The distribution of *si* in Italian transitive/inchoative pairs

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The phenomenon

In Italian most verbs entering a transitive/inchoative relation such as (1) are accompanied by the reflexive clitic *si*,[1] while others lack it (2).

(1) a. Maria ha aperto la finestra
       has opened the window
       'Maria opened the window'
   b. La finestra <u>si</u> è aperta.
       the window REFL is opened
       'The window opened.'
   c. La finestra è aperta.
       *'The window opened'.
       'The window is open.'
(2) a. Il capitano ha affondato la nave.
       the captain has sunk the boat
       'The captain sunk the boat.'
   b. La nave è affondata.
       the boat is sunk
       'The boat sunk.'
   c. *La nave si è affondata.

Previous treatments

In current syntactic analyses, the occurrence of the reflexive clitic in (1) is considered to be a concomitant of the suppression (or lack) of thematic subject role (Burzio 1986, Cinque 1988, Manzini 1986), or the reflex of inchoativization (Grimshaw 1990), or the indicator of a multiattachment relation (Rosen 1982). At the same time, its distribution across the class of inchoatives (both with and without a transitive counterpart) has been largely considered due to lexical idiosyncrasy and therefore unpredictable (Burzio 1986, Cinque 1988, Rosen 1984).

Semantic analyses of the phenomenon have mostly focused on French (Brousseau and Ritter 1991, LaBelle 1992, Zribi-Hertz 1987), and fewer on Italian (Castelfranchi & Parisi 1976, Di Sciullo 1990). In these studies the presence of *si /se* has been seen as the indicator of coreference between two arguments in the semantic structure of the predicates (Brousseau and Ritter 1991, Castelfranchi and Parisi 1976) or as the marker of some aspectual properties of the predicates (Zribi-Hertz 1987), or simply as a reflex of the unaccusative/unergative distinction (Di Sciullo 1990, LaBelle 1992).

In this paper, I propose a semantic analysis in which coreference or multiattachment of two or more arguments at the semantic level plays no role in the occurrence and distribution of the reflexive clitic *si* in transitive/inchoative pairs. Rather, here I advance the hypothesis that verbs such as *aprire* and *affondare,* which both denote change of state events, differ in a fundamental way: that is *aprire*, and all of those verbs which take *si* in their inchoative form, are

basic transitive verbs, while *affondare,* and those verbs which reject *si* in their inchoative form, are basic intransitive verbs. Since this difference in valence is directly related to the conceptualization of the events, I surmise that *aprire* denotes a caused change of state, while *affondare* denotes a simple/autonomous change of state.

The discussion will proceed as follows. I will first present 3 arguments in support of the preliminary hypothesis. I will consider : (a) the interpretation of *aprire* and *affondare* under causative *fare*; (b) their interpretation under perception verbs; and (c) their conceptualization by native speakers; secondly, on the basis of the presented evidence, I will assign each verb class a logical structure, and argue that inchoative *aprirsi* and inchoative *affondare* have different directions of derivation; thirdly, I will assign a logical structure to inchoative *aprirsi* and will discuss the phenomenon of inchoativization in Italian. To conclude, I will compare inchoative and passive structures.

i. The interpretation of *aprire* and *affondare* under causative *fare*.

The first piece of evidence in favor of the assignment of different syntactic frames, and thus logical structures, to verbs like *aprire* and those like *affondare* comes from the interpretation of these verbs under causatives.

Italian morphosyntactic causatives are expressed by means of *fare* 'do/make'+ infinitive. Causatives in Italian are monoclausal structures, that is the causative verb *fare* and the dependent verb form a single verbal nucleus which shares the single argument of *fare* and the argument(s) of the dependent verb (see (3)).

(3)   a. Maria fece cadere il vaso
                      made fall   the vase
         'Maria made the vase fall/ Maria dropped the vase'.

In causatives the subject of the dependent verb, the causee occurs as an additional surface nominal and receives appropriate morphosyntactic case marking. In general, case marking of the causee depends on the valency of the dependent infinitive. In (4) there is a chart with the possible case markings of the causee.

(4) **Morphosyntactic Case Marking of the Causee**
         intransitive   causee= accusative = ∅
         transitive (i)   causee= dative = a + NP
         transitive (ii)   causee = agentive = da+NP / ∅
         ditransitive   causee = agentive = da+NP /∅

If the verb is intransitive, the causee is realized as the direct object and bears accusative case marking as in (5a). If it is transitive, the causee may receive either dative or agentive case marking depending on the semantics of the verb and the lexical meaning of the nominal denoting the causee. If the causee is dative, it is preceded by the preposition a, 'to' as in (5b), where the causee is an experiencer; if it is agentive it is preceded by da 'by' as in (5c), where the causee bears the role of agent. If the verb is ditransitive, the causee is morphosyntactically marked as agentive (5d). When a verb is transitive or ditransitive the causee can also be omitted, as for instance in (5e), which is interpreted as an agentless causative.

