This work explores the function of superlexical prefixes in Russian, their effect on direct arguments, and the results of stacking and secondary imperfectivization on interpretation of measurability and perfectivity of the predicate. I build on Filip’s (2005) proposal that Slavic verbal prefixes operate on Aktionsart/Event Structure, rather than aspect/perfectivity, and act as operators that affect interpretation of nominal arguments. I also utilize an Event Structure approach (Ramchand 2004, Arsenijević 2006) to consider this phenomenon at the syntax-semantics interface. I argue that superlexical prefixes (in Russian, po-, pri-, pere-, na-) act as “event quantifiers”, and are located outside the event structure, that is, above v/VP. They provide indefiniteness to event quantification, which is reflected on the argument (Incremental Theme). On the other hand, lexical prefixes, located lower in the Resultant Phrase of event structure, provide temporal reference, which is interpretable during tense-aspect computation (Borik, 2006). The Aspectual head, located above the Event Structure, receives information from both inside event structure (initiation or end-state point, introduced by different classes of lexical prefixes), and from outside – the superlexical prefix. The computation then proceeds: with one lexical prefix, the IMPERF suffix –iva- allows event interpretation as either occurring multiple times (1), or ongoing (2):

(1) Redaktor ezhednevno vychityvajet s desyatok statei.
Editor daily VY-edit.IMPERF.Pres.sg.masc. about ten.Nom article.Gen.pl. The editor edits about ten articles daily. (multiple occurrences of the same event)

(2) Kogo ty tam uzhe polchasa vy-smatrivajesh’?
Who.Gen you there already half-hour VY-look.IMPERF.Pres.2sg.?
Who have you already spent a half hour looking for?
However, with one superlexical prefix, only multiple-event interpretation is possible (3):

(3) Po utram posle prazdnikov u nego pobalivala golova.

Moreover, the Incremental Theme nominal arguments of verbs with superlexical prefixes are also underspecified (cf.1); even if concrete measures are used, the underlying argument is typically a mass or plural noun (cf. 4 and 5):

(4) Anya na-brala chetyre stakana zemlyaniki.
Anya NA-collect.Past.sg four glasses.Acc (of) strawberries.Gen Anya collected four glasses of wild strawberries.

(5) *Anya na-brala chetyre yabloka.

With stacked superlexical and lexical prefixes (1), the suffix –iva- yields a multiple-occurrence event interpretation (with temporal anchors provided by the lexical prefix), inside a single containing event, and therefore receives the same interpretation as an event with one superlexical prefix alone:
(6) Chto ne s’jem, to hot’ po-nad-kus-iva-yu
What not eat-Fut.1sg that at least Superlexical-lexical-bite-IMPERF-Fut.1.sg.
What I don’t eat, I’ll at least bite of. (joke)

The proposed extension of the analysis of Russian prefixes (a) makes correct claims about results of perfectivity tests when the verb is structured as either [superlex-[lex-[stem]-iva]] or [superlex-[stem]-iva], (b) suggests an explanation for the habitual/iterative interpretation of secondary imperfective in combination with superlexical prefixes, and (c) preserves the information flow from event structure (including arguments) up to Asp.