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Interaction and causation: Causative constructions in modern standard Dutch

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Abstract

The Dutch verbs doen ('do') and laten ('let') categorize an event as involving either direct or indirect causation, respectively. The latter means that another force than the agent's is seen as more immediately involved in bringing about the effect, and is therefore especially suited to indicate interactions between humans: i.e. mind-to-mind causation. The difference between these verbs reflects the folk world view in which the mental world is seen as separate from the physical, each having distinct causal properties. We show how this explains the sharp difference, observable in usage, in the preferences of both verbs for animate and inanimate participants.

Another cultural cognitive model playing a role in the use of *doen* vs. *laten* is the 'folk model of the mind', which governs our understanding of mental processes such as perception and belief. Against the background of this model, speakers exploit the choice between the two verbs for particular effects, e.g. to attribute particular causal powers to certain referents, such as God or government authorities, or, combining verb choice with case marking, to subtly indicate different degrees of autonomy and affectedness of causees.

The study demonstrates the intimate relation between cognitive models, pragmatic contextual factors, and lexical semantics.

1. Introduction

This paper reports on one part of a larger project on causative constructions (and in fact, the linguistic expression of causation in general). In Kemmer and Verhagen (1994) we developed a general conceptual framework for handling cross-linguistic marking patterns in causatives. Here we will apply that framework to an in-depth

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study of a single language. Specifically, our focus is on analytic causative constructions in Dutch.

Modern Dutch has two causative verbs, *doen* and *laten*, which take bare infinitival complements, i.e. complements lacking the infinitival marker *te* ('to'). Examples with both verbs are given in (1)–(2), and in (3)–(5), respectively (underlining is added only for clarity; it does not indicate emphasis):

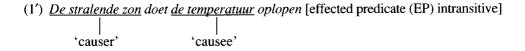
- (1) De stralende zon <u>doet</u> de temperatuur oplopen. the shining sun does the temperature rise 'The bright sun makes the temperature rise.'
- (2) De recessie <u>doet</u> de mensen verlangen naar betere tijden. the recession does the people long to better times 'The recession makes people long for better times.'
- (3) De agent <u>liet</u> hen passeren. the officer let them pass
- (4) Zij <u>liet</u> de agent haar rijbewijs zien. she let the officer her driver's-license see 'She showed the officer her driver's license.'
- (5) De sergeant <u>liet</u> ons door de modder kruipen. the sergeant let us through the mud crawl 'The sergeant had/made us crawl through the mud.'

Thus, it looks like there is at least some variation (and perhaps competition) between *laten*- and *doen*-constructions expressing causation.

Before we proceed with the analysis of this variation, we need to introduce some basic terminology. The causative verb (here *laten* or *doen*) expresses what we will call a 'causal predicate', i.e. some type of cause; we will be more specific about the nature of the causal semantics of these verbs in the course of this paper. The infinitive in the construction expresses what we will call the 'effected predicate': the process or state brought about by the causal predicate.

Effected predicates come in two varieties: intransitive and transitive. It makes a difference in the overall semantics of the causal event, in general because they involve two different configurations of participants (as described in Kemmer and Verhagen, 1994). In the first type, there are two participants: a causer and a causee. The causer is the initial energy source for the entire composite causal event – the entity construed as bringing it about.

The terminology is illustrated in (1'): the causal predicate is *doet*, the effected predicate (in this case intransitive) is *oplopen* ('rise'). For brevity, we will refer to a combination of a causal predicate and an intransitive effected predicate as an 'intransitive causative'.



The shining sun is the causer (the source of energy – in this case quite literally), and the temperature is the causee, which we can provisionally define as the participant that is the immediate recipient of the energy supplied by the causer, and the one that 'carries out' the effected predicate.

A causative structure with a transitive effected predicate (zien, 'see') is illustrated in (4'):

As in (1), there is a causer and a causee, but there is also a third participant, which we call an 'affectee': a participant that is the final endpoint of the energy flow in the entire causative event. We call it 'affectee', because in prototypical cases, it is affected in the way that transitive objects are affected participants. Again for brevity, we refer to such structures of causal predicates with transitive effected predicates as 'transitive causatives'.

In Dutch, as in many languages, it is not at all unusual to find transitive causatives with no causee expressed, as in (6):

(6) Hij heeft een rolstoel <u>laten</u> bouwen. he has a wheelchair let build 'He has had a wheelchair built.'

This sentence means that he caused someone, who is not identified any further, to build a wheelchair; thus the interpretation of the causee, being left out, is highly schematic: because the causee receives no independent linguistic expression, its interpretation is *exhausted* by the information provided by the effected predicate, which evokes the role of a 'builder' (of a wheelchair).

The definition of the causee given above is provisional because in fact the specific semantics of the causee is heavily dependent on the entire event structure. It is possible to generalize over the two kinds of event structures, as we demonstrated in Kemmer and Verhagen (1994), where the analytical framework is laid out in more detail; for our purposes in this paper, however, the definitions given are sufficient.

2. Some corpus data

The analysis we will present in the following sections is largely based on data from an electronic corpus of (mainly written) Dutch, the Eindhoven

¹ 'Energy flow' refers not simply to transmission of physical energy, but abstract analogues incorporating asymmetrical relations in general in the effected predicate (e.g. 'see' in (4)) are included (cf. Kemmer, 1994: 191–192). The 'energy flow' in the causal predicate, also an abstract analogue of physical force, refers to the types of forces laid out in Talmy's Force Dynamics framework, which will be elaborated in the course of our analysis.

Corpus,² which contains approximately 800,000 words, in 53,000 sentences; examples used in this paper which are taken from the corpus are marked '(ec)'. We extracted all sentences with the causal predicates *doen* and *laten*, and determined their distribution over the types of causative constructions described above. Some relevant figures are given in Table 1.

