In Adyghe, a polysynthetic West Caucasian language\(^1\), the ordering of slots occupied by morphological markers – at least prefixes – is strictly fixed. For instance, the marker of negation \(m\)- is always located closer to the root than the benefactive prefix \(fe\)-.

Baker (1996) puts forward what he calls ‘Mirror Principle’ presupposing that the semantic ordering of valency-changing operations (i.e., their relative scope) always corresponds to the morphological order of affixes. However, this principle can be violated in Adyghe. For instance in (1), though the linear order of benefactive and causative is strictly fixed (the causative affix is located closer to the root than the benefactive one), the semantic ordering of these two derivations, i.e. their relative scope, can be different:

\[
\begin{align*}
\text{(1)} & \quad \text{jate } \check{c}'ale-m \text{ meq}^{w\circ} \text{ s-fe-r-j\-ke-w\-r\-\check{c}'a-\-k}. \\
& \quad \text{father boy-ERG hay } 1\text{SG.IO-BEN-3SG.IO-3SG.A-CAUS-mow-PST} \\
& \quad \text{i. ‘The father made the boy mow the grass for me.’ (causative > benefactive)} \\
& \quad \text{ii. ‘On my behalf (for me), father made the boy mow the grass.’ (benefactive > causative)}
\end{align*}
\]

The causative operation can have scope either above or below the benefactive.

I am going to analyze the scope properties of the Adyghe causative marked by the prefix \(Re\)- and show that there are restrictions on the relative ordering of causative and other derivations, and that these restrictions allow us to draw some conclusions concerning general properties of causative in Adyghe. However, in the linear order, the causative morpheme always immediately precedes the verbal root.

1. Causative + reflexive

The combination of causative and reflexive can in principle have several meanings. I will concentrate on the reflexive-causative constructions where the reflexive relation is established between the agent (A) of the initial transitive verb, which becomes an indirect object of the derived causative verb, and the direct object (DO) of the initial transitive verb:

\[
\begin{align*}
\text{(2) a.} & \quad \text{s-jate } \check{\text{w\-\-n\-e-}}-\text{m-}\check{c}'e \text{ za-qa-s-j\-ke-\-}\lambda \text{e}\text{\-}\text{w\-}\text{a-z\-e-\-k}. \\
& \quad \text{1SG.Poss-father mirror-ERG-INS RFL.ABS-DIR-1SG.IO-3SG.A-CAUS-see-RE-PST} \\
& \quad \text{The father, showed me\(_1\) myself\(_j\) in the mirror.} \\
\text{b.} & \quad \text{s-jate } \check{\text{w\-\-n\-e-}}-\text{m-}\check{c}'e \text{ so-qa-z-j\-ke-\-}\lambda \text{e}\text{\-}\text{w\-}\text{a-z\-e-\-k}. \\
& \quad \text{1SG.Poss-father mirror-ERG-INS 1SG.ABS-DIR-RFL.IO-3SG.A-CAUS-see-RE-PST} \\
& \quad \text{The father, showed me\(_1\) myself\(_j\) in the mirror.}
\end{align*}
\]

The causee (‘I’) is here co-referent to the initial direct object (lit. ‘My father made me see myself / me in the mirror). This type of co-reference could potentially be marked in two different ways:

- If the causative had the scope above the reflexive, the reflexive marker would denote the co-reference between the subject and the direct object of the base verb (‘I saw myself’),

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\(^1\) The data is from our field notes and was collected during the field trips of the Russian State University for the Humanities. We also use the data from (Rogava, Kerasheva 1966) and (Smeets 1992).
and later on, the form would be causativized. In this case, the reflexive marker would occupy the direct object (absolutive) position, i.e. the leftmost position in the verb form. 
- If the reflexive had the scope below the causative, the reflexive marker would denote the co-reference between the direct object and the indirect object of the causative verb (since the initial subject becomes the indirect object of the causative construction). In this case, the reflexive marker would occupy the indirect object position.

In reality, only the first variant occurs. In (2a), the reflexive marker \( z / \text{uni0259} \) occupies the leftmost position of the verb form. In other words, the causative has the scope above the reflexive and causativization takes place after reflexivization. (2b), where the reflexive marker occupies the indirect object position, is ungrammatical.

