Modelling Spanish Psych Verbs in HPSG:
Word Order, Case, Theta Roles and Eventuality Structure

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Psych verbs (e.g. *fear, anger*) possess a uniform theta grid that includes an experiencer (EXP), i.e. the individual that experiences the mental state characterised by the predicate; and a stimulus (STM), i.e. the object triggering the mental state. This theta grid maps into two different syntactic configurations, with the EXP surfacing (a) as a subject (ES) (cf. (4)–(5)) or (b) as an object (EO) (cf. (2)–(3)).

Spanish psych verbs classification has been proposed as a threefold (cf. Italian psych predicates in Belleti and Rizzi 1988): (a) a transitive ES class (e.g. *amar* 'love') where the STM takes accusative case (cf. (4a)), (b) an EO class (e.g. *gustar* 'like') where the EXP always takes dative case (cf. (2)), and (c) an EO class (e.g. *asustar* 'frighten') where the EXP alternates between dative and accusative (DAT/ACC) case marking (cf. (3)). Cross-linguistic studies have shown that dative structures are non-agentive and stative (Landau 2010; Reinhart 2002), displaying "psych-effects" in terms of linearization (EXP-first), binding (Temme and Verhoeven 2017), control, passivization, extraction (Belleti and Rizzi 1988), among others.

In the case of EO predicates, the DAT/ACC alternation correlates with a stative (1a) and eventive (1b) interpretation, respectively (cf. Marín, 2011). Fábregas et al. (2017) claim that in dative constructions, there is no change-of-state (CoS) in the experiencer, but only the holding of the psychological state related to the STM, which is considered the subject matter (SM). Accusative structures are perceived as eventive, bringing about a CoS, and the external argument (usually animate) is considered a volitional causer (CSR) controlling the event. Studies have also shown that the preferred word order in dative structures is that of EXP-DAT > STM-NOM, whereas in accusative ones the preferred word order is STM-NOM > EXP-ACC (Gattei et al. 2015; Jiménez-Fernández and Rozwadowska 2016; Temme and Verhoeven 2016).

Taking into considerations the properties exposed, we model psych verb predicates in an HPSG framework by means of a typed inheritance hierarchy and lexical rules (LRs) for psych verbs. Our analysis contrasts with previously established claims in the literature (cf. Belleti and Rizzi, 1988), proposing a fourfold division of the psych verb category (cf. (2), (3), (4) and (5)): We propose not only a DAT/ACC alternation for EXP in EO structures (cf. (3a) vs. (3b)), but also a DAT/ACC alternation for the STM in ES structures (cf. (4)–(5)). For the latter, the class of *amar* marks the object prototypically with accusative (4a), alternating with a more marked construction in dative (4b). Furthermore, we propose a new subclass (e.g. *temer* 'fear') presenting the opposite pattern ((5a) vs. (5b)).

Case alternations are modelled in our analysis by means of LRs which take verbal lexemes as input yielding a verbal lexeme with a new case marking as output. In the case of EO verbs like *asustar* the LR changes not only the case marking, but also the event(uality) structure of the predicate by introducing an extra eventuality and theta role, i.e. CSR. In the case of ES verbs e.g. *amar*/*temer*, the LR changes the case marking of the STM and its theta role (from SM to target (TRG)).

Consequently, our analysis foresees seven different "unmarked word orders" in the psych domain taking into consideration event(uality) structure, case marking and theta roles.

(1) a. David/el reporte (le)   amarga   [_DAT a Clara].
      David/the report CL.DAT.3.SG upset-PRS.3.SG   to Clara

      'David/the report upsets Clara.'   [stative]

   b. David/?el reporte (la)   amarga   [_ACC a Clara].
      David/the report CL.ACC.3.SG upset-PRS.3.SG   to Clara

      'David/the report (actively) upsets Clara.'   [eventive]

(2) a. [_DAT A Clara] le   gusta   David/el reporte.
        to Clara CL.DAT.3.SG like-PRS.3.SG David/the report

      'Clara likes David/the report.'   [EO: EXP>SM]

(3) a. [_DAT A Clara] le   asusta   David/el reporte.
        to Clara CL.DAT.3.SG frighten-PRS.3.SG David/the report

      'David/the report frightens Clara.'   [EO: EXP>SM]

   b. David/el reporte (la)   asusta   [_ACC a Clara].
      David/the report CL.ACC.3.SG frighten-PRS.3.SG   to Clara

      'David/the report frightens Clara.'   [EO: CSR>EXP]

(4) a. Clara (lo)   ama   [_ACC a David/el reporte].
      Clara CL.ACC.3.SG love-PRS.3.SG   to David/the report

      'Clara loves David/the report.'   [ES: EXP>TRG]

   b. Clara (le)   ama   [_DAT a David/al reporte].
      Clara CL.DAT.3.SG love-PRS.3.SG   to David/the report

      'Clara loves David/the report.'   [ES: EXP>SM]

(5) a. Clara (le)   teme   [_DAT a David/al reporte].
      Clara CL.DAT.3.SG fear-PRS.3.SG   to David/the report

      'Clara fears David/the report.'   [ES: EXP>SM]

   b. Clara (lo)   teme   [_ACC a David/el reporte].
      Clara CL.ACC.3.SG fear-PRS.3.SG   to David/the report

      'Clara fears David/the report.'   [ES: EXP>TRG]

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