Table 1 Main distribution of types of causatives

Total number of analytic causative constructions: 855;

- 439 intransitive EP (9 causeeless);
- 416 transitive EP;
 - 272 (65%) causeeless;
 - 144 (35%) with explicit causee;

I.e.: percentage of three-participant causative constructions: 17%.

- Total number of causative laten: 686 (444 with explicit causee).
- Total number of causative doen; 169 (130 with explicit causee).

First, notice that there are considerably more cases of *laten* than of *doen*. Further, the intransitive causative structures slightly outnumber the transitive ones. But within the transitive set, the majority are *causeeless* causatives like (6) – consequently, the percentage of the total with a fully elaborated three-participant structure is relatively low, in fact just 17%.³ As will become clear in the course of the analysis, this 17% is the locus of the most complex patterning.

We are particularly interested in the conceptual relation between causer and causee and in its linguistic expression. Therefore, we separated the cases with an explicit causee for further examination: almost all (430 out of 439) intransitive causatives, and the minority (144 out of 416) of transitive ones (thus N = 430 + 144 = 574). In view of our cross-linguistic findings as reported in Kemmer and Verhagen (1994), the first feature worth considering is the distribution of animacy over causer and causee; 'animacy' as we counted it includes not only humans, but also human institutional entities, like the government. The results are given in Table 2.

There are two main patterns that emerge from these counts, i.e. two patterns of heavy skewings in the frequency of different animacy categories within the subsets for *laten* and *doen*. The first pattern concerns the causers. Notices that with *laten*, the overwhelming majority (99%) of cases are animate; with *doen*, on the other hand, there is a preference for *in*animate causers – albeit not nearly as strong as the reverse preference with *laten*.

² The version of the corpus we used is the one available from the Free University at Amsterdam. It is described in Uit den Boogaart (1975) and in Renkema (1981).

³ This tendency towards causeeless causatives was already noted by Dik (1980: 81). In fact, our conclusion is somewhat stronger than Dik's, the reason being that he only looked at a subset (of 594) of the *laten*-cases in the Eindhoven Corpus, i.e. those he considered causative (excluding those he considered permissive).

Table 2 Distribution of animacy of causer and causee

	Laten (444):		Doen (130):	
Causer animate:	99%		42%	
causee animate:		49%		21%
causee inanimate:		51%		79%
Causer inanimate:	1%		58%	
causee animate:		17%		58%
causee inanimate:		83%		42%

Moreover, in those cases where we do have an animate causer with *doen*, there is a large skewing in numbers for the animacy of the causee: The causees that are *in* animate are almost 4 times as frequent. An example of this latter kind of causative is (7):

(7) We zullen de reorganisatie gefaseerd <u>doen</u> plaatsvinden. we shall the reorganization in-phases do take-place 'We shall have the reorganization take place in stages.'

We shall return to this specific kind of example, fairly typical for a particular kind of discourse, in the course of the analysis.

Within the same subset of the data comprised by causatives-with-causees, there is a second set of patterns to be noticed – again, one that proved to be highly relevant cross-linguistically in our previous study. This concerns the causees, which may either be preposition-marked or have zero marking. Consider the data in Table 3.

Table 3 Case marking of causees

Always zero when:	causal predicate is doen, OR:EP is intransitive
Possibly prepositional when:	 causal predicate is <i>laten</i>, AND: EP is transitive (cases satisfying both conditions: 118, 14% of all causatives)
- zero:	56 instances (9.8% of all causees)
door (agentive/instrumental):	55 instances (9.6% of all causees)
- aan (dative):	7 instances (1.2% of all causees)

There is no prepositional marking of the causee with intransitive causatives, and none with *doen* either (regardless of transitivity). But in *transitive* causatives with *laten* – i.e. within a subset of the already relatively small set of three-participant structures (cf. Table 1), we do find different options for marking the causee; this subset contains 118 instances. Here the variation is considerable. We find three possibilities: there is no preposition; or the preposition is *door*, which indicates means

and passive agent (cf. Cornelis, 1994); or the preposition is *aan*, which has dative functions. As the table shows, zero marking (no preposition) and *door* have about the same number of instances, while there are relatively few instances with *aan* (7 examples in total).

Sentences (8) and (9) exemplify a *door*-marked and an *aan*-marked causee, respectively:

- (8) Zij wilden Woody daarna <u>door</u> een echtpaar laten adopteren. (ec) they wanted Woody thereafter through a married-couple let adopt 'They wanted to have Woody adopted by a married couple.'
- (9) Laat dit <u>aan</u> niemand lezen. (ec) let this to nobody read 'Don't let anybody read this.'

By now we have two sets of patterns: the skewing in frequency of animate and inanimate causees with *doen* and laten, and the distribution of case on the causee. We will now provide an analysis that accounts for both sets of patterns, which are not obviously related, within one general conceptual framework.

3. Doen vs. laten: Direct and indirect causation

3.1. Laten: Permission and indirect causation

Let us begin by considering the semantics of *doen* and *laten*, in order to show how this bears on the analytical problem.⁴ Each of these verbs occurs not only in causatives, but also in simple clauses without an infinitival complement. With *laten*, it is clear that the notion of 'allowing', i.e. permission or enablement, is central to its characterization in such simple clauses; (10) is the simplest kind of example:

- (10) Ik <u>laat</u> jou de keus.
 - I let you the choice
 - 'I leave the choice to you.'

Here, the initiator has some power to either grant or prevent something, and grants it; the sentence may be paraphrased as "I do not prevent you from making the choice". In (11), we have a locational complement; the sentence says that she allowed the cat to change its location, (11a), or else to remain in its location, (11b):

⁴ This analysis is also useful to illuminate the coherence in the uses of both *doen* and *laten* as these are given in dictionaries (esp. Van Dale Groot Woordenboek der Nederlandse Taal, 1992¹², and the comprehensive Woordenboek der Nederlandsche Taal (WNT)). A survey of the information in these reference works showed that what we say about the meaning of *doen* and *laten* has general validity. See also note 9.

