BACKGROUND AND CASE HISTORY
In Linguistics deverbal nominals are defined as nouns displaying some verbal properties. The nature of nominalization has been long debated and since Lees (1960) and Chomsky (1970) a syntactic account has been opposed to a lexical-semantic one. Importantly, both the accounts agree in that deverbal nouns are not a homogeneous class: according to Grimshaw (1990) and Alexiadou & Grimshaw (2008), complex event-nominals (e.g. ‘examination’) can assign thematic roles and are compatible with aspectual modifiers but cannot have a plural reading whereas result-nominals (e.g. ‘offer’) show the opposite pattern.

In order to test if there is some cognitive plausibility that deverbal nominals:
(i) involve verbal properties, i.e. are not simple nouns,
(ii) involve some verbal properties syntactic in nature,
(iii) are not a homogeneous class,

an experimental study has been conducted involving an Italian 76-year-old right-handed aphasic patient (ED) and two control subjects. ED suffered a CVA involving the left frontal lobe only. He was administered the AAT and classified as mild Broca’s aphasic; the BADA revealed a noun-verb dissociation, verbs being significantly more impaired than nouns.

METHODS AND TASKS
Firstly, ED was given a screening test which highlighted (i) a spared syntax of nouns as for the determiners, the position of adjectives and the grammatical gender and number but (ii) some problems with the syntax of verbs. In particular, ED performed badly with the passives (16.6%) and the unaccusatives (50%) compared to the transitives (100%), the inergatives (100%) and the ergatives (75%), thus showing an argument structure complexity effect often noticed in the literature (e.g. Thompson 2003).

ED was given a second test in which he had to derive the nominal starting from a neutral verb form (infinitive form and 3rd singular, simple present), as in (1):

(1) La __________ dell’America da parte di Colombo (scoprire)
    The-FEM __________ of the America by Columbus (to discover)
    “Columbus’ discovery of America”

The items consisted of all possible kinds of nominalization in Italian. In particular, ED’s comprehension and production were tested of: (i) nominals with thematic roles (‘la camminata’, the walking) vs. result nominals (‘il cammino’, the walk); (ii) participial nominals (‘la scoperta’, the discovery lit. the discovered) vs. derived nominals (‘l’invenzione’, the invention); (iii) nominals + PP argument (‘la raccolta di grano’, the collection of cereals) vs. infinito sostantivato (THE + INFINITIVE) + direct argument (‘il raccogliere giochi’, games’ collecting lit. the TO-collect games); (iv) singular nominals (‘la promessa’, the-SING promise) vs. plural nominals (‘le promesse’, the-PL promises).

Each group was made up of nominals derived from transitive, inergative, unaccusative and ergative verbs. The tasks were presented by the speech-therapist in written modality and the patient was asked to read aloud the item and complete it orally. Before starting each test the patient was trained in order to make sure he had understood the task.

Further tasks testing ED’s nominals comprehension were also administered.
RESULTS
No argument structure complexity effect was found; moreover, ED performed better with complex event-nominals (50%) than with result-nominals (20%), an unexpected result both for the linguistic theory and the neurolinguistic hypothesis (see Collina, Marangolo, Tabossi 2001). Equally unexpected, because of his noun-verb dissociation, was ED’s good performance with participial nominals (80%) compared with the derived nominals (30%).
However, as expected, ED performed better with nominals involving noun syntax (50%) than with nominals involving verb syntax (10%). Interestingly, ED’s performance with singular participial nominals was good (80%) while his performance with plural participial nominals was very bad (10%), thus confirming the linguistic prediction that complex event-nominals cannot have a plural reading and patterning with the very languages that cannot have plural nominals at all (among others Engelhardt 2000).

SELECTED REFERENCES