-bound and NP-\\dependent readings. Thus, a common derivational history for two constructions is unlikely.}\\]

2.3. Problem III: entailments
The core meaning of different consists in a distinctness condition (DC).

(52) a. John bought a different book
   b. John bought a book and this book was not identical to some salient (kind of) book a

Prediction: DC is affected by negation only if DC is part of the assertion.

Observation: (53) describes situations in which John and Mary came up with the same solution.

(53) a. O Giannis den vrike mia alli/diaforetiki lisi gia to problima. Vrike tin idia san h Maria.
   ‘John didn’t find a different solution for the problem. He found the same one as Mary’
b. \[\neg \exists x[\text{solution}(x) \land \text{John found } x \land x \neq a]\\]
   \[\text{DC is part of assertion in the ena allo frame}\\]

With alli mia, DC does not go away under negation:

(54) a. #O Giannis den vrike alli mia lisi gia to problima. Vrike tin idia san h Maria.
   ‘John didn’t find another solution for the problem. He found the same one as Mary’
b. \[\neg \exists x[\text{solution}(x) \land \text{John found } x] : x \neq a\\]
   \[\text{DC is presupposed in the allo ena frame}\\]

\[\text{\\rightarrow ena allo and allo ena differ in the way they treat the distinctness condition. This renders a}\\text{derivational relationship unlikely.}\\]
Note: Both variants entail that the NP-extension not be empty prior to reference time. Thus, the *ena allo* variant (55)b also includes a presupposition.

(55)  
  
a. O fititis vrike/den vrike alli mia lisi (gia to problima)  
   ‘The student found/didn’t find another solution for the problem’  
   ⇒ The problem has been previously solved  
  
b. O fititis vrike/den vrike mia alli lisi (gia to problima)  
   ‘The student found/didn’t find a different solution for the problem’  
   ⇒ The problem has been previously solved

Conclusion: Contra to Polysemy Hypothesis, *ena allo* and *allo ena* are not derivationally related. This does not exclude that they share a common meaning component, though.

3. Partial analysis

(56) Hypotheses

  a. *allo* in the *allo ena* frame is a non-scalar additive focus particle similar to German adnominal *noch* or Dutch *nog.*
  
  b. reciprocal *allo* derives from a reciprocal predicate.
  
  c. *allo* in the *ena allo* frame corresponds to German *anders*/*different*  
  
  d. *anders* is a comparative morpheme (just like *more*), denoting the non-identity of maximal degrees provided by two measurement functions (following Meier 2009).
  
  e. German has a third version of *different* apart from *anders* and *verschieden - unterschiedlich* - which has all properties attributed by Beck (2000) to *anders.*

3.1. *allo*/*other* as an additive particle

There are at least three types of focus particles (Beaver and Clark 2008):

(57)  
  
a. scalar: *even*  
  
b. exclusive: *only, but, mer*  
  
c. non-scalar additive: *too, also, either, another; German auch, noch, Dutch ook; Greek allo*

(58)  
  
a. Hans kaufte noch ein Buch  
  
b. O Giannis agorase allo ena biblio  
  
c. John bought another book

Accent can fall on *allo*/*other*, the modifier or the host NP (see e.g. Umbach 2009).

(59)  
  
a. Hans kaufte NOCH ein Buch  
  
b. O Giannis agorase ALLO ena biblio  
   the John bought other one book  
  
c. John bought another book  
   ⇒ John has already bought a (salient) book

(60)  
  
a. Hans kaufte noch EIN Buch  
  
b. O Giannis agorase allo ENA biblio  
  
c. John bought ONE more book  
   ⇒ John has bought a number of books

(61)  
  
a. Hans kaufte noch ein BUCH  
  
b. O Giannis agorase allo ena BIBLIO  
  
c. John bought another BOOK  
   ⇒ John has already bought something
Focus semantics (see e.g. Rullmann 2004: 339; f marks the node that bears focus):

(62) a. Focus semantic value: \[\text{allo } \alpha^f = \{[\alpha]^o\}\]
b. Focus alternative: \[\text{allo } \alpha^{f-a} = \{p|\exists x. p = ([\alpha]^f \times x)\}\]

(63) a. John bought [ANOTHER book]_f (= (59)a)
b. Focus alternatives of (63)a: \{p|\exists x[John bought x]\}

(64) [allo \alpha] presupposes that there is at least one contextually salient proposition \(p \in [\alpha]^{f-a} \subseteq \{[\alpha]^o\}\), such that \(p\) is true.