- (11) Zij <u>liet</u> de kat in het huis.
 - she let the cat in the house
 - (a) 'She let the cat into the house.'
 - (b) 'She left the cat in the house.'

The ambiguity comes out in the English translations: the first reading can be paraphrased as "She allowed the cat to go into the house", i.e. to change its state/location, whereas the second reading means "She allowed the cat to stay in the house", i.e. to remain in its state/location. Examples (12) and (13) show something similar, but now with a pure state, indicated by an adjective, rather than a location; (12) has the interpretation of a change of state (cf. (11a) above), while (13) has the interpretation of something remaining in the state it is in (cf. (11b)):

- (12) We <u>lieten</u> de zeehond vrij.

 we let the seal free

 'We let/set the seal free.' (i.e.: we granted it the state 'free')⁵
- (13) Schep deze saus over de asperges (maar <u>laat</u> de koppen vrij).

 pour this sauce over the asparagus (but let the heads free)

 'Pour this sauce over the asparagus (but leave the tips uncovered).'

Turning now to combinations of *laten* with infinitives, we claim that it is best characterized as marking *indirect causation*, which may be viewed as an *extension* of the notion 'permission/enablement'. Indirect causation can be defined as a situation that is conceptualized in such a way that it is recognized that *some other force* besides the initiator is the *most* immediate source of energy in the effected event.⁶ That is always true in cases of permission and enablement, but the reverse does not necessarily hold – i.e. 'indirect causation' subsumes permission and enablement, but also other indirect causal events. Let us make this more concrete by discussing some examples. First of all, consider (14):

When adjacent, the combination of *vrij* and *laten* may in certain circumstances be viewed as a composite verb (*vrijlaten*), viz. with a particular combination of phonological and semantic features: when it has the stress pattern of a single word (with primary stress on the first element, *vrij*-), it only has the meaning 'to set free'; (cf. the plural form *de vrijgelatenen*, lit. 'the liberated ones', i.e. freed slaves). Naturally, the fact that the composite form is in some sense a unit (with a combination of phonological and semantic features that is not derivable compositionally), does not mean that it is no longer analyzable (see Langacker, 1991: 261–288, for general discussion).

Turner (1987, esp. 139–183) convincingly shows that many instances of causation cannot be characterized adequately in standard conceptions of causality, such as necessary and sufficient conditions. He then argues for a model that he calls 'causation as progeneration': a cause is metaphorically conceptualized as a parent producing the result as offspring. One of the advantages of this model is precisely that it allows speakers to conceive of all kinds of relations as causal without being committed to a specification of all possibly relevant intermediary factors (as we conceive of offspring as produced by parents, without our being able to specify all necessary and sufficient conditions for such a process). In the same vein, indirect causation allows speakers to present a certain result as causally dependent on some agent, while leaving room for other factors than just those mentioned in the sentence.

(14) Hij haalde de stop eruit en <u>liet</u> het badwater weglopen. he took the plug out and let the bath-water run-away 'He took out the plug and let the bathwater flow off.'

In the event as presented in (14), the bathwater flowed out by virtue of some more direct source of energy than the motion of pulling the plug (i.e. gravity, for educated 20th-century speakers). This is essentially also Talmy's (1976, 1988) force dynamic account of English *let*, and it is clear, of course, that enablement/permission provides a good characterization for (14), too. But the more abstract characterization as indirect causation fits it as well, for example since the initiator may be considered responsible for the consequences. The reason that we claim that Dutch *laten* has to be characterized in terms of the more schematic sense of indirect causation, rather than the specific sense of enablement/permission, is that in the Dutch causative construction, *laten* always has the sense of indirect causation, but not always the enablement/permission sense. Consider example (5), repeated below:

(5) De sergeant <u>liet</u> ons door de modder kruipen. the sergeant let us through the mud crawl 'The sergeant had/made us crawl through the mud.'

The most likely reading of (5) is that the sergeant actually has exerted some authoritative force (an 'order' of some kind) on us, so that we had to do it. Thus (5) does not indicate permission but rather coercive causation. Still, categorization as indirect causation is justified because we had to move under our own power: the sergeant has no direct control over our bodily movements, and still has to, in some important sense, 'communicate' in order to get his order carried out. Thus, the 'other force' that is recognized as most immediate source of energy in the event is not necessarily restricted to some immanent, inherent tendency in the causee or in the world – it may very well also be another force that is induced by the causer himself. This is true not only with animate causees, but also with inanimate ones, as is illustrated by (15):

(15) [Er wordt in de laboratoria doorlopend geëxperimenteerd om de kunstvezels te vervolmaken.] Om ze nog meer te <u>laten</u> lijken op echt haar. (ec) '[There are continuously experiments going on in order to perfect the synthetic fibers.] To make (lit.: let) them look still more like real hair.'

There is no inherent tendency in the synthetic fibers to look like real hair (on the contrary, in fact), but the event is still conceptualized in such a way that the experimenters themselves are not the immediate cause of the hair-like appearance of the fibers; probably it is some physical-chemical process induced by them (whose natural result is that the synthetic material looks more like real hair).⁷

⁷ This example shows one interesting difference between Dutch *laten* and English *let: laten* allows for less autonomy of the causee than English *let*. We leave an analysis of the differences for later work.

In fact, what we find with *laten* is a continuum of indirectness. At one end (enablement/permission), there are cases with relatively great autonomy of the causee and some inherent tendency for it to carry out the effected predicate; an example would be (3), under the (most likely) reading that it was the causee's wish to pass:

(3) De agent <u>liet</u> hen passeren. the officer let them pass

At the other end (coercive-causative) are cases in which those factors are much more reduced and the causee would not normally carry out the effected predicate in the absence of an external force; the example already given is (5). There are also inbetween-cases, like (4):

(4) Zij <u>liet</u> de agent haar rijbewijs zien. she let the officer her driver's-license see 'She showed the officer her driver's license.'

