In my paper I analyze a special type of Russian reciprocal derivatives with the prefix *vzaimo*'mutually' (these derivatives have rarely been an object of linguistic analysis) and posit a question whether
these derivatives can be regarded as unaccusatives. In Russian, reciprocity is primarily marked with the free
pronou *drug druga* which does not change the inflection type of the verb or with a generalized
detranzitivizer *-sja*. However, sometimes the marker *vzaimo*- is used. In finite verb forms, it cannot be the
sole marker of reciprocity: the detransitivizer *-sja* must also be used. For instance, in (1) the variant without *-sja* is ungrammatical:

(1) Častic-y vzaimo-uničtožaj-ut-*(sja).
particle-NOM.PL VZAIMO-annihilate-3SG.PRS-REC
'The particles annihilate each other.' (in physics)

What is important, the reciprocal meaning can sometimes be coded with *-sja* alone, but only inside the class of 'inherent reciprocals', in terms of (Kemmer 1993) (*celovat*' 'kiss' – *celovat*'-*sja* 'kiss each other'). In verbs like *uničtožat*' 'annihilate' *-sja* alone cannot mark reciprocity. If we remove *vzaimo*-, as in (2), the verb has the passive meaning only:

(2) Častic-y uničtožaj-ut-sja. particle-NOM.PL annihilate-3SG.PRS-PASS

i. 'The particles are annihilated.' ii. *'The particles annihilate each other.'

This situation is highly reminiscent to one described by Alexiadou & Anagnostopolou (2004) and Embick (2004). These authors show that a similar type of system exists in Greek, Fula (West Atlantic) and Tolkapaya (a dialect, of Yavapai, Yuman), but within the reflexive, and not reciprocal domain. For instance, in Greek reflexivity can be marked with the non-active voice alone, if the verb belongs to the class of 'inherent reflexives' (see (3). However, for other verb classes the prefix *afto*- 'self' is needed in addition to the non-active voice endings, as in (4).

Greek:

(3) I Maria xtenizete kathe mera. the.NOM Maria comb.NACT.3SG.PRS every day 'Maria combs herself every day.'

(4) O Yanis afto-katastrafike. the.NOM Yanis self-destroy.NACT.3SG.PST

'Yanis destroyed himself.' (Alexiadou, Anagnostopolou 2004: 118; Embick 2004: 144).

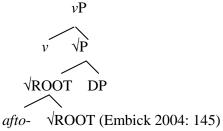
Without *afto*- the verb bears the passive or anticausative, not reflexive reading:

(5) O Yanis katastrafike.
The Yanis destroy.NACT.3SG.PST
'Yanis was destroyed.'

In Tolkapaya and Fula, we observe roughly the same situation.

This reflexive/passive/anticausative polysemy when the same set of endings can have different meanings depending on the verb class and presence / absence of special prefix forces Embick (2004) to consider reflexives to be unaccusatives – he proposes the following structure of 'afto-reflexives':

(6) the structure of afto-reflexives



In the structure there is only one argument (the DP complement), the verb has the reflexive interpretation, but, as in passive configurations, the ν licensing agentive interpretation is present. Thus, the literal meaning would be something like 'Yanis is self-destroyed' (reflexive passive).

It may seem that the situation in Russian is identical to that in Greek, Tolkapaya and Fula. The Russian -sja, just as voice markers in these languages, has many meanings related to unaccusativity and transitivity decrease: passive (stroit' 'build' – stroit'-sja 'be built'); anticausative / unaccusative (razbit' 'break (transitive)' – razbit'-sja 'break (intransitive)'); reflexive (myt' 'wash' – myt'-sja 'wash (oneself)'). Thus, we could in principle say that -sja in (1) does not reciprocalize anything, instead, it "signals unaccusative

'The particles are annihilated by each other'), parallel to Embick's 'passive reflexives'.

However, some facts prove that Russian is not entirely similar to the one in Greek, Fula and Tolkapaya. First of all, the free pronoun *drug druga* can be usedwith *vzaimo*-derivatives instead of *-sja*:

(7) Et-i kul'tur-y vzaimo-obogaščaj-ut drug drug-a this-NOM.PL culture-NOM.PL VZAIMO-enrich-3PL.PRS each.other-ACC 'These cultures mutually enrich each other.'

In this example, the relative order of derivations is opaque. However, it is clear that the unaccusative analysis is hardly plausible. *Drug druga* is a free pronoun in terms of (Reinhart, Siloni 2004) – thus, it can hardly make a transitive verb unaccusative. In (7) *drug druga* occupies the object position of the main verb. Therefore, the structure of (7) must be 'These cultures mutually enrich each other', rather than 'These cultures are mutually enriched by each other'.

Then, with participles the prefix under analysis can be the sole reciprocal marker.

- (8) **vzaimo**-dopoln'aj-ušč-ije metod-y VZAIMO-supplement-PART.PRS-NOM.PL '(Mutually) complementary methods';
- (9) **vzaimo**.uničtožaj-ušč-ije častic-y **VZAIMO-**annihilate-PART.PRS-NOM.PL particle-NOM.PL '(Mutually) annihilating particles.' (in physics).

Alexiadou (2001) and Embick (2004: 145) notice that *afto*- can be the sole marker of reflexivity in nominalizations, as opposed to finite verb forms (*afto-katastrof-i* 'self-destruction') but they do not speak of any difference between finite verb forms and participles.

These differences between Russian, on the one hand, and Greek, Fula and Tolkopaya, on the other hand, make us propose an alternative analysis for *vzaimo*-reciprocals, which is within the framework of (Reinhart, Siloni 2004). We suppose that *vzaimo*- is an adjunct which bears the reciprocal interpretation. However, *-sja* in (1) is not a marker of unaccusativity, but rather a marker of reduction of the internal argument (see Reinhart, Siloni 2004: 177). The literal interpretation is 'The particles mutually annihilate + SJA' (object reduction), thus, *-sja* does not mark here any type of unaccusative passive configuration. I think that it rather marks an objectless configuration of the type *John eats*. Therefore, the function of *-sja* in (1) is very similar to that of *drug druga* in (7): in (7) *drug druga* occupies the object position, whereas in (1) *-sja* marks object reduction¹.

This analysis is supported by the fact that many of Russian participles admit object deletion / ellipsis, as in (10) (the verb *razrušat*' 'destroy' in finite forms does not admit it):

(10) razrušaj-ušč-eje vozdejstvij-e destroy-PART.PRS-NOM.PL impact-NOM.SG 'destructive impact' (literally 'destroying ∅ impact')

If the detranzitivizer -sja marks an objectless configuration in vzaimo-forms (1) than it is not surprising that participles on vzaimo- in (8) and (9) do not have -sja: Russian participles, including those having the prefix vzaimo- can form an objectless configuration without any marker.

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¹ There are two differences: first, -sja is a morphological marker, whereas drug druga is a free pronoun which does not make the verb intransitive – it simply occupies the object position. Second, drug druga marks reciprocity in (7), because it always marks reciprocity, whereas -sja marks objectless configuration in (1) – there are no reasons to claim that it has the reciprocal meaning in forms like this.