Behavior-related unergative verbs derived from nouns and adjectives

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1. Introduction

o Behavior-related verbs are unergative verbs that intuitively describe ways of behaving. 1

- (1) a. Pour se nourrir, il **clochardise**, il fait les poubelles. (Paris Match) 'In order to eat he behaves like a homeless, he scavenges.'
 - b. On **diplomatise**, on discutaille, et les autres ils continuent d'implanter des colonies. (Internet)
 - 'One diplomatizes, one quibbles, while the other ones continue to set up colonies.'
 - c. Les spasmes financiers tenaillent l'Europe. Sarkozy **sarkoze** et Merkel **merkèlise**. (Internet)
 - 'Financial spasms are tormenting Europe. Sarkozy is sarkozing and Merkel is merkelizing.'
 - d. Quand on **pédantise** on essaie d'accorder les participes correctement. (Internet) 'When one acts pedantically, one tries to make participles agree correctly.'
 - e. Que de fois l'avait-il raillée lorsqu'elle **sentimentalisait**! (H. Malot) 'How many time did he laugh at her when she was sentimentalizing!'
- o These verbs can be derived from **common nouns** (e.g., French *diplomate*, *clochard* 'tramp, beggar'), or from **proper nouns** that refer to individuals associated with **typical behavioral patterns**, see (2a-c).
- o They can also be derived from a subset of **evaluative adjectives** (e.g., French *pédant* 'pedantic'), sometimes called *propensity adjectives* (Oshima 2009), also used to define typical behavioral patterns, see (2d-e).
- (2) a. [...] c'est un vrai clochard à bouffer des trucs par terre. (Internet) 'He's a true tramp, eating stuff on the floor.'
 - b. Juliette **est une vraie diplomate**! 'Juliette is a true diplomat!'

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- c. À propos de sa fille, Carla Bruni déclare [...] « Elle **est très Sarkozy**. » (Internet) 'About her daughter, Carla Bruni declares [...] "She's very Sarkozy."
- d. Comme d'habitude, [DSK] **était pédant**. (Internet) 'As usual, [DSK] was pedantic.'
- e. Aliosha **était** méchant, mais **sentimental**. 'Aliosha was mean, but sentimental.'
- Verbs derived from such nouns and adjectives describe **actualizations** of these typical behavioral patterns.
- In addition to their unergative use, a number of behavior-related verbs have formally identical counterparts that are **(anti)causatives**, see (3):
- (3) Sarkozy **diplomatise** le Hezbollah. (Internet) Literally: 'Sarkozy diplomatizes the Hezbollah.'
- o (3) roughly means that Sarkozy causes the Hezbollah to have/get a property typical of diplomats.

Questions raised

- How does the nominal or adjectival root contribute semantically to the semantics of the verb?
- What are the semantic relations between *diplomate / sentimental* and *diplomatiser / sentimentaliser*?
- What is the semantics of behavior-related unergative verbs derived from nouns or adjectives?
- Can we provide a unified account for both the unergative and (anti)-causative uses of these verbs?

Plan

- Section 2: être N vs N-ifier/-iser/-er: differences in use and entailment patterns;
- Section 3: être N vs Adj-ifier/-iser/-er: differences in use and entailment patterns;
- Section 4 : (modified) semantic analysis of denominal behavior-related verbs by Martin and Piñón 2016;
- Section 5: extension of the analysis to deadjectival behavior-related verbs and derivation of the entailment patterns;
- Section 6: derivation of the (anti)causative use.

Remarks

- i. In French, -iser and -ifier are the suffixes commonly used to derive behavior-related verbs. However, for several verbs, French usage varies between the "zero-derived" and the "-iser/-ifier derived" variants; cf. macronner/macron(n)iser 'behave like Macron', cabotiner/cabotiniser 'ham it up; overact', babouiner/babouiniser 'monkey around'.
- ii. In general, it seems that the **anticausative use needs the** -iser/ifier **variant** and that "zero-derived" behavior-related verbs do not have an anticausative use.