(5)   a.   Maria fece camminare <u>Carlo</u>.
                      made walk

'Maria made/had Carlo walk'.
b. Maria fece   guardare la tv <u>a Carlo</u>.
    made   watch   the tv   to
    'Maria made Carlo watch tv.'
c. Maria fece visitare la figlia   <u>dal   dottore.</u>
    made visit the daughter by.the doctor
    'Maria had the doctor visit her daughter.'
d. Maria fece leggere il   giornale   al   nonno <u>da Carlo</u>.
    made read   the newspaper to.the grandpa by
    'Maria had/made Carlo read the newspaper to grandpa.'
e. Maria fece   riparare la tv.
    made repair   the tv
    'Maria had the tv repaired (by someone)'

At the surface level, causatives of intransitives (5a) and agentless causatives (5e) are identical, since they are both expressed by the string *Fare* + Infinitive + NP, so in some cases ambiguitity may arise. Consider, for instance, the following causative construction in (6) where the dependent verb *mangiare* can receive (out of context) either a transitive or an intransitive interpretation. In the case the verb receives a transitive reading, the structure is that of an agentless causative, while in the case it receives an intransitive reading the structure is that of the causative of an intransitive.

(6)   a.   Maria fece mangiare il tacchino.
                   made eat   the turkey
       b.   'Maria had someone/people eat the turkey'
       c.   'Maria made the turkey eat'.

Another characteristic feature of Italian causative construction, is that the dependent infinitive loses its reflexive clitic when it occurs under causative *fare*[2] (7). Loss of the reflexive clitic occurs also when the verb is inherently reflexive (8), that is when the verb lacks a corresponding non-reflexive form, see (9) below.

(7)   a.   Maria si   pettina.
                       REFL combs
                       'Maria combs her hair.'
       b.   La mamma fa pettinare Maria.
                       the mommy makes comb
                       'Mommy makes Maria comb her hair.'
       c.   *La mamma fa pettinar<u>si</u> Maria.
(8)   a.   Berlusconi fa arrabbiare gli italiani.
                                makes get.angry the italians
                       'Berlusconi made Italians angry.'
       b.   *Berlusconi fa arrabbiarsi gli italiani.
(9)   a.   Gli italiani si   arrabbiano.
                       the italians REFL get.angry
                       'Italians get angry.'
       b   *Gli italiani arrabbiano.

The observed structural ambiguity of the string *Fare*+Infinitive+ NP (see (5a), (5e), and (6)), and the obligatory loss of reflexive clitic in causative contexts (see (7b-c) and (8)), make causative structures a good testing ground for the hypothesis that *aprire* and *affondare* have different basic structures. If, in fact,

aprire and *affondare* were respectively transitive and intransitive we would expect that when they occurred after causative *fare* they would receive different interpretations. Alternatively, if *aprire* and *affondare* were both basically transitive, as assumed in previous syntactic work, and the distribution of *si* were just a matter of lexical idiosyncrasy, we would expect that when these verbs were embedded in causative contexts, they would receive identical interpretations. Let us now consider the data in (10) -(13).

(10) a. Maria fece aprire la porta.
                 made open the door
     b. 'Maria had someone open the door opened'.
     c. 'Maria got the door to open.'
(11) a. Maria fece chiudere la finestra.
                 made close the window
     b. 'Maria had someone close the door'.
     c. 'Maria got the window to close.'
(12) a. Tonino fece affondare la barca.
                 made sink the boat
     b. 'Tonino made the boat sink.'
     c. *'Tonino made someone sink the boat.'
(13) a. Tonino fece annegare la mosca
                 made drown the fly
     b. 'Tonino made the fly drown.'
     c. *'Tonino made someone drown the fly.'

For native speakers of Italian sentences (10) and (11) are ambiguous, while (12) and (13) are not. Sentences (10a) and (11a) are ambiguous between a transitive, (see (10b) and (11b)) an an intransitive interpretation (see (10c) and (11c)), while (12) and (13) only receive an intransitive interpretation. Native speakers of Italian also agree in giving (10b) ' Maria had someone open the door', and (11b) 'Maria had someone close the door' as first readings of (10) and (11) respectively; this proves that they interpret the infinitives *aprire* and *chiudere* in the string *Fare* + Infinitive + NP transitively, and give the structure the reading of an agentless causative. Conversely, native speakers, interpret (12a) and (13a) unambiguously as 'Tonino made the boat sink', and as 'Tonino made the fly drown', that is, they give the verbs *affondare* and *annegare* an intransitive interpretation, and attribute the sentence the reading of the causative of an intransitive. This first piece of evidence supports the hypothesis that *aprire* and *affondare* have different basic structures.

ii. Interpretation of *aprire* and *affondare* under perception verbs.

When embedded under perception verbs such as *vedere* 'see' and *sentire* 'hear' the contrast between verbs of the *aprire* and *affondare* classes becomes sharper. Italian perception verbs enter two construction types:
(i) a perception verb plus infinitive construction, which is in all relevant aspects identical to the causative construction (see below examples (14));
and (ii) an accusative plus infinitive construction, expressed by the string
Perception Verb + NP acc + Infinitive, see below examples in (15). (For a more detailed discussion see also Lepschy & Lepschy 1988, Lepschy 1978, Radford 1977a, 1977b, Burzio 1986: 287-304, Renzi & Salvi (1991:509-14)).

Perception Verb plus Infinitive
(14)   a.   Vidi scrivere Ada
                I.saw write
                'I saw Ada write'
        b.   Vidi scrivere una lettera da Ada.
                I.saw write   a letter   by
                'I saw Ada write a letter.'
        c.   Vidi scrivere una lettera a Ugo da Ada.
                I.saw write   a letter to   by
                'I saw Ada write a letter to Ugo.'
        d.   *Vidi pettinarsi Ada.
                I.saw comb.REFL Ada
        e.   Vidi pettinare Ada.
                I.saw. comb Ada
                'I saw someone comb Ada.'

