I explore a non-lexical theory of Middles. In particular I examine the source of the implicit agent in Middles. I argue that the implicit agent results from an implicature at the CI-interface produced by the interplay of (i) encyclopaedic knowledge, (ii) the generic semantics of Middles and (iii) an expletive (non-thematic) Voice projection. The account follows ideas in Marantz (1997) and Rapoport (1999) but sheds more light on the interaction of syntactic and encyclopaedic information at the CI-interface.

Syntactic theories of Middles assume that the implicit agent is either pro (Hoekstra & Roberts 1993) or PRO (Stroik 1992). These theories cannot explain why the implicit agent in Middles differs from other well known instances of pro/PRO as well as from the implicit agent in Passives (only the latter licenses by-phrases, agentive adverbs and control into non-finite clauses). Lexical theories instead assume that the agent is present in the lexical entry and is projected to the syntax in Passives but not in Middles (e.g. Ackema & Schoorlemmer 1994). This explains its syntactic (in-)activity.

The account for Middles developed here bears on the theory of verbal alternations in Alexiadou, Anagnostopoulou & Schäfer (2006). These authors assume that the encyclopaedic meaning of roots predicts whether they take part in the causative alternation or not. \agentive (murder) and \externally-caused (destroy) need to combine with a Voice head and therefore never form Anticausatives. \cause-unspecified optionally combine with Voice and alternate. \internally-caused (blossom) don’t combine with Voice and are always intransitive. Sentences like “Kennedy murdered” or “John blossomed the flower” are syntactically well-formed but filtered out at the CI-Interface.

The reason to subsume Middle formation under the causative alternation is morphological. Many languages have morphologically unmarked and marked Anticausatives. The latter come in German with the reflexive pronoun ‘sich’ (1a vs. 2a), in Greek with non-active morphology (1b vs. 2b). Middles (3) always use the morphology of marked Anticausatives. I assume that (idiomsyncreties aside) a correlation exists between the morphology of Anticausatives and the root involved in the alternation. Building on Haspelmath (1993), I argue that languages arrange their roots along the probability scale in (4). All languages allow the alternation with \cause-unsp., but languages often put an extra mark on Anticausatives that have a lower probability to occur without an outside force, i.e. that are built from roots located at the left side of the \cause-unsp. sector in (4). I take it that these roots are morphologically confined to always show up in a transitive syntactic environment although they can be semantically unaccusative. This contradiction is dissolved via a non-thematic, expletive Voice projection. If this expletive Voice has a D-feature it projects a Spec and an expletive is merged there (‘sich’). Without a D-feature, it is spelled-out with passive morphology. Cross-linguistically we get the typology of Voice heads in (5). I argue that Middles can have the structures in (5d) or (5e)

Why should Middles be unaccusative? Middles express a dispositional statement about their theme (Lekakou 2005). This is done via an operator that applies to the highest argument. The non-projection of an external argument allows the operator to act on the theme.

Why do Middles have an expletive Voice? Their morphology makes sense insofar as typical Middle verbs like ‘read’ are located at the very left of the probability scale in (4). These verbs do not form eventive unaccusatives (“This book reads”) because our encyclopaedic knowledge tells us that reading events involve a human agent which is absent in unaccusatives. However these verbs form generic unaccusatives (Middles) where they have an understood implicit agent. I argue that the modal semantics of Genericity allows to imply information at the CI-interface that is not syntactically represented, thereby circumventing the filtering out of unaccusatives of agentive roots. The evaluation of modality involves a modal relation, a modal base and an ordering source (Krifka et. al. 1995). The latter rates worlds in terms of similarity to the normal course of events and specifies the minimal degree of ‘distance’ from normalcy a world should satisfy. Since in the actual world reading events necessarily involve a human agent we are free to conclude that this is involved in the Middle sentence.

The interplay of encyclopaedic knowledge and Genericity is not enough to license an implicit agent at the CI-Interface. This becomes clear, if we compare marked and unmarked Anticausatives (6b,c). The two roots in (6) are nearly synonymous and since both form causatives, they both have an (optional) agent in their encyclopaedic representation. If we put the Anticausatives in (6) in a generic context, we see in (7) that only the marked one can imply an implicit agent. In order to license the implication of an agent with the unmarked root we have to add an expletive Voice (‘sich’) (8) which
exactly then when needed is licensed (via economy). I conclude that the CI-Interface can imply an agent only if this is compatible with the encyclopaedic meaning of the root, if Genericity guides it and if the syntax provides an expletive projection which guides its interpretation (->syntactic theta theory).

(1) Unmarked Anticausatives:
   a. Das Kleider trocknen (**sich**) (German)  
      The clothes dry Refl  
   b. I sakula adiase (Greek)  
      The bag-nom emptied-Act

(2) Marked Anticausatives:
   a. Die Tür öffnet **sich** (German)  
      The door opens Refl  
   b. I supa kegete (Greek)  
      The soup-nom burns-Nact

(3) Middles:
   a. Das Buch liest sich leicht (German)  
      The book reads Refl. easily  
   b. Afto to vivlio diavazete efkola (Greek)  
      This the book read-Nact.3sg easily

(4) Probability Scale:
   High probability of an external force involved ↔ Low probability of an external force involved
   \(\sqrt{\text{agentive}} \succ \sqrt{\text{externally-caused}} \succ \sqrt{\text{cause-unspecified(marked)}} \succ \sqrt{\text{cause-unspecified(unmarked)}} \succ \sqrt{\text{internally-caused}}\)

(5) Interpretation:
   Syntactic features projected: Spell-out:
   a. active: [Agent [Voice[0,agent]] [ V [ Root ]]]) (active)  
   b. passive: [Voice[agent] [ V [ Root ]]) (passive)  
   c. anticausative-I: [V [ Root ]] (no Voice) (unmarked)  
   d. anticausative-II: [Voice[∅] [ V [ Root ]] (passive)  
   e. anticausative-III: [Expl. [Voice[0,∅] [ V [ Root ]]]] (Reflexive)

(6) a. Amor entflammt / entzündet die jungen Herzen  
       Amor inflames / ignites the young hearts  
      b. Die jungen Herzen entflammen (*sich)  
       The young hearts inflame Refl.  
      c. Die jungen Herzen entzünden *(sich)  
       The young hearts ignite Refl.  

(7) a. Junge Herzen entflammen leicht  
       Young hearts inflame easily  
      b. Junge Herzen entzünden sich leicht  
       Young hearts ignite Refl. Easily  

(8) Junge Herzen entflammen sich leicht  
    Young hearts inflame Refl easily