2. $\hat{E}tre\ N$ and N-iser/-ifier/-er: entailment patterns

- (4) a. *athéiser* 'to practice/teach atheism' < *athée* 'atheist'
 - b. *babouiner* 'to monkey around' < *babouin* 'baboon'
 - c. *clochardiser* 'to behave like a homeless person' < *clochard* 'homeless person'
 - d. *diplomatiser* 'behave like a diplomat' < *diplomate* 'diplomat'
 - e. gaminer 'behave in a youngster way' < gamin 'youngster/kid'
 - f. *girouetter* 'act like a weathercock, by changing one's opinions or behavior' < *girouette* 'weathercock'
 - g. *guignoler* 'behave like a Guignol' < *guignol* 'clown' (Guignol is a famous puppet from Lyon)
 - h. *hussarder* 'behave with courage, rapidity' < *hussard* 'hussar'
 - i. *jésuitiser* 'behave like a Jesuit ' < *jé*-

- suite 'Jesuit'
- j. *lambiner* 'act with slowness, languidity and nonchalance and lose one's time' < *lambin* 'slowpoke'
- k. *lézarder* 'stay lazily in the sun' < *lézard* 'lizard'
- paladiner 'behave like a paladin' < paladin 'wandering knight'
- m. *putasser* 'behave like a prostitute' < *pute* 'whore'
- n. renarder 'behave like a fox' < renard 'fox'
- o. *robinsonner* 'live alone like Robinson; wander alone' < *robinson* 'person who lives alone into nature'
- p. rossarder 'move like a rossard' < rossard 'nasty guy'
- q. somnambuler 'act like a sleepwalker' < somnambule 'sleepwalker'

2.1. Does the verb entail the noun?

- o The absence of an entailment from a behavior-related verb to the corresponding noun is obvious when the noun is a proper noun, but it has also been observed when the noun is a common noun (see Aronoff 1980, Acquaviva 2009):
- (5) He nurses well (but he's not a nurse).
- o However, in languages like French and German where nouns of profession can be bare or with a determiner, things are a bit less obvious:²
- (6) Juliette est Ø diplomate.'Juliette is a diplomat by profession.'

(Literal only)

²In (6), *diplomate* is a noun. There is also an adjective *diplomate*, in which case (6) does not mean that Juliette is a diplomat by profession.

- (7) Juliette est une diplomate.
 - 'Juliette is a diplomat.'
 - a. 'Juliette is a diplomat by profession.'

(Literal)

b. 'Juliette has properties typical of diplomats.'

(Figurative)

- o The entailment from the behavior-related verb to the noun is blocked if the noun is used as a bare NP, because the sentence is true only if the subject is 'N' by profession (de Swart et al. 2007, von Heusinger and Wespel 2007); see the (a)-sentences in (8) and (9).
- However, the entailment arguably succeeds if the noun used with an indefinite article on a **figurative** reading; see the (b)-sentences in (8) and (9).
- (8) Marie putasse.

'Marie behaves like a whore.'

- a. \rightarrow Marie est \emptyset pute.
 - 'Marie is a whore by profession.'
- b. \rightarrow Marie est une (vraie) pute.

(Figurative)

'Marie is a (true) whore.'

- (9) Juliette diplomatise.
 - 'Juliette behaves like a diplomat.'
 - a. \rightarrow Juliette est \emptyset diplomate.
 - 'Juliette is a diplomat by profession.'
 - b. \rightarrow Juliette est une (vraie) diplomate.

(Figurative)

- 'Juliette is a (true) diplomat.'
- o That the (b)-sentences are entailed is not a surprise, because on the figurative reading, the use of the noun has been argued to be correct as long as referent of the subject NP "behaves like an 'N'" (von Heusinger and Wespel 2007) or has the typical properties of an 'N' (de Swart et al. 2007), whether or not the referent actually exercises the corresponding profession.
- o This suggests that the noun is (re)interpreted the same way in the behavior-related verb and in the figurative reading of the indefinite NP.

2.2. Does the noun entail the verb?

- \circ On the other hand, the entailment from a noun on its figurative reading to the corresponding behavior-related verb in generic sentence seems blocked.³
- (10) a. Juliette est une diplomate.

(Figurative)

- 'Juliette has properties typical of a diplomat.'
- b. \rightarrow Juliette diplomatise.
 - 'Juliette behaves like a diplomat.'

³For a bare NP, the entailment from a noun to the corresponding behavior-related verb does not go through because one can be a diplomat by profession without behaving like a diplomat (consider the case of atypical diplomats).

(11) a. Marie est une (vraie) pute.

(Figurative)

- 'Marie has properties typical of a whore.'
- b. \rightarrow Marie putasse.
 - 'Marie behaves like a whore.'
- o One of the differences between the noun and the corresponding behavior-related verb that account for the reluctancy to endorse the entailments in (10)–(11) is that while the property ascribed by the noun on a figurative reading may be **stative or eventive**, the property ascribed by a behavior-related verb may only be **eventive**.
- \circ (10a) may be true if Juliette resembles typical diplomats in that she is well-groomed and has an expensive briefcase.
- Such stative properties of diplomats do not make (10b) true. In order for (10b) to be true, Juliette has to *behave* like a typical diplomat (e.g., to express herself discreetly).
- o (11a) may be true if Marie resembles typical whores in that she is dressed like one.
- Such stative properties of whores do not make (11b) true. In order for (11b) to be true, Marie has to *behave* like a typical whore (e.g., to prostitute herself, literally or figuratively).