Accusative plus Infinitive

(15)   a.   Vidi Ada scrivere.
                I.saw   write
                'I saw Ada write.'
        b.   Vidi Ada scrivere una lettera.
                I.saw   write   a letter
                'I saw Ada write a letter.'
        c.   Vidi Ada scrivere una lettera a Ugo.
                I.saw   write   a letter to
                'I saw Ada write a letter to Ugo.'
        d.   Vidi Ada pettinarsi.
                I.saw   comb.REFL
                'I saw Ada comb herself'

        In the Perception Verb plus Infinitive construction, the reflexive clitic is
omitted just like in causatives (see (14d) and (14e)); while in the Accusative plus
Infinitive construction the clitic reflexive is expressed, and is attached on to the
dependent infinitive (see 15d) as it is customary   in Italian for all clitics
dependents of infinitives.
        Let us now consider the examples (16) to (23) where *aprire* and
chiudere, and *affondare* and *annegare* occur in the two types of perception verb
constructions which we just discussed.

Perception Verb plus Infinitive

(16)   Maria vide aprire la porta
                        saw open the door.
                'Maria saw someone open the door.'
(17)   Carletto vide rompere il vaso.
                         saw break   the vaso.
                'Carletto saw someone break the vase.'

Accusative plus Infinitive

(18)   a.   Maria vide la porta aprirsi.
                Maria saw the door open-Refl
                'Maria saw the door open'

	b.	*Maria vide la porta aprire.
(19)	a.	Carletto vide il vaso rompersi.

　　　　　　　　　　saw the vase break.REFL
　　　　　　　'Carletto saw the vase break.'

	b.	*Carletto vide il vaso rompere.

Perception Verb plus Infinitive

(20)　　　　Maria vide affondare la nave.
　　　　　　Maria saw sink　　　the boat
　　　　　　'Maria saw the boat sink'
(21)　　　　Carletto vide la mosca annegare.
　　　　　　　　　　saw the fly　drown
　　　　　　'Carletto saw the fly drown.'

Accusative plus Infinitive

(22)　　　　Maria vide la nave affondare.
　　　　　　Maria saw the boat sink.
　　　　　　'Maria saw the boat sink'
(23)　　　　Carletto vide annegare la mosca.
　　　　　　　　　　saw drown　　　the fly
　　　　　　'Carletto saw the fly drown.'

Aside from the obvious syntactic differences between the occurrence of *aprire* and *affondare* in the Perception verb plus Infinitive construction, and in the Accusative plus infinitive construction, it is important to notice that *affondare* and verbs of the same class, such as *annegare*, receive the same intransitive interpretation in both the perception verb plus infinitive and the accusative plus infinitive constructions, (compare (20) and (21), and (22) and (23)), while verbs like *aprire* do not. In fact, in (16) and (17) which are instances of perception verb plus infinitive constructions, *aprire* and *rompere* are interpreted as transitives. (16) and (17) can be translated respectively as 'Maria saw someone open the door', and 'Carletto saw someone break the vase' respectively ; while in (18a) and (19a) which are instances of accusative plus infinitive, and which therefore allow the expression of the reflexive clitic, note the ungrammatical status of (18b) and (19b), *aprirsi* and *rompersi* receive the expected intransitive interpretation. Thus (18a) and (19a) can be translated as 'Maria saw the door open', and 'Carletto saw the vase break'. On the other hand, *affondare* and *annegare* , are interpreted uniquely as intransitives both in the Perception Verb plus Infinitive construction in (20) and (21), and in the Accusative plus Infinitie construction, in (22) and (23). Thus (20) and (22) can be both translated as 'Maria saw the boat sink' and (21) and (23) as 'Carletto saw the fly drown'.
　　　　To conclude, also the interpretation of *aprire* and the *affondare* under perception verbs corroborates the preliminary hypothesis that the two verb classes are associated with different basic syntactic structures and that they denote two different sorts of change events.

iii. Difference in basic conceptualization of *aprire* and *affondare*

　　　　Additional evidence that *aprire* and *affondare* are associated with different basic syntactic frames, comes from native speakers' responses to an elicitation test I conducted both in person and via electronic-mail. Native speakers were given a list of Italian verbs which included verbs of the *aprire* class and of the *affondare*

class in the infinitive form and without reflexive clitics, and were asked to write down for each verb the first sentence that came to their mind. If *aprire* and *affondare* had different basic structures, we would expect that native speakers used verbs like *aprire* mostly in their transitive form, and verbs like *affondare* mostly in their intransitive form since they would associate the particular verb with some prototypical representation of the event. I received twenty-six responses from native speakers of Italian from various regions of the country. Also in this case, the original hypothesis turned out to be sound. In fact, the majority of the speakers used verbs in the *affondare* class intransitively, and verbs in the *aprire* class both transitively and intransitively, which supports the idea that verbs of this class are basically associated with a (transitive) causative structure. (24-36) contain some of the sentences produced by the native speakers. (±*si*) indicates whether or not the reflexive clitic normally occurs with the inchoative form of the verb. Verbs in the same class as *affondare* are marked (-*si*), while verbs in the same class as *aprire* are marked (+*si*).

