On deriving Principle A: evidence from Greek
Giorgos Spathas, University of Stuttgart

Much recent literature is dedicated to deriving Binding Theory on the basis of independently needed operations. This paper discusses Principle A effects associated with SELF-anaphors, focusing on the Greek anaphor *o eaftos tis* 'the self hers'. It is argued that it is not possible to derive obligatory reflexivization on the basis of *eaftos* being a relational noun and that, in this case, Principle A effects are actually not grammatical but the result of competition between pronominal forms. Crucially, we show Principle B effects to be grammatically encoded and reflexivization strategies to be strategies of obviating Principle B violations (cf. Reuland 2011 although here obviation is not achieved through grammatical means, as is in Reuland 2001).

Principle A. Principle A, as in (1), is a syntactic co-occurrence restriction. The restriction to governing category deals with the locality effects exhibited by SELF-anaphors. The obligatory presence of the binder prefix forces identification of the two arguments of the verb, i.e. a reflexive interpretation, as in (2b). In the absence of the binder prefix the anaphor could have remained free, as in (2c). Principle A works, then, not simply because it allows the binding construal, but because it disallows a construal in which the anaphor remains free. Any proposal that attempts to derive Principle A, then, should disallow such free construals.

(1) a. **Principle A**   (e.g. Heim&Kratzer 1998, Büring 2005)
    Reflexive anaphors must be sem-bound in their minimal governing category.

  b. A **sem-binds** B iff A is binder prefix β, A and B are coindexed, and A c-commands B

(2) a. Zelda praised herself .   b. $\text{Zelda}_1\ \beta_1$ praised herself_1 c. Zelda_1 praised herself_2

A previous attempt. Spathas (2010), Patel-Grosz (2010, 2012) develop an account for Greek that treats *eaftos* as a relational noun denoting identity (11) that incorporates into the verb (12). *eaftos* composes with the verb via Relation Modification, (13). If the subject DP and the pronoun co-refer, the derivation is licit. If they do not, the result is semantic incoherence; in, e.g., (15) one asserts that Mary is identical to Helen. [In fact, the account requires that the identity statement is treated as a presupposition]

(10) I   Maria   penepse ton eafto   tis.   (11) $[[\text{eaftos}]] = \lambda x \lambda y.\ y = x$
    the Mary.NOM praised the self.ACC hers   (12) $\text{I Maria}_1\ \text{eafto}_i\text{-penepse [ton } t_i\ \text{tis}_1]$
    'Mary praised herself.'   (cf. Anagnostopoulou&Everaert 1999)

(13) *Relation Modification (RM)*: If β incorporates into γ forming a complex predicate α, and $[[\beta]]^g$ and $[[\gamma]]^g$ are both in $D_{e,et}$, then $[[\alpha]]^g = \lambda x \lambda y.\ [[\beta]]^g(x)(y)\ \&\ [[\gamma]]^g(x)(y)$.

(14) $[[\text{I Maria}_1\ \text{eafto-penepse tis}_1]]^g = \text{praised(mary)(mary)}\ \&\ \text{mary} = \text{mary}$

(15) $[[\text{I Maria}_1\ \text{eafto-penepse tis}_2]]^g = \text{praised(mary)(g(2))}\ \&\ \text{mary} = g(2)$

RM, however, cannot account for incorporation of all (inalienable possessed) relational nouns. The meaning of, e.g., (16), entails wrongly that Mary is her own (or someone else's) ankle. For such cases we need a rule akin to Chung&Ladusaw's (2004) Restrict(R). Crucially, use of R derives a non-reflexive interpertation for *eaftos*; there is nothing wrong with the two arguments not co-referring, (19). In order to 'derive Principle A', then, the account needs to force incorporation of *eaftos* to be interpreted only via RM, never via R. One can always write down a principle that enforces that, but that will be no more than a restatement of Principle A.

(16) I   Maria   strampulikse ton astragalo tis.
    the Mary.NOM sprained   the ankle.ACC hers
    'Mary sprained her ankle.'   (17) $[[\text{ankle-sprain}]] = \lambda x \lambda y.\ y\ \text{sprain}\ x\ \&\ y\ \text{is}\ x\text{'s ankle}$

(18) *Restrict (R)*: If γ incorporates into β forming a node α, and $[[\beta]]$ and $[[\gamma]]$ are both in $D_{e,et}$, then $[[\alpha]] = \lambda x \lambda y \exists z.\ [[\beta]](x)(z)\ \&\ [[\gamma]](z)(y)$.