2.3. Intermediate conclusions

SUMMARY OF OBSERVATIONS:

- i. A behavior-related verb (e.g., *Juliette diplomatise* 'Juliette behaves like a diplomat'; (9)) entails the corresponding noun (e.g., *Juliette est une diplomate* 'Juliette has properties typical of diplomats'; recall (9b)) on its **figurative** reading. This suggests that the noun is reinterpreted in a similar way in both cases.
- ii. A behavior-related verb ascribes a **typical eventive** property of 'N' to the referent of the subject NP, whereas the corresponding noun attribute either a **typical eventive** or a **typical stative** property of 'N' to the referent of the subject NP.

3. *Être N* and *Adj-iser/-ifier/-er*: entailment patterns

o The entailment patterns seem to partly vary according to whether the deadjectival behavior-related verb is derived from adjectives describing *interpersonal* dispositions (that one can only actualize through an interaction, e.g., *naughty*) or "simple" dispositions (that can be actualized by an individual alone, e.g., *stupid*).

From *naughty*-adjectives:

- (12) a. *bouffonner* 'joke around' < *bouf- fon*: 'comical, jester, buffoon'
 - b. *cabotiner* 'behave overdramatically' < *cabotin* 'over-acting, over-dramatic'
 - c. couarder 'behave like a coward' < coward 'coward'

- d. crâner 'show off' < crâne 'fierce'
- e. fanfaronner 'behave on a posh/boastful way' < fanfaron 'posh, boastful'
- f. *folâtrer* 'flirt, frolic, fool around' < *folâtre* 'playful, frisky'
- g. *galantiser* 'behave in a courteous/chilvarous way' < *galant* 'cour-

- teous, chilvarous, romantic'
- h. *goguenarder* 'to tell mocking jokes' < *goguenard*: 'mocking, jeering'
- i. *libertiner* 'live in debauchery' < *libertin*: 'libertine'
- j. *mesquiner* 'behave stingily' < *mesquin* 'stingy (person)'
- k. *pateliner* 'act as a hypocritical person' < *patelin*: 'hypocritical, hon-

From *stupid*-adjectives:

- (13) a. *barjoter* 'behave like a simpleminded crazy person' < *barjot* 'crazy/stupid'
 - b. *bêtifier* 'behave like an idiot' < *bête* 'stupid'
 - c. bougonner 'mumble in order to express one's bad mood' < bougon: 'grumpy, grouchy'
 - d. *déconner* 'behave like an idiot' < *con* 'stupid'
 - e. fainéanter 'behave like a idle' < fainéant lazy'
 - f. gâtifier 'behave on a senile way' < gâteux 'senile'

- eyed, fakely sweet'
- pédantiser 'behave like a pedant' < pédant 'pedant'
- m. *polissonner* 'behave like a naughty child' < *polisson* 'naughty'
- n. *roublarder* 'behave like a dodger' < *roublard* 'dodger'
- o. *tatillonner* 'nitpick' < *tatillon* 'finicky, nitpicking'
- g. *mélancoliser* 'devote oneself to melancholy' < *mélancolique* 'melancholic'
- h. *sentimentaliser* 'behave sentimentally' < *sentimental* 'sentimental'
- i. *flemmarder* 'behave like a sluggard' < *flemmard* 'sluggard'
- j. *niaiser* 'behave in a simple-minded way' < *niais* 'simple-minded'
- k. *patienter* 'wait patiently' < *patient* 'patient'
- ronchonner 'express one's bad mood by mumbling more or less distinctly words of dissatisfaction' < ronchon 'bad-tempered, grouchy'

3.1. Does the verb entail the adjective?

- A sentence with a behavior-related verb does not entail the sentence with a corresponding *stupid*-adjective:
- (14) a. Itamar **niaise**, mais ne t'y trompe pas, il est **loin d'être niais**, c'est juste un genre qu'il se donne ...
 - 'Itamar behaves in a simple-minded way, but don't be mistaken, he's far from being simple-minded, it's just an image that he uses to display ...'
 - b. On fainéante, mais on n'est pas fainéant, attention!
 - 'We are lazing around, but we are not lazy, be careful!'
 - c. Il **ronchonne** mais c'est juste de la façade, il **est pas ronchon** pour un sou. 'He's grumbling but it's just a show, he's not grumpy at all.'
 - d. J'ai patienté parce que j'étais bien obligé, mais je t'assure que patient, je l'étais pas!
 - 'I have been waiting because I was obliged to, but I swear you that I wasn't patient!'
- o Intuitively, the contradiction is avoided because
 - i. the deadjectival behavior-related verbs ascribe behavioral patterns typical of individuals