(24)   **affondare (-*si*) 'sink'**
    a.   Il Titanic è affondato.
            the   is sunk
            'The Titanic sunk.'
    b.   La neve   era così alta che ci   si   affondava fino al ginocchio.
            the snow was so . high that there IMP sink   as.far.as to.the knee
            'The snow was so high that one sunk in it up to the knees.'

(25)   **annegare (-*si*) 'drown'**
    a.   Per poco non annegavo!
            for little not I.drowned
            'I almost drowned.'
    b.   Il gatto è annegato nel   fiume.
            the cat is drowned in.the river
            'The cat drowned in the river.'

(26)   **aprire (+*si*) 'open'**
    a.   Ho   aperto finalmente gli occhi.
            I.have opened at.last   the eyes
            'I have opened my eyes at last .'
    b.   Matteo ha aperto la bocca.
                   has opened the mouth
            'Matteo opened his mouth.'

(27)   **chiudere (+*si*) 'close'**
    a.   Non mi si chiude più lo zaino.
            not to.me REFL close anymore the backpack
            'My backpack doesn't close anymore.'
    b.   Prima di uscire chiudo la porta!
            before of go.out I.close the door
            'Before leaving I close the door.'

(28)   **crescere (-*si*) 'grow'**
    a.   Matteo cresce troppo in fretta.
                    grows too   in haste
            'Matteo grows too fast.'
    b.   Mio nipote sta   crescendo.
            my nephew stays growing
            'My nephew is growing.'

(29)   **cuocere (+*si*) 'cook'**
    a.   Ho cotto la pasta.
            I.cooked the pasta

'I cooked pasta.'
b.   Cuociamo la bistecca.
     we.cook   the steak
     'We cook the steak.'

(30) **dimagrire (-*si*) 'lose weight/make thin'**
    a.   Nelle ultime settimane sono dimagrito.
       in.the last   weeks   I.am become.slim
       ' In the last weeks I lost weight.'
    b.   Devo dimagrire.
       I.must become slim
       'I must lose weight.'

(31) **ingrassare (-*si*) 'get fat/make fat'**
    a.   Il gatto ingrassa   ogni giorno di più.
       the cat   becomes.fat every day of more
       'The cat gets fatter every day.'
    b.   Sono ingrassata di due chili e   mezzo
       I.am become.fat of two kilos and half
       'I gained two and a half kilos.'

(32) **migliorare (-*si*) 'improve'**
    a.   Il mio accento è migliorato parecchio.
       the my accent is improved much
       'My accent improved a lot.'
    b.   Il tempo   non migliora affatto.
       the weather not improves at.all
       'The weather doesn't improve at all.'

(33) **raffreddare (+*si*) 'cool/get cold'**
    a.   Ho messo la birra in frigo per raffreddarla.
       I.have put the beer in refridgerator for cool.it
       'I put the beer in the refridgerator to cool it.'
    b.   Non faceva altro che raffreddare i miei entusiasmi.
       not she/he.did other than cool   the my enthusiasms
       'S/he didn't do anything except cool off my enthusiasm.'

(34) **rompere (+*si*) 'break'**
    a.   Questi stivali mi   rompono le calze.
       these boots to.me break   the stockings
       'These boots break my stockings.'
    b.   Non rompere questi bicchieri!
       not break   these glasses
       'Don't break these glasses.'

(35) **sciogliere (+*si*) 'melt'**
    a.   La neve si   scioglie.
       the snow REFL melts
       'The snow melts.'
    b.   Dopo aver sciolto il burro, ho versato il vino bianco
       after have melt the butter I.have pour the wine white
       'After melting the butter, I poured the white wine.'

(36) **terminare (-*si*) 'end'**
    a.   La corsa è terminata.
       the race is ended
       'The race ended.'
    b.   Quando termina il trimestre?
       when   ends   the quarter
       'When does the quarter end?'

To conclude, the evidence presented here supports the preliminary hypothesis that verbs like *aprire* and *affondare* are respectively transitive and intransitive in their base forms. ·

Analysis

Slobin (1981) states that "the way into grammar involves attention to both prototypical situations in the world of reference and canonical forms in the world of language" (p.188), and that children typically associate particular event types with transitive or intransitive structures. Hence, it is not farfetched to assume that -- if native speakers of a given language associate particular verbs with 'canonical' syntactic forms -- that will tell us something about the way they conceptualize the event denoted by the verb.

The evidence here presented shows that verbs of the *aprire* class are canonically interpreted as transitives, while verbs of the *affondare* class are canonically interpreted as intransitives. Consequently, the fact that verbs like *aprire* are associated with a transitive structure, implies that at the conceptual level the event denoted by the verb includes at least two participants or entities, the participant which undergoes the change, and the participant which causes or instigates the change. On the contrary, the fact that verbs like *affondare* are canonically associated with intransitive structures, implies that at the conceptual level, the event contains a single entity which undergoes a change. The difference in the number of participants which are prototypically assigned to the events denoted by the two verb classes, and their semantic roles --vis a vis the change of state -- points to a crucial difference between the two verb classes: the event denoted by verbs such as *aprire* is prototypically seen as being the result of some external cause; the other, the event denoted by verbs such as *affondare* is prototypically perceived as occurring autonomously, i.e. without the intervention of any external cause. (For a discussion of change events as autonomous or caused see also Rothemberg 1974, Jacobsen 1985, Pustejovsky 1988).