2. Causative + reciprocal
The problem of relative scope of valency-changing operations occurs also for the combination of the causative and reciprocal derivations with transitive verbs. When the reciprocal relation is established between the causee (the subject of the initial transitive verb) and the initial direct object, the ordering of derivations can in principle be different. However, here causativization also follows reciprocalization. If the reciprocalization took place after the causativization, the initial agent would be the indirect object of the causative construction. In this case, the reciprocal marker \( z \text{e} / \) would have been used which is always employed to mark reciprocity between the direct object and the indirect object.

However, it is not the case: in causative constructions with the reciprocal relation between the agent of the initial verb and the direct object, the reciprocal prefix \( z \text{e} / \) is used, as in (3a). This prefix marks only the reciprocal relation between the agent and the direct object of a transitive verb. This means that when reciprocalization occurs, the initial agent still occupies its base position, and not the surface indirect object position. Thus, causativization takes place later and scopes above reciprocalization:

(3) a. \( \text{čet\text{ow}a-m-re ha-m-re zere-z-\text{i}e-\text{λe}b^w-\text{i}e-x} \). 
  \( \text{cat-ERG-COOD dog-ERG-COOD REC.A-1SG-CAUS-see-PERF-PL} \)
  I, showed the cat and the dog to each other.

b. \( \text{čet\text{ow}a-m-re ha-m-re ŝ/\text{uni02b7}-ze-z-\text{i}e-\text{λe}b^w-\text{e}-\text{x}} \). 
  \( \text{cat-ERG-COOD dog-ERG-COOD 2PL.ABS-REC.IO-1SG-CAUS-see-PERF} \)
  I, showed the cat and the dog to each other.

3. Causative + antipassive
Finally, let us look at the combination of the causative and the antipassive. The latter eliminates the direct object and is marked with the suffix -\( e \) overtly present only with shwa-final stems, as in (4). Here, too, two mutual orderings of the two derivations are theoretically possible: either the causative after the antipassive (for instance, ‘He ate meat’ \( \rightarrow \) ‘He ate’ \( \rightarrow \) ‘I made him eat’) or the antipassive after the causative (‘He ate meat’ \( \rightarrow \) ‘I made him ate meat’ \( \rightarrow \) ‘I made him eat’).

For (4), for instance, both analyses are theoretically possible:

(4) \( \text{se a-r z-\text{i}e-\text{šha-\text{i}}} \). 
  \( \text{L.ERG (s)he-ABS 1SG.A-CAUS-eat.AP-PST} \)
  ‘I made him / her ate; I fed him / her.’
Note that the causative marker is a prefix, while the antipassive is marked suffixally, so their linear order provides no information about possible semantic orderings. However, in reality, the antipassivization takes place before the causativization. This is evident from the fact that causatives of intransitive verbs cannot be used in transitively, in the antipassive form or simply with intransitive cross-referencing morphology. In other words, causative derivatives cannot undergo antipassivization. In (5), the causative /ke-žen/ ‘bake (transitive)’ of the intransitive verb /žen/ ‘bake (intransitive), be baked’ fails to be used in transitively (antipassively), as in (5b):

(5)  a. halɔ̃w'kaže-m halɔ̃w'ə-r j-e-ka-že.  
    baker-OBL bread-ABS 3SG.A-DYN-CAUS-be.baked  
    ‘The baker is baking bread.’

b. *halɔ̃w'kaže-r njepe rjen-ew me-ka-že.  
    baker-ABS today whole-ADV DYN-CAUS-be.baked  
    intended meaning: ‘The baker bakes the whole day.’

Conclusions
Though the linear order of derivational morphemes is usually rigid in Adyghe, their semantic scope can in principle be different, as example (1) with two possible interpretations shows. The causative derivation in Adyghe has one general morphosyntactic property: usually (though not always, (1) being an exception) causativization takes place after other valency-changing alternations.

This property of causativization is possibly related to the special linear position of the causative morpheme which always immediately precedes the verbal root, while all other derivational prefixes are situated to the left of the causative marker. This and other features shows that the causative marker and causativization itself occupy a separate place in the Adyghe system, and are not similar to other valency-changing mechanisms.

References