- defined by the adjective (e.g., lying in a couch in front of TV in the case of *fainéanter* 'laze around'; waiting in the case of *patienter* 'wait');
- ii. it is possible to actualize these patterns while not being an individual (or not being in a state) satisfying the adjectival property (e.g., it is possible to lie in a couch watching TV without being a lazy person or in a lazy state).
- Note that these behavior-related verbs also do not entail that the events they denote satisfy the adjectival property. For example, one can *patienter impatiemment* (139 hits on Google).
- However, when the verb is derived from a *naughty*-adjective, the entailment arguably *does* go through, as shown by the fact that the sentences (15) do sound contradictory:
- (15) a. Notre petit chou **polissonne**, #mais **sans être polisson**, attention!

 'Our little darling is playing the fool, but without being foolish, be careful!'
 - b. Juliette **mesquine/tatillonne** #mais ne t'y trompe pas, c'est juste de la façade, elle n'**est pas mesquine/tatillonne**.
 - 'Juliette behaves in a stingy way/nitpicks, but don't get her wrong, it is just a show, she is not stingy/nitpicking.'
 - c. Paul **libertine**, mais c'est juste un genre qu'il se donne, #il n'**est pas libertin** pour un sou
 - 'Paul behaves in a libertine way, but that's just an image that he's giving of himself, he's not libertine at all.'

3.2. Does the adjective entail the verb?

- The entailment from a *stupid*-adjective to the corresponding sentence with a behavioural verb seems also blocked:
- (16) a. Hier, Sasha **était ronchon**. 'Yesterday Sasha was grumpy.'
- 'Yesterday Sasha was grumbling.'

b. \rightarrow Hier, Sasha **ronchonnait**.

(17) a. Jean **a été fainéant**. 'Jean was lazy'

b.

→ Jean a fainéanté.'Jean lazed around.'

(18) a. Itamar **est patient**. 'Itamar is patient.'

- b.

 → Itamar patiente.'Itamar is waiting.'
- The entailment is here blocked for at least one of the following two reasons:
 - i. While the property ascribed by the adjective may be **stative or eventive**, the property ascribed by a behavior-related verb may only be **eventive**.
 - ii. The **range of eventive properties** that can make *stupid*-adjectives in (16a)-(18a) true is in some cases *broader* than the range of (eventive) properties making the sentence with the corresponding behavioral-verb true (see (16b)-(18b):⁴

⁴We believe that when the adjectival sentence requires the subject's referent to act (which is often the case with the *passé composé*, for instance), the action is presupposed, and what is asserted is a state (actualized by the presupposed action), see Martin (2015).

- (18a) may be true if Itamar is respectfully and carefully interacting with a furious customer without losing his temper. This does not make (18b) true, which requires Itamar to *wait*.
- (17a) may be true if Jean was lazy in the way he was (actively) writing his paper, but this does not make (17b) true, which rather requires Jean to refrain from working at all.
- The pattern is roughly the same for *naughty*-adjectives:
- (19) a. Juliette **était polissonne**/folâtre/couarde/goguenarde.
 - 'Juliette was looking mischievous/ frisky/coward/mocking.' (potential translation)

3.3. Intermediate conclusions

SUMMARY OF OBSERVATIONS:

- i. No entailment from a behavior-related verb (e.g., *Juliette niaise* 'Juliette is behaving in a simple-minded way') to the corresponding *stupid*-adjective (e.g., *Juliette est niaise* 'Juliette is simple-minded').
- ii. Entailment from a behavior-related verb (e.g., *Itamar polissonne* 'Itamar is playing the fool') to the corresponding *naughty*-adjective (e.g., *Itamar est polisson* 'Itamar is foolish').
- iii. A behavior-related verb ascribes a typical **eventive** property of 'A' to the referent of the subject NP, whereas the corresponding adjective often attributes either a **typical eventive** or a **typical stative** property of 'A' to the referent of the subject NP.
- iv. The range of eventive properties that an adjective of propensity may describe (in fact, presuppose) is **generally** *broader* than the range of eventive properties ascribed by the corresponding behavior-related verb.