Following the verb classification developed in Vendler 1967, Dowty 1979, and further elaborated in Foley and Van Valin 1984, Van Valin 1993, Van Valin and LaPolla 1995, I assign verbs like *aprire* the logical structures of (transitive) accomplishments (37) and verbs like *affondare* the logical structure of intransitive achievements (38) respectively. In (37b) I give the LS for (37c), and in (38b) I provide the structure for (38c).

(37)   a.   [do'(x ,ø)] CAUSE [BECOME **pred'** (y)]
        b.   [do' (Maria ,ø)] CAUSE [BECOME **open'** (porta)]
        c.   Maria aprí la porta.
                'Maria opened the door'
(38)   a.   BECOME **pred** ' (y)
        b.   BECOME **not afloat** ' (nave)
        c.   La nave affondó
                'The boat sunk.'

The above structures clearly highlight the differences noted in the interpretation of the two verb classes. The logical structure of accomplishments includes two subcomponents: a causal component, which includes the abstract operator CAUSE and which takes as its first argument an activity structure, in which an agent, *Maria* (37b)or x (37a) performs a causing activity ø, and an achievement structure which describes a process, and includes the entity undergoing the change: BECOME **pred** ' (y). The logical structure of achievements includes a

process component, i.e. the abstract operator BECOME, and a resulting state predicate and its arguments (y).[3] Van Valin (1993:35) includes among the criteria which distinguish accomplishments from achievements that of "inherent causative semantics". The three pieces of evidence given above all constitute proof of the inherently causative meaning of *aprire*, and the lack of such meaning in *affondare*.

The task of distinguishing between an accomplishment and an achievement is not always an easy one, especially when the verbs involved are syntactically intransitive. However, the behaviour of *aprire* and *affondare* with manner adverbs (Dowty's test 11 1976:60) provides additional supporting evidence in favour of the classification here proposed. Consider the following:

(39)   a.   La porta si è chiusa violentemente.
              the door REFL is closed violently.
              'The door closed violently.'
        b.   *La nave è affondata violentemente.
              the boat is sunk   violently.
              'The boat sunk violently.'

The different grammaticality of the adverb *violentemente* with *aprire* and *affondare* points to a difference at the level of logical structure. In fact, since it is an adverb which modifies the activity component of the predicate, and not its result state or the process represented by the achievement component BECOME **pred'** (y), *violentemente* can occur with *aprire*. On the other hand, *violentemente* cannot occur with *affondare*, because this verbs lacks an activity component in LS.

That the conceptualization of predicates such as *aprire* and *affondare* is different does not imply that there is isomorphism between real world causality and lexical causality, rather it implies that speakers of a certain language may view those events as complex or as simple, as caused or as autonomous. As argued in Jacobsen (1985)

> The perception of a particular kind of change as belonging to one or the other of these categories need not be based on objective reality, nor need it be exceptionless. What is important is that such categories are based on experiential prototypes... (1985:97)

Not all languages classify verbs in the same manner, in fact even among the Romance languages there is considerable variation with respect to the distribution of the clitic *si/se*, so that cognates or translational equivalents do not necessarily belong to the same verb classes. Consider for instance the following examples from Italian (40) Romanian (41) and French (42).

(40)   a.   La nave è affondata.
              'The boat sunk.'
        b.   L' acqua è evaporata.
              the water is evaporated
(41)   a.   Nava s-a scufundat
              boat.the REFL-has sunk
              'The boat sunk.'
        b.   Capitanul a facut sa se scufunde nava
              captain.the has made COMPL REFL sink boat
              'The captain made the boat sink.'

(42)   a.   L' eau s'est évaporée
              the water REFL is evaporated
              'The water evaporated.'

Furthermore not all speakers of the same language agree on the type of change event denoted by a verb. Take for instance English 'break' which some native speakers conceptualize primarely as an autonomous change, i.e. an achievement, while others as a caused change, i.e. an accomplishment.
       But in spite of the variations, there are some patterns of consistency in the assignment of verbs to one class of events or the other. Jacobsen (1985) discusses patterns of transitivity in English and Japanese, and notices that most verbs which have basic transitive forms are "verbs of destruction and violence", and that this indicates that such events are prototypically perceived as occurring under the influence of an outside force, these verbs are also standard accomplishments in Dowty (1976). In (43) below the intransitive form of the verb is considered derived with respect to the basic transitive form, as indicated by the presence of derivational morpheme -eru.

(43)   a. Yoshio wa kami o moyashi-ta.
                        paper   burn   Past
              'Yoshio burned the paper.'
       b. Kami ga   moe-ta.
              'The paper burned.'
       c.moyasu (tr)/moeru (intr)

On the other hand, verbs which have basic intransitive forms are mostly associated with "a self-induced change". Thus in Japanese "the verbs for grow, float, and sink ...[describe events which].. are typically observed to happen without any readily apparent causative source" (Jacobsen 1985:99). The fact that these events are viewed as basic achievements is grammaticized in Japanese by giving derived morphological status   to the corresponding transitive accomplishment forms, as signaled once again by the suffix -eru, which in this case is used to derive a transitive from an intransitive.

