The productivity of an affix is the probability that it will apply to a new stem to express a lexeme + inflectional property set (Plag 2005). Productivity is thus a form-level concept. Defectiveness is often argued to be the opposite of productivity – a failure at the level of form due to conflicting word formation demands (Albright 2003). However, it is not clear that productivity and defectiveness are, in fact, opposites. For example, Russian has verbs with defective 1sg (*pobežu ‘I will win’). Since the unused 1sg forms would be well-formed, the Russian 1sg gaps cannot be explained (synchronously) as a form-level problem.

So why do defective Russian verbs persist? I argue that the proper generalization exists at the level of the lexeme paradigm (Stump 2001, 2006). Word knowledge involves more than knowledge of form. It also involves knowledge of the probability with which a lexeme + inflectional property set (IPS) is used, relative to other IPS. This probability need not closely reflect semantics. I argue that defective verbs like *pobežu persist because speakers infer a low relative probability of usage. In short, I argue that productivity and defectiveness are tangential issues, representing different levels of word knowledge.

I discuss two types of evidence. First, I present the results of a self-ratings task in which native Russian speakers (N=38) were asked to judge the acceptability of 1sg forms. Speakers’ judgments for non-defective verbs correlated with the productivity of the form. For the defective verbs, however, subjects’ judgments correlated with relative frequency of usage, as represented in the Russian National Corpus (RNC). Second, I present evidence that Russian speakers can and historically have analogically extended this pattern of non-use to new words. This amounts to the “productivity” of the defective Russian verb pattern.