Here, the use of *laten* might be motivated on the grounds of a request by the officer (with or without a reference to his authority), which would make it look like permission; but it is also motivated in the situation in which she has asked the officer to look at the driver's license and he complies with her request (causative), for the seeing still involves some processes on the part of the officer which are not under direct control of the initiator. Thus, in cases like (4) and many others, it does not make much sense to try to decide between a permissive and a causative reading: the use of *laten*, categorizing an event as involving indirect causation, in itself simply leaves this undecided. Note that the same possibilities (showing on request, vs. showing not on request) are in fact present in the English translation of (4), and that this does not lead one to argue for ambiguity of the verb *show*.⁸

Dutch *laten* can thus be seen as having a fairly schematic meaning. It may refer to enablement, or its corresponding concept in the sociophysical realm, permission: the initiator has the power to prevent the occurrence of the effected predicate, and does not do so, thereby leaving a second force (natural or human) to come into play in effecting the event. In these cases the role of the initiator is a relatively passive one. *Laten* is, however, licensed in a much wider array of contexts, including instances of active instigation sometimes amounting to outright compulsion. What these contexts have in common is the conceptualizer's recognition of an intermediary force that most directly brings about the effected predicate.

All in all, we claim to have established that the use of *laten* in combination with an infinitival complement uniformly marks the causality in the event as being indi-

⁸ Thus, in our view it is not insightful to see the difference between permission and causation as a matter of lexical ambiguity (as in, e.g., Dik, 1980). Rather, it must be a matter of the construal of interpretation at (minimally) the clause level, taking all other factors into account, and furthermore a matter of degree.

rect, and that this use is closely connected with the enablement/permission that is marked by *laten* in other uses.

3.2. Doen: Producing a result and direct causation

Turning now to *doen*, a consideration of its use in simple clauses makes it clear that a central aspect of its characterization must be the exertion of energy by the initiator of the event depicted; (16) and (17) provide examples with animate and inanimate subjects, respectively:

- (16) Vandaag doe ik examen. today do I exam 'Today, I do/take my exam.'
- (17) Dat <u>doet</u> pijn / <u>doet</u> mij verdriet. that does pain / does me sorrow 'That hurts / grieves me.'

Sentence (16) means that I perform an activity, putting energy into producing a certain result (e.g., answers to the exam questions). The case with the inanimate subject in (17) means 'produce an effect', which comes very close to causation, of course. In both cases, there is *no* intervening energy source 'downstream' (cf. Langacker, 1991: 217) from the initiator: if the energy is put in, the effect is the inevitable result. This sense of directness is also present in combinations of *doen* with infinitives, i.e. in causatives. Consider example (1), repeated here for convenience:

(1) De stralende zon <u>doet</u> de temperatuur oplopen. the shining sun does the temperature rise 'The bright sun makes the temperature rise.'

The rising of the temperature is the inevitable consequence of the sun shining. The characterization of causative *doen* is thus definitely distinct from that of *laten*. To be sure, this does not mean that for all conceivable or actual contexts, only one of these verbs will be allowed. Some situations will allow a speaker to naturally conceptualize a specific event as involving direct causation as well as indirect causation. Despite this possibility, though, the choice of one verb rather than another will often result in a specific effect, due to the semantic difference. We will discuss examples of this phenomenon in Section 4.2.

4. Cultural cognitive models of causation

4.1. Models of causation types

The characterizations of *laten* and *doen* allow for a very nice mapping onto some of the distinctions between types of causation proposed by Talmy (1976, 1988), in particular as those distinctions are schematized by Croft (1991):

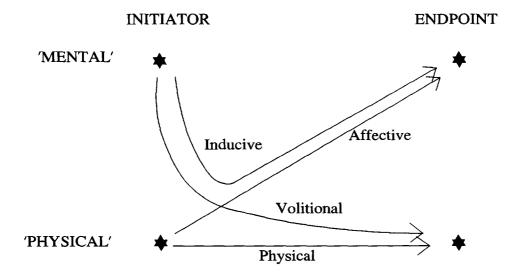


Fig. 1. A model of causation types (Croft 1991: 167; based on Talmy 1976).

Causative events are distinguished along two dimensions. The first is the distinction between initiator and endpoint of the causal change. Notice that the model is highly abstract and schematic, generalizing over both simple and more complicated causative events. The claim is that all of them involve at least an initiating element, and an endpoint; the endpoint may correspond to the (state of the) causee in intransitive causatives (of the type 'He let/made the baby cry'), or to the affectee in transitive causatives (of the type 'She let/had him bake a cake'), in which case the causee has a more intermediary role to play (Kemmer and Verhagen, 1994).

The other dimension is essentially the distinction between animate and inanimate. An obviously important aspect of this model of causation types is the very marked asymmetry between entities with a mental dimension (animates) vs. those that are merely physical. Animates can only act on animates via the intervening physical world, i.e. the model implies that one cannot reach into another person's mind and directly cause him or her to do, feel, or think something. Physical entities are taken to act directly on other things; hence the straight arrows in the diagram in Fig. 1, vs. the very bent arrow for mental-on-mental causation, and the slightly bent one for mental-on-physical.

This model immediately provides a basic understanding of the animacy skewing observable in Table 2. If *laten* indicates *indirect* causation, one would expect it to be particularly suited for indicating *inducive* (mental-on-mental) causation, and so to have a relatively high frequency of *animate* causers, which is just what the table shows.