(44)   a. Fune ga shizun-da.
              boat   sink-Past
              'The boat sank down.'
       b. Yoshio wa fune o shizume-ta.
                        boat   sink-   Past
              'Yoshio sank the boat.'
       c. shizumu (intr)/shizumeru (tr) (sink)

Events of destruction and events such as growth, may represent the opposite ends of a continuum, whose middle may involve less standard cases which may be conceptualized "differently across cultures" (Jacobsen 1985:102).The existence of such a middle area of variation would explain the differences across the various Romance languages with respect to the distribution of si/se.
       In the languages such as Japanese which grammaticize the distinction between the two types of change events some change events will be classified as basic and others as derived. As Jacobsen says, we would expect that "experiential normality will somehow be reflected in linguistic normality, simpler linguistic forms in general being more normal (unmarked) than more complex linguistic forms..." (Jacobsen 1985: 97). Here I would like to suggest that Italian is one of the languages which grammaticalize the contrast between autonomous

and caused changes, betweeen basic accomplishments and basic achievements. Within this context then the occurrence of *si* marks those change events which, regardless of their syntactic realization and valency, are always viewed as the result of an external cause.

(45) below includes verbs which are basic achievements, and lack *si* in their inchoative counterpart; (46) contains accomplishments, whose derived inchoative form is marked by *si*. This class is relatively large and open-ended as it includes many neologisms and borrowings .

(45) **Basic Achievements** [4] [-si]

accorciare 'shorten', *affogare* 'drown', *affondare* 'sink', *annegare* 'drown', *annerire* 'blacken/to become black',*arrossire* 'blush', *aumentare* 'increase', *cambiare* 'change', *cessare* 'cease' , *cominciare* 'begin', *continuare* 'continue', *crescere* 'grow', *dimagrire* ' make thin'/to become thin',*diminuire* 'diminish', *diventare* 'become', *esplodere* 'explode', *finire* 'finish', *imbellire* 'beautify'/'become beautiful', *imbruttire* ' make ugly'/' become ugly', *ingiallire* 'make yellow'/'become yellow', *ingrassare* 'fatten'/'become fat', *invecchiare* 'age'/become old', *migliorare* 'improve'', *peggiorare* 'worsen', *rincretinire* 'make stupid/become stupid', *ringiovanire* 'make sb (look) old'/become younger', *sbiancare* 'whiten'/turn white/pale' *smettere* 'quit', *terminare* 'end'

(46) **Basic Accomplishments** [+si]

accendere 'turn on/light up', *allungare* ' lengthen'/ grow taller/longer', *appallottolare* 'form into a ball/roll up into a ball', *aprire* 'open', *arrossare* ' redden', *arrotolare* 'roll up', *asciugare* 'dry/dry out', *avariare* 'damage/go bad', *bagnare* ' wet', *bruciare* 'burn', *chiudere* ' close', *diffondere* ' shed/emit', *disintegrare* 'disintegrate', *distruggere* 'destroy' *fracassare* ' break up /smash', *frantumare* ' shatter', *gonfiare* ' blow up'/swell up,'*guarire* 'heal' , *impaurire* ' frighten', *indebolire* 'weaken'/ grow weak', *infrangere* ' crack', *raffreddare* cool/get cool', *riscaldare* ''warm/ warm up' , *rompere* ',break' *seccare* 'dry/dry up', *spegnere* 'put out/go out'

At this point we may be able to formulate, a preliminary descriptive generalization with respect to the distribution of *si* . When does *si* occur? The occurrence of *si* in transitive/ inchoative pairs is limited to those predicates which contain a causal component in LS, namely transitive accomplishments. The lack of *si* in the inchoative form of verbs such as *affondare* follows from the fact that these verbs are achievements and lack a causal component. It is interesting to notice that Roeper and Hale (1988) found that the rule for the formation of English middle was restricted along the same line, that is only semantically causative verbs have a middle form. The distribution of *si* can be summarized as follows in (47)

(47) **The distribution of *si* in transitive inchoative pairs**
(Preliminary generalization)
[+si] inchoatives originate from structures which are basic transitive accomplishments, i.e. they are inherently causative constructions. *Si* marks the presence of a causal component in the logical representation of the event.

[-si] inchoatives are basically intransitive achievements, they lack a
causal component in their logical representation.

Aprire vs Aprirsi

In the above section, I attributed *aprire* and *affondare* their basic logical
structures, and explained the distribution of *si* in terms of the presence of a
CAUSE component in the basic form of the verb. Moreover, the fact that *aprire*
is typically associated with a transitive frame, while *affondare* is typically
associated with an intransitive frame, indicates that the direction of derivation of
the two inchoatives is different. *Aprire* is a basic transitive accomplishment,
from which intransitive *aprirsi* is derived via inchoativization, while *affondare*
is a basic intransitive achievement whose transitive counterpart is derived via
lexical causativization. (48) below contain the basic and derived logical structures
of inchoative and transitive *affondare*:

(48) *affondare*:
        a.   BECOME **not afloat** ' (y)
        b.   [**do'** $(x,\emptyset)$] CAUSE [BECOME **not afloat** '(y)]; $x \neq y$

Given that the basic form for *aprire* is a transitive accomplishment, its
derived inchoative *aprirsi* could have at least two possible logical structures. The
first possibility is that *aprirsi* has the structure of an intransitive achievement,
which basically results from the omission of the causal component in the basic
accomplishment structure, as in (49b) from (49a).

