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Making claims, decisions, and other things*

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Abstract This paper analyzes complex attitude predicates such as *make the claim that S*. The proposal is couched in the idea that propositional attitudes are built from content-bearing individuals (e.g. Moulton 2009; Moltmann 2020). I argue that the singular definite in this construction refers to a definite kind in the sense of Dayal 2004, specifying the type of result rather than the result itself. This immediately explains a range of phenomena including non-anaphoricity, no instantiation in negative contexts, and apparent non-uniqueness in quantified contexts. A compositional analysis is developed, building up from the individual parts, in which this construction takes a definite kind argument and denotes the creation of its instances.

Keywords: attitudes, light verb constructions, content nouns, kinds

1 Introduction

Many languages offer multiple ways to express attitudes. In English, attitude verbs as in (1a) can alternate with complex attitude predicates (CAPs) as in (1b), where the attitude is expressed by a combination of a light verb with a definite noun phrase. This paper is concerned with the latter.

(1) a. The bureau claimed / decided that time is relative.
b. The bureau made the claim / the decision that time is relative.

While it is commonly assumed that the sentences in (1) are roughly equivalent, there are in general at least two different ways to think about this equivalence. Either we replace the CAP by something that we already have an analysis for, as in (2a), or we decompose the predicate in a way that likens it to a CAP, as in (2b).

(2) a. make the claim_N = ~~make the claim~~ > claim_V

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b. $\text{claim}_{\text{V}} = \text{claim}_{\text{N}}\text{-}\sout{\text{make}}_{\text{V}}$

While (2a) provides a simple resort, recent research has argued for the latter (Moltmann 2021). What is special about CAPs and analyses like (2b) is that they highlight the role of content-bearing individuals in attitude formation. Consequently, the syntactic distinction above roughly corresponds to two different semantic treatments.

In (3a), *x* refers to the agent of a claiming event and *claim(x)(w)* yields the set of possible worlds compatible with what *x* claims in *w*. In (3b), *x* refers to the claiming event itself or its result, the claim, which is modified by a content function (see Moulton 2009). The latter type of analysis has become increasingly important in semantics (e.g. Bondarenko 2021; Elliott 2017; Moulton 2009; Müller 2020; Kratzer 2006; Moltmann 2013, 2020).

(3) a. $\lambda p.\lambda x \lambda w.\ \forall w'\ [\text{w'} \in \text{claim(x)(w)} \rightarrow \text{p(w')}]$

b. $\lambda p.\lambda x.\ \text{claim(x)} \ \&\ \text{fCONT(x)} = \text{p}$

Two central aspects are often left open or presupposed, however, both of which become apparent in CAPs: (i) what individual bears content and accordingly, what *the claim* refers to in (1b), and (ii) how a content-bearing individual forms an attitude predicate, i.e. the contribution of *make* in (1b). This paper aims to provide a compositional analysis for CAPs and argues that CAPs with *make* denotate the instantiation of a particular attitude kind.

The paper is structured as follows. The next section presents the problem of the definite determiner and discuss a predicate-based analysis. Section 3 constitutes the main section. It explores abstract nouns like *claim* with respect to their individuation criteria and introduces definite kinds with a particular focus on attitudinal kinds. In Section 4, I lay out my analysis based on the causation of realization states of attitudinal kinds. An overview of different attitudes and CAPs with other verbs can be found in Section 5. The last section concludes.

2 The problem

2.1 Apparent lack of presuppositions

Individuals that bear content are usually taken to be particular contentful events, such as claiming events, or the results/products of these events. As such, content-bearing individuals are intrinsically linked to a particular event or agent. Both views, the event view and the result view, therefore make the following two predictions, illustrated with respect to *claim*.

(4) *Predictions of event-based views*

a. If there is no claiming-event, there is no claim.

b. If there are multiple claiming-events, there are multiple claims.

These predictions seem to clash with the use of the definite determiner in CAPs, since definites are associated with existence and uniqueness presuppositions. This issue has recently been addressed in Srinivas & Legendre 2024, from which most of the examples that I will discuss in this section are drawn.