Doen, on the other hand, ought to occur more often with *in*animate causers, which it does. Moreover, the place where *doen* is least expected to be found is with ani-

mates acting on animates – and this indeed corresponds to the cell where the *minority* of animate causees within the minority of animate causers is to be found.⁹

In terms of Lakoff's (1987) notion of 'Idealized Cognitive Models' that are organized in terms of prototypical centers and radial extensions, we may say that several ICMs of causation are involved here, which map onto two schemas of direct and indirect causation, expressed by doen and laten, in a fairly straightforward manner. Inducive causation clearly is a prototypical case of indirect causation, and thus it is expressed by means of laten quite generally. Physical and affective causation are clear instances of direct causation, thus they are generally expressed by means of doen. Volitional causation is, in terms of categorization as direct or indirect, the most complex, i.e. neither prototypically direct nor prototypically indirect; thus it comes as no particular surprise that quite a number of examples of both doen and laten are to be found in this subclass: volitionality is in itself not a heavily weighted factor in the categorization of the event as either direct or indirect, and thus other factors will more often be decisive here than in other subclasses. But the same 'other factors' may sometimes (less frequently than with volitional causation) also 'outweigh' the causation type in the other subclasses – in particular, in inducive causation. It is therefore interesting to see if and how our analysis can account for the data in a more fine-grained way; this is what we will do in the next section, where we will pay special attention to some direct contrasts between doen and laten, and to uses of these verbs in some less prototypical cases as these are defined by our model.

4.2. The folk model of the mind

What we will do now is to further enrich our analysis by invoking some details of the 'folk model of the mind', how the mind relates to the physical world, and how events in the mind may be caused. In Fig. 2, some relevant aspects are presented of the folk model of the mind prevalent in (at least large parts of) Western Culture, as it has been described by D'Andrade (1987).

According to this model, there is only one mental state that is conceived of as caused *directly* by the *outside* world, viz. perception. That is, (despite modern theories of vision, so to speak) we think that we see what we see because it is there, within our visual field, in the outside world; and we cannot avoid perceiving it if it is there – perception is not controllable.

On the other hand, a mental state like my believing something is conceived of as controllable, so it is not possible for something in the outside world to immediately

⁹ We want to thank an anonymous reviewer for drawing our attention to the Dutch-English translation dictionary *Van Dale* (Utrecht and Antwerpen 1986). Under *laten* this gives 'drop something' for *iets laten vallen* (lit.: 'to let something fall', p. 708), and under *doen* it gives 'a stone made him stumble/tripped him up' for *een steen deed hem vallen* (lit.: 'a stone did him fall', p. 296; note that the agent in this example is inanimate). This is indeed another nice illustration of our general point: In the second case, the image of the event is such that the presence of the stone itself produces the result (it blocks the normal process of walking), while in the first case there is no such immediate connection between what the agent does (no longer holding something, thereby 'allowing' gravity to exert its force) and the result.

Perception	Belief	Feelings	Desires	Intentions	Resolutions
cause outside mind	cause inside mind	cause inside and outside mind	cause inside and outside mind	cause inside mind	cause inside mind
not controllable	e usually controllable	usually not controllable	not controllable	controls itself	control of control

Fig. 2. Aspects of the folk model of the mind (D'Andrade, 1987: 117).

cause me to believe a certain proposition – at least so we think. We will return to other mental states below, but let us first consider some consequences of these relatively simple observations.

If we have an event with a mental endpoint and an outside causer, and it is categorized as direct causation by means of *doen*, then it is naturally taken as involving a case of perception. But if we have such an event categorized as *indirect* causation by means of *laten*, then it is of course naturally interpreted as a case of inducive causation, with the causee as an intermediary in the process. Now consider the difference between (18) and (19):

- (18) De psychiater <u>deed</u> mij aan mijn moeder denken. the psychiatrist did me at my mother think 'The psychiatrist made me think of (reminded me of) my mother.'
- (19) De psychiater <u>liet</u> mij aan mijn moeder denken. the psychiatrist let me at my mother think 'The psychiatrist had/made me think of/about my mother.'

The first of these, with *doen*, does indeed describe a case of perception. The psychiatrist is in fact not involved in the event as an intentional animate being – he need not be present or even alive for the sentence to be usable (adequately). Rather, it is something observable in the way the psychiatrist looks or behaves that causes me to perceive a certain similarity. Example (19), on the other hand, is completely different. Here, the psychiatrist and I are communicating. He/she intentionally tells me something, and I decide to follow his/her advice; my thinking of my mother here is also deliberate on my part. On while (18) does not describe interaction between humans, (19) does, and it is evident why this should be the case, given the meaning of doen and laten and the folk model of the mind.

These observations explain the occurrence of a few of the sentences with causers counted as animate (to be precise: 3, i.e. 5.5% of animate causers with *doen*). The reason for such occurrences is that this count was done independently of other fac-

As an anonymous reviewer pointed out, such deliberate thinking as in (19) allows for the use of the preposition over ('about' – denken over means 'to reflect on', 'to contemplate'), while replacing over for aan in (18) leads to an inappropriate sentence.

tors than descriptions of the referents themselves, i.e. independently of the construed animacy of the initiator. So noun phrases like *De psychiater* were always counted as animate, based on their inherent semantics. What we see here is that the use of *doen* may be precisely the decisive factor in determining that the feature 'animate', although available from the lexical meaning of the head noun, actually plays no part in its role as causer in this particular event.

Recall now example (2), repeated here for convenience.

(2) De recessie <u>doet</u> de mensen verlangen naar betere tijden. (ec) the recession does the people long towards better times 'The recession makes people long for better times.'

This sentence describes a feeling or a desire (perhaps both). Given that according to the folk model of the mind we do not think of such mental states as controllable, it is again understandable that we find *doen* here. The recession is not another mind, interacting with the people, and the desire for better times is also depicted as beyond the people's control: it is not viewed as the result of a deliberate decision, it just is there as a consequence of the perception of the recession.

In Section 4.1, we pointed out how our analysis accounts for the general tendency in the skewing between animacy and type of causation; here we have so far added some considerations deriving from the folk model of the mind, which justify why certain kinds of events are categorized as direct or indirect causation. A problem still to be addressed, however, is the fact that the percentage of *doen*-cases with an *animate* causer is, although a minority, still considerable (42% in Table 2); most specifically, we still face the question why the cell of *doen* with both an animate causer and an animate causee is not completely empty. The conceptual question behind this is: What does it mean for a causal relationship to involve a mental initiator and a mental endpoint, and still be categorized as direct?