(49) *aprire*
        a.   [**do'** $(x,\emptyset)$)] CAUSE BECOME **open'** (y) $x \neq y$
        b.   BECOME **open'** (y)

The main problem with (44b) is that it obliterates the noted differences between
simple change of state and caused change of state, and thus makes inchoatives
aprirsi and inchoative *affondare* identical at the logical level.

If we want to keep the intuition that unlike *affondare*, *aprirsi* denotes a
caused change, and that like transitive *aprire*, the event denoted by *aprirsi* is
still the result of an external cause, then its logical structure must still contain
the abstract operator CAUSE and its first argument, i.e. the causing event. This
structure will be essentially identical to that of a transitive accomplishment (49a),
however since the causing event is not syntactically realized, but it is
semantically implied, I will represent it as some kind of activity, where both
the agent and the causing activity are totally unspecified (see Van Valin &
LaPolla 1995) and thus I will represent both with ø, see below (50). (For
alternative solutions to the representation of implicit causing events see Hale and
Roeper 1988 and Pustejovsky 1988).

(50)   [**do'** $(\emptyset, \emptyset)$] CAUSE [BECOME **open'** (y)]

The Process of Inchoativization

Inchoativization is a lexical process which applies on the logical structure
of basic transitive accomplishment, and has the effect of making the causal
component (i.e the first argument of the operator CAUSE) inaccessible for
syntactic processes, by moving it to the background. Now, for some event to be
moved to the background it must either lack saliency, or be underspecified. Thus
we could suppose that one condition for the inchoativization of a transitive

accomplishment structure is that the causal component be totally unspecified as shown above in (50). So we can modify our descriptive generalization of the distribution of *si* by saying that *si* marks a unspecified causal component in the LS of the verb:

(47a)   **The distribution of *si* in transitive inchoative pairs**

   [+si] inchoatives originate from structures which are basic transitive accomplishments, i.e. they are inherently causative constructions. *Si* marks the presence of a unspecified causal component in the logical structure of the event.

   [-si] inchoatives are basically intransitive achievements, they lack a causal component in their logical representation.

   While backgrounding the causal component of an accomplishment structure, because unspecified, inchoativization 'foregrounds' the resulting process or state, and with it the entity which undergoes the change, the theme or patient. The obvious syntactic reflex of foregrounding the achievement component, is that its theme or patient argument, is expressed syntactically as the subject of the construction.[5]
   But what of those cases in which *si*-inchoatives co-occur with a causal clause, as for instance the examples in (51)?

(51)   a.   Il vaso   si ruppe a causa della stupidaggine di Gino.
             the vase   REFL broke because of the stypidity of Gino
             'The vase broke because of Gino's stupidity.'
       b.   La porta si aprí per il vento.
             the door REFL opened for the wind
             'The door opened because of the wind.'

What will their structure be? Consider (52) the LS of (51b) In (52) the logical structure of the predicative conjunction **because of** specifies the causative component which is left unspecified in the LS of inchoative *aprirsi*.

(52)   a.   **because of** [**do'** $(\emptyset, \emptyset)$] CAUSE [BECOME **open'** (door)], [**do'** (wind, $\emptyset$)]

Differences between inchoatives and passives

   Within this analysis inchoativization is viewed as a process very similar to passivization. Infact, while inchoativization backgrounds the causal component, and foregrounds the achievement component of the logical structure, passivization backgrounds the subject and foregrounds the object. As passive is related to an explicit or implicit subject, so inchoativization is related to an explicit or implicit causal component. However, inchoativization is a productive lexical process with a limited range of application, since it can only affect accomplishment structures, while passive is a productive syntactic process which affects all transitive structures regardless of their aspectual class. In Italian passive can apply to transitive states, achievements, and accomplishments[6]:

(53)   a.   Maria vide Gino in pizzeria.
             'Maria saw Gino at the pizza parlor'   (state)

       b.   Gino fu visto in pizzeria da Maria.
            Gino was seen at the pizza parlor by Maria.'

(54) a.   Maria notò la polvere sul comò.   (achievement)
            'Maria noticed the dust on the chest of drawers.'

       b.   La polvere sul comò è stata notata da Maria.
            'The dust on the chest of drawers was noticed by Maria.'

(55) a.   Maria ruppe il vaso.   (accomplishment)
            'Maria broke the vase.'

       b.   Il vaso fu rotto da Maria.
            'The vase was broken by Maria.'

For passive to take place in Italian it is simply necessary that the verb be transitive and that therefore it express the two macroroles of actor and undergoer. Passive will have the effect of backgrounding the actor macrorole and foregrounding the undergoer macrorole. In Italian all non-core, i.e. non subject, actors are morphosyntactically marked by the preposition *da'* by.[7] What is then the difference between passive and inchoatives? Passive is a productive syntactic process which affects the syntactic realization of a macrorole, i.e. of actor, as subject of the structure. Inchoativization is instead a lexical process which affects the causal component of an accomplishment verb, which contributes the argument that links to the actor macrorole (see Foley and Van Valin (1984) for this characterization of passive). Inchoativization has one effect of backgounding/removing, the causal component of the accomplishment, and with it the argument which would link to the actor macrorole and thus become the subject of a transitive structure. The other effect of inchoativization is that of linking the theme/patient of the achievement structure to the undergoer macrorole, which then becomes the subject of the newly created inchoative structure.