First of all, the definite article in CAPs does not encode familiarity and can be used in non-anaphoric contexts (also called first mention, or referent-establishing, cf. de Cuba 2017; Hankamer & Mikkelsen 2021; Hawkins 1978). This property is shared between different nominal constructions, such as NCCs in general, close appositions, and defining relative clauses. In an out-of-the-blue context, all three of the following sentences could be uttered.

(5) a. Asya made the claim that Betül likes the musical Cats. *(no previous mention of the claim)*

b. Asya likes the color blue. *(no previous mention of the color)*

c. Aaron really liked the boy that he met in Cardiff. *(no previous mention of the boy)*

Srinivas & Legendre (2024) compare cases like (5a) to cases like (5c) in order to show the lack of existence and uniqueness presuppositions. In (6), the existence presupposition projects from under negation and the conditional antecedent. In CAPs, however, this presupposition of the definite determiner seemingly disappears, as illustrated by (7): if no claim is made, no claim exists.

(6) a. Bill did not like the person that he went out with last night.

b. If Bill liked the person that he went out with last night, why isn't he seeing them again?

(In both of these cases, a unique person exists who went out with Bill.)

(Srinivas & Legendre 2024: 600, ex. 9)

(7) a. John did not make the claim that Hanna liked cats.

b. If John made the claim that Hanna liked cats, you may punish him any way you like.

(In both of these sentences, a unique claim may not exist that Hanna liked cats.)

(Srinivas & Legendre 2024: 600, ex. 11)

A similar contrast between both types of examples can be found with respect to uniqueness. In (8), *the person he went out with* must refer to one unique person,

which is liked by both Bill and his mother. In (9), on the other hand, both made their own decision independently of each other, at a different time, possibly in a different manner.

(8) Bill and his mother both like the person that he went out with last night.
(unique person)
(Srinivas & Legendre 2024: 603, ex. 17)

(9) Context: Anthony and Sara are the CEOs of a company. They are looking to hire a new project manager. After interviewing a lot of candidates . . .
. . . both (independently) made *the decision that Martha should be offered the job*. (Anthony made his decision immediately after speaking with Martha; he just knew she would be the right person for the job. But Sara's decision took some deliberation.)
(separate decisions possible)
(Srinivas & Legendre 2024: 601, ex. 13)

In that, CAPs with light verbs differ from other combinations of verbs with abstract nouns:

(10) Context: Same as above, but the initial hiring decision was made by two project managers.
They decided to hire Martha, and . . .
. . . Anthony and Sara rejected the decision.
(unique decision)
(adapted from Srinivas & Legendre 2024: 602, ex. 15)

While in the example above, Anthony's and Sara's decisions had the same content, the issue becomes more obvious in cases like (11), where the two made different decisions in terms of content.

(11) After the interview, Anthony and Sara both (independently) made *the decision whether Martha should be hired*. (They made different decisions: Anthony said yes, Sara said no.)
(Srinivas & Legendre 2024: 601, ex. 14)

In the next section, we will discuss Srinivas & Legendre's solution to this issue.

2.2 A predicate-based analysis

The apparent lack of presuppositions is also known from other constructions, namely those involving weak definites. Weak definites in English often alternate between an

overt and no realization of the weak definite as in the pair *go to the store* and *go to school*. Both examples have in common that they don't refer to a specific individual. There is also no existence presupposition, as evidenced by (12). I will call weak definites in this type of construction *Carlsonian weak definites*.[1]

(12) I can't even go to school/to the hospital, because there is no school/hospital around here!

Weak definites don't involve the same uniqueness that strong definites do. Moreover, they often rely on the combination with a particular verb. In (13), only (13a) allows for a non-unique reading of *the bus*, whereas *the bus* in (13b) must be interpreted as uniquely referring. This mirrors the difference between *make the decision* and *reject the decision* shown above.