In order to answer this question, we draw attention to the specific nature of communication, as, in a way, implied by the folk model of the mind. Inherently, communication is indirect. As pointed out above, no human mind can directly cause a change in another human mind. Categorizing such events as indirect causation with *laten* recognizes this feature, and thus recognizes the separate, partly independent role of the target of communication in bringing about the intended result. Categorizing such an event as *direct* causation, we may now say, therefore makes the hearer or reader focus exclusively on the part of the action of the causer that is completely within its own control, or from another perspective, it presents the entire event as beyond the control of the causee.

For example, God can be conceived of as capable of directly causing anything, including a change in a person's mind (cf. the conceived nature of the phenomenon of conversion). Consider example (20).

(20) Pater Germano geeft haar de raad, Jezus te smeken, haar de gewone father Germano gives her the advice, Jesus to beg, her the ordinary

weg te <u>doen</u> bewandelen road to do walk-on

'Father Germano counsels her to beg Jesus to make her walk in the usual path.'

The way this is to be understood is that the 'her' is to beg Jesus, not to communicate with her, but to directly make her do 'the right thing', overriding her own volition if necessary. This type, with God as causer, accounts for another three cases (5.5%) of the doen-causatives with mind-to-mind-causality.

Another subset (of the same size) is the following. Since it is not normally possible for one person to immediately create a belief in another person (a belief being under that person's own control), it should only be possible to readily use this type of expression for non-actual events. And we do in fact find some combinations of *doen* with *geloven* (meaning 'to believe'), but none of them is assertive. Consider example (21).

(21) ... wat sommige technici ons ook willen <u>doen</u> geloven. (ec) ... what some technicians us also want-to do believe 'whatever certain technicians want to make us believe.' (i.e., they cannot make us believe it)

The use of the complete phrase ("Such-and-such is the case, whatever they want to make us believe") in fact implies that they will *not* make us believe it, which is just what our approach implies. Thus, the fact that combinations of *doen* and *geloven* ('believe') occur in the corpus in precisely this way¹¹ in fact confirms our approach, rather than that it contradicts it

Some more intricate, but also very illuminating, examples are to be found in (22) and (23).

(22) Met een zucht <u>deed</u> hij de buitenwereld weten dat het kleine vertrek with a sigh did he the outside-world know that the small room bezet was. (ec) occupied was

'With a sigh he made it known to the outside world that the small room was occupied.' [i.e., humorously: "He locked the door of the bathroom"]

(23) Gaarne wil ik u <u>doen</u> weten, dat ik geen enkele gladly want I you do know, that I no single verantwoordelijkheid kan nemen voor de nu uitgevoerde responsibility can take for the now executed

The other two instances of this type in the corpus are hypotheticals (of the type "They would want to make us believe"), again evoking the opposite of actual. An independent search for *doen* + *geloven* in Dutch and Flemish weekly magazines (Nathalie Lans, p.c.) strongly supports this generalization: *all* cases found were non-actual (of the type described here, with "They wanted to make someone believe" as the 'strongest' case).

werkzaamheden. $\langle ec \rangle$ operations

'I want to tell you that I cannot take any responsibility for the operations that have been executed now.'

Unlike previous examples, these neither involve God, nor denial of direct mental contact, but they still conform to the general analysis. The interesting point of (22) is that it evokes, in a humorous, ironical way, both the communicative and the noncommunicative aspects of the situation. The physical act referred to is the sliding of the latch of the bathroom door, with the effect that there is a signal on the outside indicating 'occupied'. The effected predicate is 'know' – something mental; but the causee is 'the outside world' – not very human, and not very specific; and the causal relation is categorized as direct, by means of *doen*. Mainly because of this verb, the non-communicative aspect is foregrounded: the causer changes something in the physical world, the result of which *might* be interpreted, by *whoever might* come along as 'This bathroom is occupied' – we understand the sentence to mean precisely that no actual person is construing this interpretation: *doen* implies that there is no real communication.

Such examples provide a clear illustration of a more general point. They show that it is not really possible to set up selectional restrictions in any strict way; for example, even though it might look plausible at the start, we cannot stipulate a rule to the effect that mental effected predicates select *laten*. What is actually going on is that each lexical and grammatical signal chosen by the speaker/writer sets up a constraint for the hearer's/reader's interpretation; the latter must, as a whole, maximally satisfy the set of constraints presented in the utterance, but it is clearly incorrect to say that a given element absolutely constrains the occurrence of another element. In fact, the earlier examples with God as causer and non-affirmative cases of *doen geloven* ('make believe'), illustrate the same point.

In (23), the effect of *doen* for the overall interpretation of the sentence is that the influence of the causer is maximized. The author seems to want to guarantee the arrival of his message with maximal certainty, as though it were a physical consequence of the way the world is. Categorizing it as indirect by means of *laten* would make this change in knowledge-state partly dependent on the causee. Put differently: by using *doen* the author focuses attention on an action that is completely within his own control, and suggests that this is sufficient for producing the desired effect. We believe that this is what underlies the fact that in the Eindhoven Corpus the subcorpus of political language – with government authorities as causers – is the only one in which *doen* outnumbers *laten*.

In fact, we believe that these effects of presenting an act as non-communicative provide the general motivation for cases of *doen* with inanimate causees, where the use of *laten* would suggest an unmentioned intermediary person co-responsible for the result. Consider the following examples.

(24) De bezetters hebben inmiddels een dreigende verklaring <u>doen</u> the occupiers have meanwhile a threatening declaration make

uitgaan. ⟨ec⟩ go-out

'Meanwhile, the occupiers have sent out a threatening statement.'

(25) De regering stelt zich voor deze herstructurering gefaseerd te doen the government envisions [REFL] this restructuring in-phases to make plaatsvinden. (ec)

take-place

'The government intends to have this reorganization take place in stages.'

