A Feature Geometric Approach:
On the Greek past tenses

This abstract proposes a feature-geometric analysis for the Greek INFL, extending the work of Cowper (2005). Using Distributed Morphology and Minimalist Syntax, Cowper defines INFL as a small universal set of monovalent interpretable features, which are connected by entailment relations. This set of features is divided into three groups: (a) *Mood*, with the features [Finite], [Proposition], and [Deixis]; (b) *Narrow Tense*, [Precedence], and (c) *Aspect,* with [Event] and either [Interval] (imperfective viewpoint aspect), or [Moment] (perfective viewpoint aspect). If [Event] is absent the clause will be interpreted as stative. In this abstract we show that, although Greek chooses different features and assembles them in a slightly different way than English into lexical and vocabulary items, this approach can account for the Greek tense system. We focus specifically on the Greek past tenses, the present perfect and the so called aorist, the Greek past tense, which differ systematically from the corresponding English tenses.

In English, the progressive *–ing* spells out [Interval] (and by entailment [Event]), giving imperfective viewpoint aspect, while the simple past tense appears with states or the (default) perfective viewpoint aspect. With regard to [Precedence] and Mood features these are denoted either by the auxiliary in the case of the progressive past, or the verb in the case of the simple past. In Greek, the aspect is denoted by the verbal stem, either the present or the past stem, which appears in the aorist. The present stem does not carry any aspectual features, and thus appears with states or the (default) imperfective viewpoint aspect. The past stem, on the other hand, spells out [Moment] giving perfective viewpoint aspect. Thus, in the Greek INFL [Moment] will be present, which will be the marked feature for Greek, while in English [Interval] will be present, the marked feature for English. With regard to the Mood features, these are spelled out by the verbal endings, while the past endings additionally spell out [Precedence] (figure (1) and (2)).
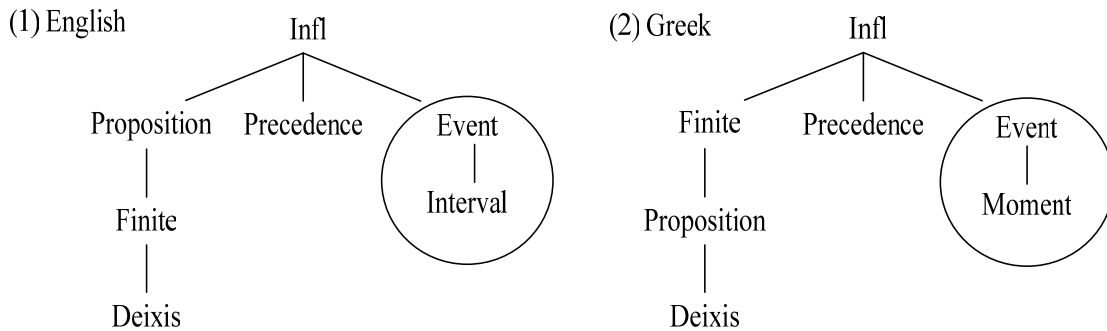
In sum, it is shown that the English progressive and the Greek aorist appear only in eventive clauses, while the English simple past and the Greek imperfect appear in both stative and eventive clauses.

When it comes to the Greek present perfect, this is composed by an auxiliary, be/have, plus an infinitive or participle. The infinitive is formed with the perfective stem ([Moment]), while the participle uses an archaic perfect stem and denotes a result state. It is proposed that, like in English, this tense has a biclausal structure, i.e. two INFLs. When the perfect tense has the form auxiliary + infinitive, the lower INFL has the features [Precedence] and [Moment], spelled out by the infinitive (as depicted in figure (3)). With respect to the higher INFL, in which the auxiliary moves to, Mood features are denoted. This structure correctly captures the fact that there is both an event (in the lower INFL) and a state (in the higher INFL) involved, while in the computation, the insertion of the aorist will be blocked, as the lower INFL structure does not have any Mood features. With regard to the participle, the clause takes a slightly different interpretation, as it denotes a result state. Hence, the lower INFL, which is interpreted as stative, has only the feature [Precedence], blocking the insertion of the imperfect, which additionally spells out Mood features.

Overall, it is shown that this analysis provides an elegant account of the differences, as well as the similarities between the English and Greek tense systems.
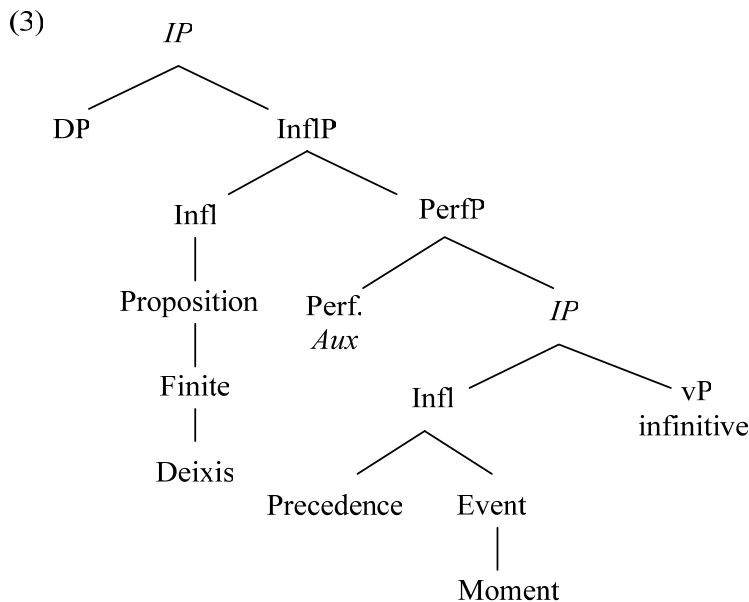
1. Data

The structure in (1) is proposed by Cowper (2005) for English. For Greek we propose the structure in (2):

(1) English

```
                    Infl
                   /  |   \
      Proposition  Precedence  (Event
          |                      |
        Finite                 Interval)
          |
        Deixis
```

(2) Greek

```
                    Infl
                   /  |   \
        Finite   Precedence  (Event
          |                    |
      Proposition            Moment)
          |
        Deixis
```

The circled features denote the aspectual difference between the two languages. Notice also that there is a difference in the Mood features. This change was necessary as the Greek subjunctive is finite, but may not be propositional; hence, in this way the subjunctive is blocked. However, we are not dealing with this here.

The proposed structure for the Greek perfect (leaving aside the less frequent form with the perfect participle) is the following:

(3)

```
                    IP
                   /    \
                 DP      InflP
                        /    \
                    Infl      PerfP
                     |        /    \
                Proposition  Perf.    IP
                     |       Aux     /   \
                  Finite          Infl    vP
                     |           /   \    infinitive
                  Deixis   Precedence  Event
                                        |
                                      Moment
```

2. References

- Cowper, Elizabeth, 2005: "The Geometry of Interpretable Features: INFL in English and Spanish", *Project Muse*.
- Halle, Morris, and Alex Marantz, 1993: "Distributed Morphology and the pieces of Inflection". Cambridge, MA: MIT Press.
- Harley, Heidi, and Elizabeth Ritter, 2002: "Person and number in pronouns: A feature-geometric analysis". *Language* 78.482-526.