(13) a. Harry and Samantha both took the bus to work today. (Harry took the 23A, Samantha the 64D.)
(separate buses possible)

b. Harry and Samantha both repaired the bus at work today. *(#Harry repaired the 23A, Samantha the 64D.)*
(unique bus that both Harry and Samantha repaired)

(Srinivas & Legendre 2024: 601, ex. 12)

Srinivas & Legendre argue that this suggests that the DP is pseudo-incorporated into the light verb (cf. Dayal 2011). Based on this similarity and Carlson, Sussman, Klein & Tanenhaus' 2006 analysis, they take the definite in CAPs with *make* to be semantically vacuous: it takes a predicate as an argument and returns the same predicate. What the DP denotes is then only a predicate that is incorporated into the complex predicate.

(14) a. $[\![\text{the}_{\text{weak}}]\!] = \lambda P.\lambda x.\ \text{P(x)}.$

b. $[\![\text{the}_{\text{weak}}\ \text{claim}_{\text{N}}]\!] = \lambda x.\ \text{claim(x)}$

c. $[\![\text{the}_{\text{weak}}\ \text{claim}_{\text{N}}$ that Hanna liked cats$]\!] = \lambda x.\ \text{claim(x)}$ & fCONT(x) = *Hanna liked cats*

d. $[\![\text{make}_{\text{INC-V}}]\!] = \lambda P.\lambda y.\lambda e.$ [make(e) & Agent(e)=y & $\exists$ x. [P(x) & Theme(e)=x]]

e. $[\![\text{make}_{\text{INC-V}}\ \text{the}_{\text{weak}}\ \text{claim}_{\text{N}}$ that Hanna liked cats$]\!] = \lambda y.\lambda e.$ [make(e) & Agent(e)=y & $\exists$ x. [claim(x) & fCONT(x) = *Hanna liked cats* & Theme(e)=x]]

(adapted from Srinivas & Legendre 2024: 615–616)

1 Weak definites also appear in other contexts, including proper names, which definitely refer. For an overview, see Schwarz 2009 and Aguilar-Guevara 2014.

The analysis accounts for the behavior described above. Crucially, however, it leaves open what it means to make a claim or a decision. Furthermore, it faces empirical challenges.

It is well-known that weak definites cannot be passivized and appear in subject position. Moreover, they cannot be modified. In both (15b) and (16b), the weak interpretation disappears and only a specific interpretation is possible. Both phenomena indicate a lack of autonomy and a certain degree of incorporation of the DP/NP in the a-examples.

(15) a. Asya and Betül read the newspaper. *(They were both reading different newspapers, for example, Asya was reading the Telegraph and Betül the Gazette.)*

b. The newspaper was read by Asya and by Betül. *There is a particular newspaper that both read by both.*

(16) a. Asya and Betül both had to go to the hospital. *(...but not necessarily to the same hospital.)*

b. Asya and Betül both had to go to the old hospital. *(There is a specific old hospital that both had to go to.)*

This, however, is not the case for CAPs with *make*. The examples in (17) and (18) show passivization and modification, respectively.[2] Both operations do not affect interpretation.

(17) a. The claim that Debbie likes the movie Cats has been made by Betül and by Asya. *(...at different times.)*

b. The decision whether Asya should be hired will be made by Betül and by Cillian.

(18) a. Asya made the outrageous claim that Betül likes the movie Cats.

b. Betül made the astonishing decision that Asya should be hired.

These examples show that the DP in CAPs behaves like a regular referential argument in this respect and a predicate-analysis is not warranted. In the following section, we will discuss individuation criteria and argue that the DP in CAPs refers to a specific *kind* of attitude.

2 Aguilar-Guevara (2014) notes that modification is possible if it creates a subclass, as in *go to the psychiatric hospital*. Note that this would not be the case for *the outrageous claim* or *the astonishing decision*.

3 The nature of a claim

3.1 Individuation

The discussion above rests on the assumption that if a claim is made at different times by different people in different claiming events, there must be more than one claim. What we find, however, is that abstract individuals such as claims are subject to a maximalization effect. In a sentence like *The scientist made two claims*, we naturally assume that the two differ in content. As (19) and (20) show, claims are only individuated in terms of content and any aspect of their realization is irrelevant.[3]

(19) Carola made the claim that time is relative. Five minutes later, Carlito very loudly made the claim that time is relative, ...

a. # ... but he didn't make the same claim, his claim was very loud.

b. # ... but his claim his was different than hers, it was very loud.