Since the effected predicates are intransitive, and the causees inanimate, we may say that these cases do not represent inducive, but rather volitional causation, and that this allows for the use of *doen*. However, that does not yet explain the fact that this use also has a particular semantic/pragmatic effect, in comparison with *laten* – which would in both cases have been possible too. By using *doen*, the reporter who wrote (24) explicitly categorizes this particular event (of the occupiers producing a statement) as nothing more than sending out a piece of paper into the world, i.e. a non-communicative event; and s/he thereby also categorizes the occupiers as not communicating, or perhaps better, as impossible to communicate with.

In the event referred to in (25), it is obviously true that people other than those constituting the government itself will have to perform certain actions in order for the reorganization to take place. However, by using *doen*, the author reduces the possible influence of these intermediaries to practically zero, as if the government's wish will suffice for the reorganization to take place in this particular way. The result is presented as something that inevitably follows 'if the government says so'. These kinds of formulations therefore sound more authoritarian than if *laten* were used – even when no human causee is explicitly mentioned – because the latter leaves more room for the inference that other forces than those mentioned, in particular human beings with other intentions, might possibly change the outcome.

Summing up so far, we have shown that the idea that a causative event is categorized as direct by *doen* and as indirect by *laten*, in fact provides a good instrument for explaining not only general distributional phenomena, but also intricate semantic and pragmatic aspects of sentences that might at first glance appear to be exceptions to these gross patterns of distribution.

5. The marking of causees

As we mentioned in Section 2, explicit case marking of causees in modern Dutch is possible only in a fairly small subset of the instances of causative constructions in our corpus. We furthermore observed that it in fact only occurs with *laten*, and not with *doen* (cf. Table 3). The explanation for this distribution is, we claim, simply that it is only *laten*, because of its semantics of indirect causation, that leaves room, as it were, for a *range* of possibilities for the contribution of the causee to the entire event. It is only indirect causation that allows a construal of the causee as a more direct source of the force producing the effect than the causer. Especially in indirect

transitive causatives, containing a separate 'affectee' that is the most affected participant, causees can therefore be construed with different degrees of autonomy and affectedness. At the same time, the meaning of indirect causation is not specific as to the *actual* degree of autonomy or affectedness. The existence of a range of possibilities, we claim, motivates the potential for differences in explicit *marking* on the causee in indirect transitive causatives. We will now illustrate how the particular markings that occur are precisely those which involve specific degrees of autonomy and affectedness of causees.

In Kemmer and Verhagen (1994), we argued that dative and instrumental marked causees cross-linguistically tend to indicate greater autonomy and less affectedness than accusative or zero marked causees, and that this in turn instantiates a more general pattern in which recipients, instruments, and the like, are more peripheral in, and less affected by, an event than objects are. Dutch is no exception to this pattern. Consider (26)–(28):¹²

(26) Hij liet de brief <u>aan</u> iedereen lezen.

he let the letter to everybody read

'He let everybody read the letter'

(27) Hij liet de brief <u>door</u> iemand lezen.

he let the letter by someone read

'He had the letter read by someone'

(28) Hij liet _____ haar de brief lezen.

he let _____ her the letter read

'He let/had her read the letter'

Because of the dative marking in (26), the causee is categorized as a recipient. Thus, everybody is reading the letter for its contents. The causee has a fair amount of autonomy in the event, it clearly has a contribution to make of its own, and the sentence thus tends towards a permissive reading: "He let the letter read 'to' everybody who wanted to".

In (27), the causee is categorized as an instrument. One possible reading is that the purpose is to get the letter corrected by having someone go over it. Another reading is that the letter is being read aloud by the causee, in order to get the message to some *other*, unmentioned audience. Thus, a natural continuation of (27) would be something of the type '... and this person did a fine job', while the analogous '... and they did a fine job' would be highly inappropriate following (26). In any case, the reading by the causee is not for content, and the causee is not very much affected by the event. The sentence thus tends to be interpreted not as permissive, but as

We have taken these examples from Comrie (1976), and adapted them. The adaptations concern the description of the causee, in order to bring it in line with semantic effects of the prepositions: Comrie had the pronoun haar ('her') in all examples, and furthermore at the same position as well. We also want to repeat here the observation by Dik (1980), viz. that, contrary to what Comrie's presentation implies, the pattern of a three-way choice with the same effected predicate is the exception rather than the rule. As far as we can see, the verb lezen ('to read') is even unique in this respect.

'just' causative (the causee being no more than an instrument, the question of his/her wishes with respect to the event does not really arise).

Sentence (28), finally, precisely allows for the highest degree of affectedness of the causee. The default interpretation is that the reading of the letter (i.e. its contents) really affects the causee; a continuation of the type '... and she did a fine job' is not really appropriate. This is the only type of causative sentence with *laten* that allows the interpretation that the causee reads the letter more or less involuntarily, or under some kind of order. This sentence, too, is interpreted causatively rather than permissively.

Thus, it is specifically dative-marking with *aan*, as opposed to instrumental and zero marking, that reinforces a permissive reading of *laten*. This comes out clearly in a pair like the following:

- (29) De sergeant heeft ons het nieuwe kanon laten zien the sergeant has us the new gun let see 'The sergeant showed us the new gun.'
- (30) De sergeant heeft het nieuwe kanon aan ons laten zien. The sergeant has the new gun to us let see 'The sergeant showed the new gun to us.'

While (29) is neutral on the question of whether we wanted to see the new gun or not, (30) favours the interpretation that we did; for example, we may have requested to see the new gun, and the sergeant was willing to please us – i.e. *laten* has a permissive interpretation here. In the event described by (29), in contrast, it may very well be that we actually did not want to see the new gun at all (note that it is unnatural to have (30) preceded by an adverbial phrase like *Zeer tegen onze zin*, 'Very much against our wishes', while this is no problem in (29)).

The verb *lezen*, used in the examples (26)–(28), is the only one that allows all three possible markings of the causee. However, the pattern of interpretations illustrated by means of those examples is clearly observable in the corpus data as well. Consider the following examples.