Entailments I - accented \textit{allo/noch}: The focus alternatives of the host clause of \textit{ALLO/NOCH} must be entailed by the context: \([\text{antecedent clause}]^o \cap C \subseteq [\text{host clause}]^{f-a}\) (where C is context).

(65) a. Hans hat eine Tante eingeladen, und Maria hat NOCH eine Verwandte eingeladen
b. O Giannis kalese mia thia kai h Maria kalese ALLON enan syngeni
c. John invited an aunt and Mary invited ANOTHER relative
d. #Hans hat eine Verwandte eingeladen, und Maria hat NOCH eine Tante eingeladen
e. #O Giannis kalese ena syngeni kai h Maria kalese ALLI mia thia
f. #John invited a relative and Mary invited ANOTHER aunt

(66) a. Jeder schrieb ein Buch und einige schrieben NOCH ein Buch
b. Kathe enas egrapse ena biblio kai meriki egrapsan ALLO ena biblio
c. Every body wrote a book, and some wrote ANOTHER book
d. #Einige schrieben ein Buch und jeder schrieb NOCH ein Buch
e. #Meriki egrapsan ena biblio kai kathe enas egrapse ALLO ena biblio
f. #Some people wrote a book, and everybody wrote ANOTHER book

Analysis: Entailments are a consequence of deaccenting (Tancredi 1992).

Deaccenting has properties similar to VP-ellipsis, both operations induce scope parallelism effects and lead to disambiguation with names (Fox 2000):

(67) Scope parallelism effects
a. Some boy admires every teacher, and some girl did, too (two way ambiguous)
b. Some boy admires every teacher, and some girl admires every teacher (two way ambiguous)

(68) Disambiguation with names
a. Some boy admires every teacher, and Mary did, too \[\exists \forall (*\forall \exists)\]
b. Some boy admires teacher, and Mary admires every teacher \[\exists \forall (*\forall \exists)\]

(69) a. First John called Mary an idiot Republican, and then BILL insulted her
b. *First John insulted Mary, and then BILL called her an idiot (Fox 2000: 84, (14))

(70) Parallelism (Fox 2000: 85, following Rooth 1992)
Phonological reduction of a constituent \(\alpha\) is licensed only if there is some constituent \(\beta\) which reflexively dominates \(\alpha\) and the discourse contains an antecedent \(\beta_A\) such that either a or b:

a. Direct parallelism
   \(\beta_A\) is a focus alternative to \(\beta\): \([\beta_A] \in [\beta]^{f-a}\)
b. Indirect parallelism
   \(\beta_A\) together with shared presuppositions entails an antecedent \(\beta_{AC}\) and \([\beta_{AC}] \in [\beta]^{f-a}\)
Stress on *allo/noch/different* leads to deaccenting (phonological reduction) of the following environment, which is subject to parallelism. Moreover, subjects in (65) are contrastively focussed.

(71) a. John, invited an aunt and Mary, invited ANOTHER relative \((= (65)c)\)
    b. \([\beta]^\alpha = \{p\exists x. x \text{ invited a relative}\}\) \((\alpha = \text{relative})\)
    c. Direct parallelism not satisfied:
        \([\text{John invited an aunt}] (= \beta_\lambda) \notin \{p\exists x. x \text{ invited a relative}\}\)
    d. Indirect parallelism satisfied:
        \([\text{John invited an aunt}] (= \beta_\lambda) \Rightarrow [\text{John invited a relative}] (= \beta_{AC})\) and
        \([\text{John invited a relative}] (= \beta_{AC}) \in \{p\exists x. x \text{ invited a relative}\}\)

(72) f. #John, invited a relative and Mary, invited ANOTHER aunt \((= (65)f)\)
    a. \([\beta]^\alpha = \{p\exists x. x \text{ invited an aunt}\}\)
    b. Direct parallelism not satisfied:
        \([\text{John invited an relative}] (= \beta_\lambda) \notin \{p\exists x. x \text{ invited an aunt}\}\)
    c. Indirect parallelism not satisfied, because \(-\exists \beta_{AC}\), s.t. \(\beta_{AC} \in \{p\exists x. x \text{ invited an aunt}\}\)

\(\Rightarrow\) Entailment pattern with stressed *allo/noch/different* are a consequence of indirect parallelism.