(20) a. Asya's claim is different from Betül's claim. Asya said that all cats are evil and Betül said that all black cats are evil.

b. # Asya's claim is different from Betül's claim. Asya's claim was loud and Betül's claim was very quiet.

Repeating a claim does not lead to a second claim either, see (21). The way we count abstract individuals is particular to them. Ordinary individuals, like cats, behave the opposite way, cf. (22).

(21) The scientist made five claims that day...

a. # ... all of which were that time is relative.

b. ... she made four random claims and also claimed twice that time is relative.

(22) The cat gave birth to a litter of five cats...

a. ... all of which look exactly the same.

b. # ... four very distinct cats and two black ones who look exactly the same.

Although the same holds for decisions, the phrase *the decision whether S* indicates that they also have a more coarse individuation criterion than content and can also be individuated in terms of topic.

3 This does not seem to be specific to abstract individuals in CAPs, as this example shows:

(i) We discussed two claims yesterday. # Maya said very loudly that time is relative and later, Ahmed said quietly that time is relative. We discussed both of their claims.

The individuation criteria for these abstract individuals are not compatible with the assumption that they denote content-bearing events or content-bearing results from events. Instead, we find that they bear the most resemblance to definite kinds, which we discuss in the next section.

3.2 Kinds and attitudes

Reference to kinds is a typical function of the definite determiner in languages with definiteness marking (Dayal 2004). Like bare plurals, they can serve as arguments for kind-level predicates, as in (23), a characteristic that sets them apart from generic interpretations of the singular indefinite.

(23) a. The Asiatic Lion is widespread/common/extinct.

b. Asiatic lions are widespread/common/extinct.

c. # An Asiatic lion is widespread/common/extinct.

While most research on kinds has involved bare nouns, particularly bare plurals, it is well known that there is something different about the singular definite noun phrases: they are group-like and can refer to the taxonomic entity, or the concept, of a kind rather than the sum of individuals that represent the kind. I will use the term *kind* to refer to this notion of kind.

For Carlson (1977), kinds are part of the domain of individuals. Particular instantiations relate to the kind they instantiate via a realization relation $R(x^o,y^k)$. For convenience, object-level individuals, that is, particular instantiations, are indicated by superscript x^o and kind-level individuals by superscript y^z. The set of lions can then be represented as the set of individuals that instantiates the taxonomic kind of *the Lion*:

(24) λx^{o}. R(x^{o}, lion^{k})

I will assume with Dayal 2004 that the definite in these cases is just a regular definite denoting ι, quantifying over an taxonomic entity instead of an instantiation. With the system above, I will treat a definite kind like *the lion* as in (25):

(25) ιx^{k}. LION(x^{k})

Kind reference is not restricted to zoological classifications, but also includes artifacts such as *the Coca Cola bottle* and abstract, content-bearing individuals. The latter is evidenced by the application of typical kind predicates:

(26) The claim/belief that time is relative is common/widespread.

To ensure that this is also the interpretation of the DP in CAPs, we can combine them with a non-restricting relative clause that contains a kind-predicate and one with a realization-describing predicate. Example (27a) with *very common* is perfectly fine, whereas (27b) with *loud* is marked.

(27) a. The claim that cats are demonic, which is very common, was first made in 1366.

b. # The claim that cats are demonic, which was very loud, was made by friend yesterday.

As kind terms, they share multiple well-known characteristics with other kind terms. In examples (23) and (26) above, the definite is used non-anaphoric. In order to be appropriate, a kind must be sufficiently specific, which explains the need for the second part of the noun phrase in (28).

(28) a. She encountered the animal #(Smilodon).

b. She encountered the claim #(that S).

(# for non-anaphoric contexts)

Importantly, we can refer to kinds even if they have no current instantiations. This leads to the intuition described above, namely that under negation or conditional antecedents, no such claim exists.[4]

(29) a. The Smilodon is extinct.

b. The Universal Translator device has never been invented.

c. The claim that time is anything else than wibbly wobbly is a claim that no one ever made.