(19) $[[\text{I Maria}_1\ \text{eafto-penepse tis}_2]]^g = \exists z.\ \text{Mary praised } z\ \&\ z = g(2)$

Proposal. Assume that *eaftos* denotes the identity relation and is interpreted in situ, (20). If so, nothing forces reflexivization in (10). Greek is subject to Principle B effects, (21). If use of *o eaftos tis* obviates Principle B effects, then it is the only pronominal form that can be

used to describe a reflexive event. As any structural theory of competition predicts (e.g. Katzir 2008) *o eaftos tis* will be used only when unmarked forms (i.e. a clitic pronoun) are not available. If (10) is a description of a reflexive event, the clitic is not available because of Principle B, so *o eaftos tis* is used. When the pronoun is licensed (as, e.g. in the case of a non-local antecedent in (22)), it will always be preferred as the cheapest option; we show that *o eaftos tis* and the clitic pronoun are in strictly complementary distribution. Examples like (22) and other so-called locality violations were previously attributed to the locality restrictions on movement that incorporation is subject to. In fact, we do not want the grammar to exclude *o eaftos tis* in those positions; it is licensed under focus, as long as it contrasts with a relational noun (so that use of a focused pronoun violates the economy conditions on focus licensing), (23). The account also predicts that modified *self*, as in (24) from Patel-Grosz (2012), will also escape locality violations; since clitic pronouns cannot be modified, they do not compete. We need assume no syntactic/ semantic difference between modified and unmodified *eaftos*.

(20) $[\![$ o eaftos tis$_1$ $]\!]$ = ιy. y=g(1)   (21) *I   Maria$_1$ tin$_1$ penepse.
                                                                      the Mary   her praised
                                                                      'Mary praised herself.'

(22) *I   Maria   ipe oti o Janis   penepse ton eafto   tis.
       the Mary.NOM said that the John.NOM praised   the self.ACC hers
       'Mary said that John praised her.'

(23) A: I   Maria   ipe oti o Janis   penepse ton aderfo   tis.
         the Mary.NOM said that the John.NOM praised   the brother.ACC her
         'Mary said that John praised her brother.'
      B: Oxi, I   Maria   ipe oti o Janis   penepse ton EAFTO   tis.
         'No; Mary said that John praised HER (lit. her SELF).'

(24) I   mitera tu Janni$_1$ agapai ton alithino eafto tu$_1$.
      the mother the Janni.gen loves   the true   selfi his
      'John's mother loves his true self."

The remaining question is why *o eaftos tis* obviates Principle B effects. Patel-Grosz (2012) argues that we should revise the identity sematics in (11) to cover cases of adjectival modification, as in (25)/(26). She proposes that *eaftos* denotes a part-of relation. If so, the anaphor and its antecedent are not co-valued for the purposes of Principle B. As new evidence for this position consider the fact that *o eaftos tis* introduces a new discourse referent that (if perhaps somewhat jokingly) can be picked up for plural anaphora, as in (27).

(25) $[\![$ eaftos $]\!]$ = λxλy. y is a part of x   (26) $[\![$ o eaftos tis$_1$ $]\!]$ = ιy. y is a part of g(1)

(27) I   Maria penepse pali ton eafto tis. Ine   poli erotevmenes.
      the Mary   praised again the self hers are.3pl very loved
      'Mary praised herself again. ??They are very much in love.'

English. The analysis above cannot be applied to all SELF-anaphors cross-linguistically. Notice that the English translation in (27) is particularly odd, unlike cases of modified *self*, (28). Similarly, Spathas (2010) argues based on the ability of modified and unmodified *self* to license paycheck readings of pronouns, that only the former denote a relation. Moreover, he argues based on association with focus that *herself* is an arity reducer, (29). If so, the problem of deriving obligatory reflexivization for *herself* is dispensed with, since we built binding into the lexical semantics of the anaphor. In the case of other Germanic languages (e.g. Dutch *zichzelf*) the *self* element seems to be an add-on on an existing reflexivization strategy (e.g. Bergeton 2004) and, thus, cannot be taken to be responsible for deriving reflexivization.

(28)   Mary praised her perfect little self again. They are very much in love.

(29) $[\![$ herself $]\!]$ = λR$_{e,et}$λx. R(x)(x) (Partee and Bach 1981, Szabolcsi 1992, a.m.o.)

Patel-Grosz, P. 2012. Complex reflexives and the principle A problem. Journal of South Asian Languages. **Reuland, E. 2011**. *Anaphora and Language Design*. MIT Press. **Spathas, G. 2010**. Focus on anaphora. LOT dissertation.