In this jigsaw puzzle we will look at different kinds of causatives. For simplicity, assume that all the forms glossed CAUS are the same kind of element (albeit in different languages) - the exact syntactic label is not important right now.

In this expert group, see if you can find out what is being caused, and to what/whom. Characterise this in terms of grammatical roles (subject, object, etc).

1 English

(1) a. Tyler opened the door.
     b. Tyler caused the door to open.
(2) a. Kim broke the vase.
     b. Kim caused the vase to break.
(3) a. Kim taught Chris.
     b. Kim caused Chris to learn.

2 Hebrew

Only the forms glossed with CAUS here are the "causative" ones for our purposes. The pattern here should be similar to the one in English above.

(4) a. *teo   kara   et   ha-sefer*
         Theo read.PAST ACC the-book

         'Theo read the book.'

     b. *teo   hekri   et   ha-sefer   le-axiv*
         Theo read.PAST-CAUS ACC the-book to-his.brother

         'Theo read the book out to his brother.'

(5) a. *ha-maxʃev   kalat   et   ha-ʃeder*
         the-computer received.PAST ACC the-transmission

         'The computer received the transmission.

     b. *ha-maxʃev   heklit   et   ha-toxnit*
         the-computer received.PAST-CAUS ACC the-program

         'The computer recorded the program.'

(6) a. *ha-sefer   nafal*
         the-book fell.PAST

         'The book fell.'

     b. *teo   hepil   et   ha-sefer*
         Theo fell.PAST-CAUS ACC the-book

         'Theo dropped the book.'

3　Quechua

And the same pattern for CAUS:

(7)　a.　*Yaku　t'impu-rqa*
　　　　Water　boil-PAST
　　　　'The water boiled.'

　　　b.　*Wayna yaku-ta　　t'impu-chi-rqa*
　　　　boy　　water-ACC　boil-CAUS-PAST
　　　　'The boy boiled the water.'

(8)　*Juan Marya-ta　phiña-chi-rqa*
　　John　Mary-ACC　anger-CAUS-PAST
　　'John angered Mary.'

4　Romance

And the same pattern again, with 'make':

(9)　a.　*Marie fit　　reparer la　voiture (à Jean).*　　　　　　　　[French]
　　　　Marie made repair　the　car　　at Jean
　　　　'Marie got the car fixed (by Jean)', 'Marie made John fix the car.'

　　　b.　*Maria fece　riparare la　macchina (a Gianni).*　　　　　　[Italian]
　　　　Maria made repair　the　car　　　at Gianni
　　　　'Maria got the car fixed (by Gianni).'

　　　c.　*Maria hizo　arreglar el　coche (a Juan).*　　　　　　　　[Spanish]
　　　　Maria made repair　the　car　　at Juan
　　　　'Maria got the car fixed (by Juan).'

5　Analysis

If you have time: what would a formal analysis look like? Specifically, what would the relationship be between the Causer, the Causee, the verb/root, and the element CAUS?

In this jigsaw puzzle we will look at different kinds of causatives. For simplicity, assume that all the forms glossed CAUS are the same kind of element (albeit in different languages) - the exact syntactic label is not important right now.

In this expert group, see if you can find out what is being caused, and to what/whom. Characterise this in terms of grammatical roles (subject, object, etc).

1 Hebrew

Only the forms glossed with CAUS here are the "causative" ones for our purposes.

(1) a. *adam axal   et   ha-xumus*
         Adam ate-PAST ACC the-hummus
         'Adam ate the hummus.'

   b. *adam heexil   et   teo   xumus*
       Adam ate.CAUS-PAST ACC Theo hummus
       'Adam fed Theo hummus.'

(2) a. *teo lavaʃ   et   ha-meil*
         Theo wore-PAST ACC the-coat
         'Theo wore the coat.'

   b. *teo helbiʃ   et   axiv   be-meil*
       Theo wore.CAUS-PAST ACC his.brother in-coat
       'Theo dressed his brother in a coat.'

(3) a. *teo xatam   al   ha-mismax*
         Theo signed-PAST on   the-document
         'Theo signed the document.'

   b. *teo hextim   et   ha-menahelet al   ha-mismax*
       Theo signed.CAUS-PAST ACC the-manager   on   the-document
       'Theo signed the manager on the document.'

2 Japanese

The same pattern can be found in Japanese:

(4) *Taroo-ga   Hanako-o   ik-ase-ta*
     Taro-NOM   Hanako-ACC go-CAUS-PAST
     'Taro made Hanako go.'

(5) *Kotosi-wa   dekinai gakusei-o   hue-sase-ta*
     This.year-TOPIC poor   students-ACC increase-CAUS-PAST
     'This year, we caused (the number of) poor students to increase.'

(6) *Taroo-wa   Hanako-ni   hanasi-o   tutae-sase-ta*
     Taro-TOPIC Hanako-DAT story-ACC convey-CAUS-PAST
     'Taro made Hanako convey a story.'

3   Quechua

And the same pattern in Quechua:

(7) *Marya Juan-man libru-ta   rikhu-chi-rqa*
     Mary Juan-DAT book-ACC see-CAUS-PAST
     'Mary showed John the book.'