Furthermore, kinds are uniquely referred to with the definite in contexts when more than one instantiation is to be assumed. In (30a), for instance, *the new Model 8* may refer to a type of phone or car. The kind provides a comparison class for their instantiations, which is indicated by the use of *same* in (31).

(30) a. They both have the new Model 8. *But each person has their own phone/car.*

b. They both (independently) made the claim that protons have no mass.

(31) a. They have the same phone.

b. They made the same claim.

4 There is something particular about the word *exist*, which cannot describe the existence of a taxonomic entity but requires the existence of actual instantiations (see e.g. Moltmann 2013):

(i) # The Triceratops exists. *spoken today*

As the last subsection has shown, the criterion by which kinds of claims are individuated is shared content. We say that someone made the *same* claim as someone else if their claim has the same content. This, however, leaves a small wrinkle for decisions.

In Section 2, we discussed examples from Srinivas & Legendre 2024 in which *Both made the decision whether S* includes decisions with different content, one said person yes, the other person said no. They thus made *different* decisions. First, let us demonstrate that *the decision* can have a kind-referring interpretation. In (32), *the decision to take a gap year* is combined with the kind-predicate *to become common* and cannot refer to a particular decision of a particular person.

(32) The decision to take a gap year is becoming increasingly common in Europe.

In (33), overt kind reference is combined with *whether*, showing that decision-kinds are not only defined in terms of content but also in terms of topic. The modifiers *same* and *different* can also pick out topics as a comparison class for decisions, see (34).

(33) Everyone has to make that kind of decision, namely whether to stay or to leave, at some point. While some decide to stay, others decide to leave.

(34) a. Again and again, people are faced with the same decision.

b. Different people face different decisions.

Topic-defined kinds of decisions are direct superordinates to content-kinds, comprising all decisions whose content equals one of the propositions of the question set of the topic. That is, every decision *whether S* is either a decision in favor of *that S* or a decision in favor of *that not S*.

We can thus conclude that the singular definite DP in CAPs denotes a definite kind. As shown, this explains all of the problems presented in Section 2 and is in line with the difference between CAPs and Carlsonian weak definites. Most importantly, it is in line with a standard analysis of the definite determiner. In the next section, we draw the focus back on *the make the N that* construction.

3.3 Kinds in complex attitude predicates

Kind reference has also been proposed for weak definites and pseudo-incorporation (e.g. Aguilar-Guevara 2014; Sağ 2019). Moreover, both CAPs and weak definites often involve light verbs (in a loose sense), the latter verbs such as *to be* + P, *go*, or *take*. This begs the question whether we arrived at the same result in different terms.

That there is something different about our construction was shown in Section 2.2. In contrast to Carlsonian weak definites, the kind-denoting argument *in make the N that* constructions can be promoted to subject positions in passives and can

be freely modified. This suggests that the DP in CAPs behaves like a syntactically independent unit and just like any other selected argument.

Morever, Carlsonian weak definites often involve a high degree of lexicalization. As Carlson et al. (2006) put it:

(35) a. Being at school is not simply being at a school, but that and more...

b. Being in prison is not simply being in a prison, but that and more...

Lexicalization is further evidenced by the fact that the weak interpretation disappears if the verb or the noun is exchanged (Carlson et al. 2006; Aguilar-Guevara 2014). Cases where the determiner is dropped become ungrammatical (ibid.).

(36) a. Both go to the hospital / #the building.

b. Both read the newspaper / #the magazine.

c. Both go to(/#past) the hospital.

d. Both go to/#see the hospital.

e. Both are still in bed / *in couch.

(# where weak interpretation is not possible)

These facts do not seem to hold for CAPs. Making a claim or a decision does not seem to involve anything more than its parts suggest, i.e. there is no semantic enrichment.

Moreover, everything we showed in the last section was a characteristic of singular definite kinds, not of one particular lexical combination. As shown, the verb *face* can also take kinds of decisions as arguments.

Concurrently, the verb *make* receives a very similar interpretation when it combines with types of concrete, physical objects. In (37), *the new Model 8* refers to a type of phone that predates the particular making-process.

