Perfective generics in Polish

My main goal is to explain the semantics of a peculiar class of generic sentences in Polish, namely those expressed by means of perfective aspect (henceforth perfective generics), exemplified in (1-3).

(1) Cierpliwy – kamień ugotuje.
Patient(one)-nom stone-acc
perf-cook-(non-past)
‘A patient person will cook a stone.’

(2) Prawdziwy przyjaciel pomoże w potrzebie.
True friend perf-help-(non-past) in need.
‘A true friend will help you in need.’

(3) Prawdziwy mężczyzna się nie rozplacze.
True man refl not perf-cry-(non-past).
‘A true man won’t cry.’

Recent studies related to genericity have focused mainly on the variation in the expression of genericity in the nominal domain in Germanic and Romance lgs (cf. Cohen 2001, Greenberg 2003, Oosterhof 2006, Farkas and De Swart 2007 a.o.). It turns out that there is also a variation in the morpho-syntactic expression of genericity in the verbal (aspectual) domain in Polish in which there exist both perfective and imperfective generics. The former constitute a problem for most theories relating aspect and habituality in which the underlying assumption is that sentences in the perfective aspect lack generic readings (cf. Bonomi 1995, Lenci and Bertinetto 2000, Menéndez-Benito 2002, a.o.). All perfective statements in (1-3) are truly generic since they support the truth of counterfactuals. I assume that perfective aspect, as a quantizedness operator on eventuality descriptions, restricts the denotation of a verb it operates on to a singleton set containing a quantized event. Perfective aspect and count singulars are similar since the former individuate a single event while the latter individuate a single atom by default (cf. Farkas 2006). Interestingly, all perfective generic contexts in (1-3) have bare singular rather than bare plural subjects. Is it just a coincidence that the anyway restricted set of count singular generics is perfectly compatible with all perfective generic sentences in Polish? The semantics of English indefinite singular (IS) generics such as *A boy does not cry* or *A whale is a mammal* has been recently subject to scrutiny in Cohen (2001) and Greenberg (2003). There are a number of criteria which allow me to conclude that the semantics of IS generics in English and count singular generics in Polish is to some extent equivalent. Polish is a determinerless lg with a morphological number distinction. There are many similarities between count singular and perfective generics in Polish (for lack of space I do not discuss them here). It turns out however, that while all Polish perfective generics have bare count singular subjects (rather than bare plural ones), not all Polish count singular generics are expressed by means of perfective aspect, as shown in (4-6):

(4) a. Krowa daje mleko.
Cow imp-give milk.
‘A cow gives milk.’
b. #Krowa da mleko. (#gen)
‘A cow perf-give milk.’

(5) a. Ptak lata.
Bird imp-fly.
‘A bird flies.’
b. #Ptak pofrunie. (#gen)
‘A bird will fly.’

(6) a. Kura znosi jaja.
Hen imp-lay eggs.
‘A hen lays eggs.’
b. #Kura zniesie jaja. (#gen)
‘A hen will lay eggs.’

I argue that some aspects of the semantics of bare count singular generics should definitely be taken into account in a semantic theory of perfective genericity, but there is an additional aspect of meaning of perfective generics which distinguishes them from count singular imperfective generics.

Proposal: I assume the uniform underlying representation for count singular imperfective and perfective generics, as in (7) but I argue that there is a difference in the modal mechanism which determines the set of worlds against which they are evaluated.

(7) Gen_{x,w} [3x squirrels (x,s,w)] [Hab_{e,w} (3e eat nuts (x,s,e,w))]

Gen and Hab impose maximality upon the plural sum individuals they operate on (cf. Ferreira 2005 and Farkas and De Swart 2007). I assume that the count singular perfective and imperfective generics represent two (not completely unrelated) types of Kratzerian (1991)
modality. Since all perfective generics have count singular subjects, the modality involved in them is responsible for the generic interpretation of both perfective aspect and count singular nominals. I argue that the set of worlds in the conversational background against which count singular perfective generics are evaluated is restricted by a biological, legal, social, stereotypical law-like proposition meant by a speaker and accomodated by a hearer like for instance patience generally facilitates doing things which are extremely time-consuming in (1), friends are reliable in (2) or masculinity does not match with crying in (3). Count singular subject are interpreted generically when the accomodated law-like proposition is by presupposition obeyed by all members of the subject set while perfective aspect is interpreted generically when the proposition expressed by means of perfective aspect is compatible with all the worlds in the restricted conversational background (cf. Greenberg 2003). With these facts in mind, I explain the difference in the semantics of count singular perfective generics, presented in (1-3) and count singular (obligatorily) imperfective generics, presented in (4-6)? Since, in Polish non-past perfective aspect is typically used to make future reference, the semantics of perfective generics should involve some elements of the semantics of futurity. Copley (2002) argues that the semantics of futures does not necessarily involve universal quantification over all possible metaphysical alternations of a world at a given time but the set of these inertia future worlds is restricted to those on which the director (an individual who directs a proposition to the future) bases his commitments. In other words, the metaphysical modal base from which inertia futures develop is bouletically ordered. The presence of the commitment-based semantics in Polish perfective generics (generic futures) is manifested prosodically. All perfective generics in Polish are uttered with emphatic, persuasive prosody, as if the director wanted to convince the listener to the truth of the generalization e.g. PrawDZIwy facet nie rozPLAcze się. ‘A true man will not cry.’ Since commitments are always made on the basis of the known facts w.r.t. the unknown facts, generalizations based on a speaker’s commitments are most suitably expressed by means of future forms. In the evaluation of the truth of count singular perfective generics in (1-3) the worlds on which a director bases his commitments are those in which an accomodated biological, legal, social, stereotypical law-like proposition holds. This law-like proposition is part of the bouletic ordering source and the the quantification is over future inertia worlds which are continuations of the worlds in the bouletically ordered metaphysical modal base. By contrast, count singular (obligatorily) imperfective generics in Polish do not involve a commitment modality, so the quantification is not over inertia alternatives but simply over the worlds in the metaphysical modal base ordered by the accomodated social, legal, biological or stereotypical norm. The theory aslo explains why perfective generics, which have a future form, are able to support past counterfactuals. The law-like proposition on which the director bases his commitments is true in all the metaphysically accessible worlds w.r.t. <w, I> at a larger time interval I’ surrounding the present interval I. This larger interval I’ contains both the past and the future intervals (cf. Greenberg 2003). Therefore, the proposition expressed by means of perfective generics is not only true in all inertia futures branching off the worlds in which the law-like proposition holds but it is also counterfactually true in all past inertia worlds to <w, I> in which this law-like proposition is holds.