In (66), subjects do not bear contrastive stress and parallelism is satisfied by direct parallelism:

(73) a. Every body wrote a book, and some wrote ANOTHER book \((= (66)c)\)
    b. \([\text{everybody wrote a book}] \in \{\{\text{Some wrote a book}\}\}\)

*Alternative/A variant*: Entailment patterns can be related to requirements for presupposition satisfaction. Rullmann (2004: 338): “the host sentence must be used in a discourse context that entails the presupposition introduced by the particle”. Exemplified on the basis of (65):

(74) a. Presupposition of (65)a: A relative has been invited
    b. Context of (65)a: John invited an aunt
    c. \([\text{John invited an aunt}] \cap C \subseteq [\text{somebody invited a relative}]\)

(75) a. Presupposition of (65)b: An aunt has been invited
    b. Context of (65)b: John invited a relative
    c. \([\text{John invited a relative}] \cap C \not\subseteq [\text{somebody invited an aunt}]\)

**Conclusion**: *ALLO* in the *allo ena NP* frame is an additive focus particle corresponding to *NOCH*

*Note I on restitutive interpretation*: in (65), the subject position is existentially closed, resulting in a restitutive construal for *NOCH*. This does not work for (66)a-c, though, where the subject is not focussed. Thus, a theory of the distribution of restitutive and repetitive readings of *allo/noch* is missing.

*Note II on restitutive interpretation*: In German, accented *wieder*/‘again’ is repetitive, while unaccented *wieder* leads to restitutive reading. *allo/noch* differs in that respect.

Entailments II - unaccented *allo*: If the NP (and possibly its correlate in the antecedent) receive stress, the direction of entailments is reversed.
Some notes on non-identity

(76) a. Hans hat eine Verwandte eingeladen, und Maria hat noch eine TANTE eingeladen.
b. O Giannis kalese ena syngeni kai h Maria kalese mia alli THIA
c. John invited a relative and Mary invited another AUNT
d. #Hans hat eine Tante eingeladen, und Maria hat noch einen VERWANDTEN eingeladen.
e. #O Giannis kalese mia thia kai h Maria kalese allon enan SYNGENI
f. #John invited an aunt and Mary invited another RELATIVE

But this time, the parallelism conditions are too weak, because the antecedent is part the focus alternatives of the second clause in both cases. (NB: parallelism domain is VP, not whole clause)

(77) a. John invited a relative and Mary invited another AUNT
b. Direct parallelism satisfied:
   [Somebody invited a relative] (= \(\beta_A\)) \(\in\) \{p\|\exists x.\)Somebody invited x\}
(78) a. #John invited an aunt and Mary invited another RELATIVE
b. Direct parallelism satisfied:
   [Somebody invited an aunt] (= \(\beta_A\)) \(\in\) \{p\|\exists x.\)Somebody invited x\}

\[\rightarrow\] An open problem

3.2. RECIPROCAL INTERPRETATION OF DIFFERENT

Beck (2000: 120): reciprocal different is synonymous with overtly reciprocal relation.

(79) London and Pfrondorf are different = London and Pfrondorf are different from each other

Evidence: Relation is visible in (i) distribution and (ii) restrictions on derivational history.

(80) a. Predicative use possible \(\iff\) reciprocal interpretation possible
b. Predicative construction can be drived (e.g. by ellipsis) \(\iff\) reciprocal interpretation possible

Corollary: Adnominal occurrences of different originate as reduced relatives.

(81) a. They bought different books
b. They bought book that were/are different from each other

I. German verschieden and unterschiedlich make good main predicates, while anders doesn’t. This correlates with their ability to support reciprocal interpretations (see also (94) in appendix).