(37) *Context: A tour guide passes a phone factory*
Here, they make the new Model 8.

In (37), *make* takes a kind-individual as an argument and denotes the creation of instantiations of that kind. Thus, the DP does not refer to the particular result of a process but to the kind of result the process is supposed to create. *Make* in this example acts as a full verb. The main difference to *make the claim* is that *make* in (37) denotes an event that involves physical labor. *Make* in CAPs is thus a minimally bleached version that only lacks the property of physical concreteness.

We now turn to the analysis.

4 Analysis

We almost have all of the necessary individual parts to formalize our analysis for *make the N that* constructions. To recapture, here is what we have gathered so far:

- Kinds are taxonomic entities in the domain of individuals. Particular instantiations stand in a realization relation to their kind. (Carlson 1977)
- The definite denotes the usual ι operator, quantifying over kind-individuals in our case. (Dayal 2004)
- Abstract content-bearing individuals come in kinds, defined (mainly) by their content. (e.g. Moltmann 2020)
- *Make the N* takes a kind-individual as argument and denotes the creation of instantiations.

What is missing so far is how instantiations are created. First of all, the creation is telic, which can be shown with the *takes-an-hour* test from Dowty 1979 in (38):

(38) a. It took her an hour to make the decision that Martha should be hired.
b. It took him only one minute to make the claim that our boss is a lizard person.

To keep our functional inventory small, and to get closer to other meanings of *make* such as *make him do it* or *make the table wet*, we can view creation as a particular kind of causation.[5] But what does it mean to cause a claim? Typically, causation applies to events like *the downfall of the Roman empire*, rather than to individuals like *a cake* or *Jack*. A more straightforward account would involve event-state causation.

Thus, I will make the following assumption: to create a particular individual is to cause a state in which it is realized. For this, we need to augment the Carlsonian realization relation with a state argument as in (39). This makes instantiations temporally dependent on the state in which they are realized. That is, a particular individual x^o realizes a certain kind and *exists* for the duration of the state in which it is realized.

(39) *State based realization*
$R(x^o, y^k, s)$ iff x^o is an instantiation of the kind y^k in s.

5 See Kratzer 2005 on causation in resultatives. While the analysis proposed for CAPs is not intended for other contexts, it seems possible to be extended to some cases such as *make the table wet*. In this particular case, the phrase might denote the creation of a stage of the table in which it is wet, or the creation of a trope of wetness.

Typically, result states can be temporally modified (cf. Piñón 1999):

(40) a. She opened the window for ten minutes.
b. She opened the window until she closed it again.

Particular claims – and therefore their realization states – endure past the event in which they were instantiated. While claims usually don't have clear temporal boundaries, we can imagine a context like (41), where the realization state is temporally modified.

(41) In this paper, we have made the claim that bats are birds, at least for the time being, until we revoke it again.

A making-event can now be defined in terms of state-causation, separating the agent from the verbal denotation (Kratzer 1996):

(42) $[\![\text{make}]\!] = \lambda x^{k}.\lambda e.\exists s.\exists y^{o}.$ CAUSE(e,s) & R(y^{o}, x^{k}, s)

While in general, a state or event can have multiple causes, we assume that a (completed) making-event creates exactly one instantiation. That is, if an instantiation y^o of kind x^k exists before an instantiation z^o is created, then y and z are distinct. This condition is behind the non-uniqueness intuition for different claim-making events.

(43) *Non-identity condition.*
$\forall e, x^{o}, y^{o}, z^{k}, s, s'.$ [[CAUSE(e,s) & R(x^{o}, y^{k}, s) & R(z^{o},y^{k}, s') & INIT(s') < CULM(e)] $\rightarrow$ s' $\neq$ s & $z^{o} \neq y^{o}$]

For the definite DP, I start with a kind denotation of the common noun and assume that the CP provides a content-predicate over a content-bearing individual. The iota operator is taken from Partee 1987. The parts are given in (44) and the derivation in (45).