- (31) Hij wilde het op Schiphol <u>aan</u> een collega laten zien. (ec) he wanted it on Schiphol to a colleague let see 'He wanted to show it to a colleague, at Schiphol.'
- (32) Hij wilde juist laten merken <u>aan</u> de mensen dat ze niet zo slecht he wanted actually let notice to the people that they not so bad waren als ze zelf dachten.

 were as they self thought

'He actually wanted to let people realize that they were not as bad as they themselves thought they were.'

Sentence (31), with *aan*, suggests that the colleague will be happy to see whatever *it* refers to (he probably wants it), so he is not just a passive receiver. And in (32), with the subject referring to Jesus, the people are no passive receivers either, but rather beneficiaries, who are understood to enjoy the message.

On the other hand, sentences like (33) and (34), with the same or similar effected predicates but without *aan*-marking of the causee, have a more obviously causative interpretation, and indicate a more passive role of the causees.

(33)	Charlie Greene liet de ruim drieduizend toeschouwers zien dat
	Charlie Greene let the over three-thousand spectators see that
	hij ook op de sintels in alle opzichten uit de voeten kwam. (ec)
	he also on the cinders in all respects out-of the feet came
	'Charlie Greene showed the more than three thousand spectators that he could
	in every respect put his best foot forward on cinders, too,'
(34)	Juist omdat hij oneerlijk was, mocht ik hem niet laten
	precisely because he dishonest was, ought I him not let
	merken dat ik hem oneerlijk vond. (ec)
	notice that I him dishonest found
	'Precisely because he was dishonest, I should not let him notice that I consid-
	ered him dishonest.'

In (33), the audience has to do no more than keep their eyes open, in order for them to perceive what Greene does.¹³ And (34) suggests that were the causee to notice that the speaker found him dishonest, this would affect the causee in an undesirable way, and furthermore than the causee is definitely not actively looking for the causer's opinion.

Let us now turn to the marking of causees with *door*, as in (8) and (35):

(8) Zij wilden Woody daarna <u>door</u> een echtpaar laten adopteren. \langle \text{ec}\rangle they wanted Woody thereafter through a married-couple let adopt

'They wanted to have Woody adopted afterwards by a married couple.'

(35) Want tegenwoordig laten goudsmeden zich weer graag inspireren for presently let goldsmiths themselves again gladly inspire door deze klare, strakke stijl. (ec) through this clear, austere style 'For nowadays goldsmiths are happily letting themselves be inspired again by this clear, austere style.'

As we said above, in the *door*-marked cases causees are categorized as instruments. They are not an object of the causer's activity. The purpose of the causer in (8) is not to have some couple adopt a child, it is to get the child a home, and the couple is the instrument to that end; the only *object* of the causer's wish is Woody. Accordingly, we typically find indefinite noun phrases as *door*-marked causees. In the set of 118 sentences in our corpus in which prepositional marking is possible in principle

Note that the initiator here is not a purely physical entity causing the perception, but a volitional one, which motivates the categorization of indirect causation.

(Table 3), there are 30 indefinite causees; 23 of them (77%) have *door*; on the other hand, of the remaining 88 definite causees, only 32 have *door* (36%); this skewing is highly significant.¹⁴

Example (35) is a clear case of an instrumental causee which can hardly be expressed in another way: with zero marking the 'style' would somehow become personified, with the goldsmiths allowing or making it to do something to them, rather than the goldsmiths allowing or making *themselves* entertain certain ideas (for which the style mentioned is an instrument). Accordingly, quite a number of *door-marked* causees are also inanimate.

All of these distinctions are in fact parallels to those related to the use of *aan*, *door* and zero in simple clauses, as is predicted by the analysis proposed in Kemmer and Verhagen (1994). The claim is that causative constructions are modelled on simple clauses, and from that it follows that *aan* in causative constructions has the same effects as in simple clauses. Following the analyses of the difference between *aan* and zero in simple clauses in, among others, Janssen (1976) and Kirsner (1988), it is then predicted that an *aan*-marked causee is interpreted as less affected and more autonomous than a zero-marked one; as we have seen, this is indeed the case. Similarly, following the analysis of *door* in Cornelis (1994) and Cornelis and Cuyckens (1995), the effects illustrated in (8) and (35) are precisely those that are to be expected: *door* marks minimally affected causal intermediaries with little autonomy. All in all, this in turn further corroborates the general claim from Kemmer and Verhagen (1994), that causative constructions are indeed modelled on simple clauses with only one verb. ¹⁵

6. Conclusion

In this paper we have shown that the two types of analytic causative constructions in Dutch – those marked with *doen* and those marked with *laten*, respectively – can be best characterized in terms of direct vs. indirect causation. We showed that this distinction is closely related to other uses of the verbs, in particular in simple non-causative clauses. This analysis not only accounts for the distribution of the verbs in different contexts (especially with respect to animacy of the participants in the causal event), but also provides insight into the interpretation of a rich array of specific cases, in particular when we combine Talmy's theory of force dynamic causation models with D'Andrade's theory of the folk model of the mind. Finally, we showed

¹⁴ Of the seven *aan*-marked causees, five are definite, and two are indefinite; these numbers are too small to show a statistical difference with the two other sets (*door*- as well as zero-marking). The difference between the latter two itself is statistically very significant. In fact, the latter partlern parallels the general distribution of (in)definiteness over prepositional phrases suggested by (among others) Kirsner (1988).

¹⁵ Further evidence, specific to Dutch, can be provided from word order phenomena: causative constructions exhibit certain patterns that are restricted to mono-clausal structures. However, we will not elaborate this point here.

that effects of and the restrictions on the occurrence of different case markings found on causees in Dutch can also be explained in terms of the analysis of the distinction between *doen* and *laten* proposed here, and the general framework for analyzing causative constructions put forward in Kemmer and Verhagen (1994).

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