(82) Hans und Maria sind verschieden/unterschiedlich/*anders
   \(\text{‘John and Mary are different’}\)

(83) a. Hans hat unterschiedliche/verschiedene Bücher gekauft \(\text{(*reciprocal)}\)
b. Hans hat andere Bücher gekauft \(\text{(*reciprocal)}\)
   \(\text{‘John bought different books’}\)

II. Greek allo cannot be construed predicatively (84), hence does not support reciprocal interpretation.

(84) a. *O Giannis einai allos \(\text{(in non-deictic/idiomatic interpretation)}\)
b. *O Giannis kai h Maria einai alloi the John and the Mary are different

This is correct. Unlike diaforetiki, neither variant with allo (dio allo/allo dio) admits reciprocal reading.
allo behaves like German anders, not like verschieden.

(85) O Giannis agorase diaforetika biblia
   a. ‘John bought different books’
   b. “John bought books that are different from each other”

(86) *O Giannis agorase (dio) alla biblia
   a. ‘John bought two other books
   b. *‘John bought (two) different books’
      (reciprocal)

(87) *O Giannis agorase alla dio biblia
   a. ‘John bought two more books’
   b. *‘John bought two different books’

III. French: If there is a choice between pre- and postnominal order of AP, broad ellipsis is restricted to the prenominal construction:

(88) a. John met a taller women than Bill △
    i. #△ = [AP is a d-tall woman]
    ii. △ = [VP met a d-tall woman]
   b. John met a women taller than Bill △
    i. △ = [AP is d-tall]
    ii. *△ = [VP met a d-tall woman]

French uses two forms, autre and différent - and French admits post- as well as prenominal orders. If the formation of reciprocal différent implicates broad ellipsis (a whole relative clause is missing on analysis (81)), it is predicted that reciprocal readings are restricted to pre-nominal différent. This seems to be correct (Tovena & van Peteghem (2002, ex. (28) and (29)b):

(89) a. Frank et Max aiment différent livres
    b. Frank et Max aiment des livres différent

4. SUMMARY

Similarities between the ena all and the allo ena construction in Greek are superficial. Ambiguity is not structurally determined.

(90) Assumption that allo ena is an additive non-scalar focus particle accounts for
   a. different complementation patterns
   b. absence of Q-bound and reciprocal readings
   c. presupposition projection of distinctness condition
   d. asymmetric entailments under deaccenting

(91) ena allo corresponds to anders (hence Q-bound ok, DC part of assertion,...)

(92) Some open issues
   a. How is type-token asymmetry explained?
   b. Is there a common meaning component shared by NOCH and different?
   c. Unlikeanders, ena allo has a reciprocal reading. Why, given that it behaves like anders in other respects (Q-bound reading ok, no overt from each other complement)?
This misalignment poses complications for Beck’s attempt to reduce the four readings of different to two interpretive strategies:

(93) a. Deictic and Q-bound involve covert comparative construction (‘different than’)
    b. i. Reciprocal reading involves a relational adjective with a silent from each other
        ii. Plural dependent reading is reciprocal meaning plus cumulation.

[For some further remarks see More notes on Non-Identity Marking, Frankfurt/Main, May 24, 2012.]

Notes
1. I am indebted to Elena Anagnostopoulou, Paola Menendez-Benito and Viola Schmitt for valuable vomments and to A. Thimh, A. Tsokoglou, E. Vlachou and the audience of the Mediterranean Syntax Meeting 3 for help with the Greek data. Greek judgements are - as usual - subject to speaker variation, but have been checked for internal consistency.
2. The system does not derive types of kinds, because GEN(‘α) is not well-formed. Such entities exist, though. In (i), dinosaurs signifies the type of the dinosaur kind, not a kind token. I have to leave this inadequacy unresolved.
   (i) Every single reference to/mention of dinosaurs was recored by the CIA
3. As is standard practice, identity is understood as relative identity, i.e. an equivalence relation (reflexive, transitive, symmetric) induced by contextually salient properties.
4. The (pseuo)-formalized formula is also satisfied if the two book sets overlap (Beck 2000: 122).

References


### APPENDIX

(94) *Table: Cross-linguistic variation in expressing non-identity relation by different’*

<table>
<thead>
<tr>
<th>Language</th>
<th>deictic</th>
<th>Q-bound</th>
<th>plural dependent</th>
<th>reciprocal</th>
<th>c-selection</th>
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<td>*</td>
<td>*</td>
<td>*</td>
<td>von (P°)</td>
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<td>✓</td>
<td>*</td>
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German from Beck (2000), French from Tovena and van Peteghem (2002)