(44) a. $[\![\text{the}]\!] = \lambda x.\iota x$
b. $[\![\text{claim}]\!] = \lambda x^{k}.$ claim(x^{k})
c. $[\![\text{that S}]\!] = \lambda x.$ fCONT(x) = S

(45) a. $[\![\text{claim that S}]\!] = \lambda x^{k}.$ claim(x^{k}) & fCONT(x^{k}) = S (via Predicate Modification)
b. $[\![\text{the}]\!]([\![\text{the claim that S}]\!]) = \iota x^{k}.$ claim(x^{k}) & fCONT(x^{k}) = S

Finally, *make* applies to (45b) via Functional Application, yielding (46).

(46) a. (to) make the claim that time is relative
b. $[\![(42)]\!]([\![\text{the claim that time is relative}]\!]) = \lambda e.\exists s.$ CAUSE(e,s) & $\exists y^{o}.$ R(y^{o}, $\iota x^{k}.$ [claim(x^{k}) & fCONT(x^{k}) = *time is relative*], s)

This brings us to the question how this analysis compares to an analysis of $claim_{verb}$. As pointed out in the introduction, it has been contended that lexical verbs can be decomposed into a light verb and an incorporated lexical noun. In particular, this has been proposed for $need_{verb}$ as $have_{LV}$-$need_{N}$ by Harves & Kayne (2012) and particularly for $claim_{verb}$ as $make_{LV}$-$claim_{N}$ by Moltmann (2021). Therefore, we should be able to carry over our analysis from CAPs to simple attitude verbs.

A major difference between $claim_{V}$ and *make the* $claim_{N}$ would be that the verb already incorporates the type of attitude it creates. While above, I assumed a predicate analysis for the complement, I will assume a definite analysis for when it stands alone. Consequently, *that S* might act as a relative clause when it directly combines with a noun (e.g. Arsenijević 2009), and it acts as a free relative if it stands alone (cf. Roussou 2010).[6] I will derive this by applying the definite to the complement clause. A possible derivation is sketched out in (47):

(47) (to) claim that time is relative

a. $[\![\text{claim}_{\text{verb}}]\!] = \lambda x.\lambda e.\exists s.$ claim(x) & CAUSE(e,s) & $\exists y.$ R(y, x, s)

b. $[\![(43a)]\!]([\![(43c)]\!]) = \iota x.$ fCONT(x) = S

c. $[\![(x46)]\!]([\![(44b)]\!]) = \lambda e.\exists s.$ claim($\iota x.$ fCONT(x) = S) & CAUSE(e,s) & $\exists y.$ R(y, $\iota x.$ fCONT(x) = S, s)

So far, we have only talked about *make* in combination with *claim* and *decision*. But CAPs form a very broad pattern in English. In the next section we will look at a wider range of attitude in CAPs.

5 Other kinds of attitudes

Most attitudes that are expressed in CAPs are formed either with *make* or with *have*. CAPs with *make* are eventive. Many speech reports can be formed that way, such us *make the claim / statement / assertion / allegation / accusation / report / comment / remark / complaint / joke / admission / announcement / suggestion / proposal / insinuation / prediction / observation / contention / case / point / argument that S*, on top of other types of speech acts, like *promise, threat*, some mental acts and experiences like *assumption, judgment, assessment, compromise, experience, discovery*, and also acts that relate to alternatives like *decision, choice, call*. In all of

6 A possible addition would be that the complement clause contains a free variable ranging over types of attitudes $\iota x.$ ATT(x) & fCONT(x) = S) (cf. Kratzer 2016, who assumes that Mood contains a free variable ranging over domain projection functions. It's possible that it is not completely "free" and cannot be randomly filled in pragmatics but must be bound by an element that provides a suitable predicate.

these cases, *make* combines with a noun that can bear content.[7]

Most of them (but not all, see *case, point*) have corresponding simple verbs with the same or a similar meaning. In some cases, the simple verb has a different argument structure, as in *to accuse someone of something*. In other cases, like *make the observation/observe*, the simple verb has two readings, namely as a perception verb and as a speech report verb, while the CAP only has the latter reading:

(48) a. He observed cats for two hours.

b. # He made the observation that cats are demons for two hours.