(8) *Juan puñu-n*
     Juan sleep-3SUBJ
     'Juan sleeps.'

(9) * *Maria Juan-ta   puñu-n*
     Maria Juan-ACC sleep-3SUBJ
     (int. 'Maria sleeps Juan.')

(10) *Maria Juan-ta   puñu-chi-n*
      Maria Juan-ACC sleep-CAUS-3SUBJ
      'Maria makes Juan sleep.'

(11) a.   *Alqo wayna-ta khani-rqa*
           Dog boy-ACC   bite-PAST
           'The dog bit the boy.'

      b.   *Juan alqo-wan   wayna-ta khani-chi-rqa.*
           Juan dog-INSTR boy-ACC   bite-CAUS-PAST
           'Juan made the dog bite the boy.' (literally 'Juan made-bite the boy using the dog')

4   Turkish

And also in Turkish:

(12) *ben kIz-a   maymun-u   sat-tIr-dI-m*
      I   girl-DAT monkey-ACC sell-CAUS-PAST-1SG
      'I made the girl sell the monkey'

(13) *kIz-I   maymun-a   bak-tIr-dI-m*
      girl-ACC monkey-DAT look-CAUS-PAST-1SG
      'I made/had/let the girl look at the monkey'

(14) *kIz-I   maymun-dan kork-tur-uyor-um*
      girl-ACC monkey-ABL fear-CAUS-PRES-1SG
      'I am making the girl fear the monkey'

5   Analysis

What would a formal analysis look like? Specifically, what would the relationship be between the Causer, the Causee, the verb/root, and the element CAUS?

In this jigsaw puzzle we will look at different kinds of causatives. For simplicity, assume that all the forms glossed CAUS are the same kind of element (albeit in different languages) - the exact syntactic label is not important right now.

In this expert group, we will try to see how CAUS can interact with the verb.

1　Japanese

What would be the literal meaning of each of these examples, and what is the actual meaning?

(1)　*Taroo-ga　zisyoku-o　　niow-ase-ta*
　　　Taro-NOM　resignation-ACC　smell-CAUS-PAST
　　　'Taro hinted at resigation.'

(2)　*mimi-o　sum-ase*
　　　ear-ACC　clear-CAUS
　　　'listen carefully'

(3)　*hana-o　　sak-ase*
　　　flower-ACC　bloom-CAUS
　　　'engage in heatedly'

2　German

The prefix *be-* creates causative verbs in German:

(4)　a.　*enden* 'to end (intransitive)'
　　　b.　*beenden* 'to end something (transitive)'

(5)　a.　*malen* 'to draw, paint'
　　　b.　*bemalen* 'to paint a surface (completely)'

(6)　a.　*Nachricht* 'a message'
　　　b.　*benachrichtigen* 'to inform'

But many verbs with this causative prefix have a different profile, like those in (7)–(8). What can you say about their meaning (if anything)?

(7)　a.　*gleiten* 'to slide'
　　　b.　*begleiten* 'to accompany'

(8)　a.　*nehmen* 'to take'
　　　b.　*benehmen* 'to behave'

3　Hebrew

And is there a way to characterize the relationship between the simple verb and the causative verb in the following examples?

(9) a.   *teo   sagar   et   ha-delet*
          Theo closed-PAST ACC the-door
          'Theo closed the door.'

     b.   *teo   hesgir   et   axiv   la-ʃiltonot*
          Theo closed.CAUS-PAST ACC his.brother to.the-authorities
          'Theo turned his brother in.'

(10) a.   *teo   matsa   et   ha-matana*
          Theo found-PAST ACC the-present
          'Theo found the present.'

     b.   *teo   hemtsi   et   ha-misxak   ha-xadaʃ*
          Theo found.CAUS-PAST ACC the-game   the-new
          'Theo invented the new game.'

(11) a.   *beki   ravtsa   al   ha-ritspa*
          Becky lazed-PAST on   the-floor
          'Becky lay down on the floor', 'Becky lazed around on the floor.'

     b.   *beki   herbits-a   la-xatul*
          Becky lazed.CAUS-PAST.3SG.F to.the-cat
          'Becky hit the cat.'

4   Analysis

What would a formal analysis look like? Specifically, what would the relationship be between the verb/root and the element CAUS?

5   English

If there's time, we can carry out a different kind of exercise.
Is *kill* the same thing as *cause to die*? Is *melt* the same thing as *cause to melt*? Let's look at some examples (some are mildly violent).
Direct causation:

(12) a.   Mary caused John to die and it surprised me that he did so.
     b.   *Mary killed John and it surprised me that he did so.

Time adverbials:

(13) a.   Mary caused the glass to melt on Sunday by heating it on Saturday.
     b.   *Mary melted the glass on Sunday by heating it on Saturday.

(14) Pat broke the stick on Monday (*by stepping on it on last week).

Instrumentals and agent-oriented adverbials:

(15) a.   The pirates caused Bill to die by swallowing his tongue.
     b.   *The pirates killed Bill by swallowing his tongue.

(16) Pat broke the stick quickly (*by stepping on it slowly).

What do these examples mean for the relationship between the causing event jand the caused event?