    It is easy to see then that if inchoativization has applied at the semantic level, it has already destroyed the conditions for the application of the syntactic rule of passive. In fact, there would be no transitive structure on which passive could apply since there is no actor macrorole to background, and the undergoer macrorole is already linked to subject. Backrounding the actor macrorole in passives means that it is either omitted or expressed as a peripheral element or as an adjunct/adverbial introduced by the agentive preposition *da*.

    This explanation, I believe, provides a rational for the often noted impossibility of passivizing an inchoative and of inchoativizing a passive. Thus, any lexical process that affects the causal component of a predicate, will necessarily affect, its agent. But it must also be noted that the components acted upon by passive and inchoativization overlap but are not identical. Inchoativization affects the entire structure of the first argument of CAUSE which normally contains an activity, or it may contain another accomplishment, while passivization only affects the realization of the actor macrorole as syntactic subject.

    Sentences such as (56) have often been presented as an argument to prove that passive structures have an implied subject, while inchoatives lack it.

(56) a.   La porta fu chiusa da Maria.
            'The door was closed by Maria.'

       b.   *La porta si chiuse da Maria.
            '*The door closed by Maria.'

Here I would like to point out that the present view of inchoativization may provide a more plausible explanation for the agrammaticality of (56b). In fact,

although incompatible with agentive phrases, inchoatives allow causal phrases, or adjuncts, which are introduced by the conjunction *a causa di*.

(57)   a.   La porta si chiuse a causa di Maria
              the door REFL   ˙ because.of
              The door closed because of Maria.

Conclusions

         To sum up I have argued that the asymmetry in the distribution of the reflexive *si* results from two related factors: the difference in the basic LS of the two types of predicates, and their direction of derivation. I have shown that *aprire* denotes a basic causative event, i.e. an accomplishment, which is canonically expressed via a transitive structure;   while *affondare* denotes a basic change event, i.e. an achievement, and is canonically realized as an intransitive verb. From this it follows that inchoative *aprirsi,* is derived via a lexical rule of inchoativization, while inchoative *affondare* is the basic form of the verb from which a transitive form is derived via the addition of a causal component.
The occurrence of *si* with ˙ verbs like *aprire* indicates the presence of a unspecified causal component in the logical structure. The reflexive clitic *si* is a place marker for the implicit causal component.
         This analysis has further implications   with respect to the so-called inherent reflexives such as *pentirsi*   'repent', *arrabbiarsi*. 'get angry', which include many psych-verbs.

(58)   a.   Maria si pentí.
                     REFL repented   ˙
              'Maria repented.'
       b.   *Maria pentí.

Infact, we can safely assume that also for the class of inherent reflexives the LS is that of an accomplishment, whose causal componenent is totally unspecified (see Pesetsky 1995 for a similar analysis of Italian and French psych-verbs).
Moreover, I hope that the analysis provided in this paper will constitute another step towards the study of all uses of *si* in Italian and towards a unitary account of all occurrences of *si/se* in Romance.

Endnotes

[1] I will use *si*, literally 'him/herself' as a shorthand for all forms of the Italian clitic reflexives, i.e. *mi* 'myself', *ti 'yourself*', *si* 'himself/herself', *ci 'ourselves*, *vi 'yourselves'*, *si 'themselves'*
[2] If a reflexive clitic occurs in a causative construction structure it can only attach on the higher causative verb, and find its antecedent in the causer.
i.   Maria si   fa   pettinare da Carlo.
              REFL makes comb   by
        'Maria makes Carlo comb her.'

[3] As pointed out by Rothemberg (1974) in the case of verbs such as French *casser* 'break', and we can here extend tht analysis to *affondare*, the inherent properties of the entity undergoing the change may be the ultimate cause for the change. There is definitely no volition nor idea of responsibility for the change involved here (see Brousseau and Ritter (1991) for a different analysis).

[4] A subclass of (45)which includes many deadjectival verbs may optionally take *si* in their inchoative form. The occurrence of *si* does create a difference in meaning, as I will explain in a work in progress on the meaning of optional *si* in Italian and other Romance languages (Centineo in progress).

[5] A question comes to mind: do all accomplishments allow an intransitive counterpart? No, not all of them do. In fact, it must be noted that synomyms of verbs which exhibit a transitive/inchoative alternation like *chiudere* 'close' do not always occur in transitive/inchoative alternations. Without getting into much detail, it seems that the verbs which allow an inchoative counterpart are the ones which are lexically neutral, that is they often denote the event and give no detail about the instrument which is involved in the carrying out of the event, or the manner in which the event is carried out.

[6] I am aware that in his work LaFauci (1983) points out that a number of intransitive verbs in Italian also allow passivization. They are all intransitive activities ('unergatives'), such as *parlare* 'speak' etc.. In those structures, only backgrounding of the 'actor' can take place.

[7] A condition on the application of passive is that the actor and undergoer be different. The existence of such identity constraint would also explain the impossibility of passivizing a reflexive structure, an explanation different and more likely than those provided by Burzio (1986) and others working within the GB framework. They in fact argue that such restriction has to do with the fact that reflexives do not allow as their antecedents derived subjects.

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