Besides some idiosyncratic and non-systematic combinations, like *put forward* or *advance a claim*, another pattern of eventive CAPs is formed with *reach*. There is at least *reach the decision / conclusion / verdict that S*, flanked by *arrive at /draw the conclusion that S*. The choice of *reach* indicates a longer prior process of deliberation. The *spend-an-hour* test from Dowty 1979 indicates that it denotes an achievement rather than an accomplishment, cf. (49b).

(49) a. # They spent hours reaching the decision that Martha should be hired.

b. ? They spent hours making the decision that Martha should be hired.

Stative attitudes, on the other hand, are mostly formed with *have*. They form the pattern *have the belief / opinion / dream / expectation / suspicion / impression / desire / hope / fear that S*. On top of that, there are some content-bearing nouns without respective verbs, such as *have the position / view /attitude that S*.

Some statives seem to involve attitudes also as mass terms. This is indicated by the lack of the determiner in (50) in English and French.

(50) a. I have hope that one day we will see a better future.

b. J'ai peur que leur perception soit fausse.
'I fear that their perception is wrong.'

For the standard cases in English that involve the definite, I assume that they also refer to kinds of attitudes. To illustrate this, let us look at possible predicates. Again, *widespread* and *common* apply to kinds. For stative attitudes, *deep belief* and *secret hope* arguably involve adjectives that target qualities of the particular attitude rather

7 A reviewer commented that *make the claim* contrasts with *give the speech*. While *speech* also combines with *make* in lesser frequency, it is important to note that *speech* is not a content-bearing noun in the relevant sense. Just like a book, a speech has content, but it does not have a single propositional content and cannot combine with a *that*-clause. Regarding other combinations, *give the impression* does not describe the attitude of the subject. *Give/provide the explanation*, on the other hand, seems to denote the content reading of *to explain that S*. All in all, *give* does not seem to form a broader pattern for CAPs in English.

than a quality of the kind. As done in Section 3, this is tested with a relative clause and a copula construction. The reason for this is that this construction is much more restricted with respect to type coercion than direct modification (Bücking & Maienborn 2019). As (51) and (52) show, kind-predicates are more acceptable than predicates that target qualities of particulars.

(51) a. I have the belief that time is relative, which is widespread/very common.
b. ?? I have the belief that time is relative, which is deep.

(52) a. I have the hope that time is forgiving, which is very common.
b. ?? I have the hope that time is forgiving, which is secret.

What these attitudes have in common is that they can be *shared*. Moreover, some attitudes may come in an eventive and a stative version, such as *make the assumption that* and *hold the assumption that*.

As we have seen, CAPs exhibit broad patterns in English, out of which *make* forms the broadest. I assume that my analysis applies to all of the CAPs with *make* described above. While *reach* also denotes a change of state, it involves more, and possibly different, meaning components. Since in my analysis, instantiations are formed by the verbal part, a possible consequence for stative attitudes would be that they don't instantiate. This might explain a difference noted by Arsenijević (2020), namely between *three claims that the earth is concave* and *# seven beliefs that disinfectants cure from viruses*. It will be left for further research how best to account for stative CAPs.

6 Conclusion

In this paper, I have laid out a compositional analysis of complex attitude predicates involving *make* that accounts for its individual parts, in particular the use of the definite determiner and the contribution of the light verb. I have defended a regular use of the definite against claims of a semantically vacuous denotation. Crucially, the DP in constructions like *make the claim/decision that S* involves reference to a kind. The use of the singular definite to refer to a kind in this construction is therefore no different to its use in other contexts. The contribution of the light verb was then analyzed as causation of a state in which that kind is instantiated.

An important consequence is *that the claim that S* is not a result nominal in the sense that *building*, *translation* or *destruction* are. *The claim* does not denote the particular result that was created, but it instead refers to the kind of the result which is produced. This sheds new light on the distinction between acts and their products: while an act of claiming yields a certain result, it is defined in terms of the kind of result it produces.

The proposed analysis is not only applicable to the range of complex attitude predicates with *make* but may also offer a blueprint for simple eventive attitude verbs and cases of (pseudo-)incorporation that involve a make-type verb. Further research will show how to deal with stative attitudes and how they, if at all, instantiate.

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