4. Martin and Piñón (2016) on denominal behavior-related verbs (modified)

4.1. The relation stereotype

o We follow various previous authors (e.g., Lieber 2004, Plag 1999) in the idea that the relevant part of the corresponding noun meaning in a behavior-related verb is the **typical** – and by "typical" we now mean stereotypical or prototypical – **properties** associated with the noun or adjective meaning, though we will speak of stereotypical properties (i.e., stereotypes) and assume that prototypical properties are among them.⁵

⁵The part of the analysis presented in (20)-(25) is taken from Martin and Piñón (2016) and remains unchanged.

 \circ At a first step, we postulate a relation stereotype between nominal or adjectival properties P and stereotypes S, as in (20), such that S is a stereotype (i.e., a stereotypical property) of P.

(20)
$$\lambda P \lambda S$$
. stereotype (S, P) 'S is a stereotype of P' (type $\langle \langle e, t \rangle, \langle \langle e, t \rangle, t \rangle \rangle$)

- \circ For example, if P were diplomat, then stereotype(S, diplomat) would state that S is a stereotype of diplomat (i.e., of diplomats), for example, being discreet or carrying a nice briefcase or being well-groomed.
- o Three principles apply to stereotype:
- i. Every stereotype S of a nominal or adjectival property P is a property of an individual x or a property of a state s or a property of an event e:
- (21) $Principle 1. \forall S(\exists P(\mathsf{stereotype}(S,P)) \to \exists x(S(x)) \lor \exists s(S(s)) \lor \exists e(S(e)))$
- ii. If S is a stereotype of P, then S does not entail P (i.e., S is not a hyponym of P):
- (22) Principle 2. $\forall S \forall P(\mathsf{stereotype}(S, P) \to \neg \forall x (S(x) \to P(x)))$
- iii. If S is a stereotype of P, then S is based on the "facts" of individuals that are P:

(23) Principle 3.
$$\forall S \forall P(\text{stereotype}(S, P) \rightarrow \exists x (P(x) \land (S(x) \lor (\exists R(\text{thematic}(R) \land (\exists s (S(s) \land R(s, x)) \lor \exists e (S(e) \land R(e, x))))))))$$

4.2. The derivation of the denominal verb

- We now turn to the question of how behavior-related verbs are derived, using *diplomatiser* 'behave like a diplomat' as an example.
- The noun *diplomate* 'diplomat' is straightforwardly analyzed as the following predicate of individuals:
- (24) diplomate ('diplomat') $\rightarrow \lambda x$.diplomat(x)
- \circ Applying the relation stereotype in (20) to this predicate, we derive the set of stereotypes S of diplomats:
- (25) $[\lambda P \lambda S. \text{stereotype}(S, P)](\lambda x. \text{diplomat}(x)) = \lambda S. \text{stereotype}(S, \lambda x. \text{diplomat}(x))$ 'The set of stereotypes S of diplomats'
- \circ In (25), the stereotypes S of diplomats may be properties of individuals, states, or events (recall (21)).
- o Instead of postulating that the meaning of *-iser* applies to a predicate of stereotypes such as the one in (25), it seems more natural to think of *-iser* as spelling out a verbal head in charge of introducing stereotypes, for otherwise it would not be clear what element introduces them into the derivation.

- \circ This verbal head, which we call v_{stereo} , can be spelled out either by *-iser*, or by a covert null suffix in the case of other behavior-related verbs like *patienter*.
- \circ As it is not the case that all *-iser*-verbs involve the stereotype relation (see, e.g., *alcooliser* 'alcoholize'), v_{stereo} should not be equated with *-iser* itself; rather *-iser* may spell out v_{stereo} (as in *diplomatiser*), or not (as in *alcooliser*).
- \circ Furthermore, since virtually any *-iser* behavior-related verbs additionally has (anti)causative uses (that also involve the stereotype relation), we ideally would like our analysis of the verbal head v_{stereo} spelled out by *-iser* to be extendable to these additional uses.
- \circ Consequently, we factor out the agentive flavour of our previous analysis for *-iser*; we do not make the verbal head v_{stereo} it realizes responsible for introducing an external argument, and leave the eventuality v it introduces underspecified between events and states.
- \circ This motivates the following analysis of v_{stereo} as spelled out by *-iser*, which we label as "*-iser*_{stereo}":

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(26) v_{stereo} = -iser_{stereo};
-iser_{stereo} \rightsquigarrow \lambda P \lambda v. \exists S(stereotype(S, P) \land S(v)) \land (event(v) \lor state(v))
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- \circ The predicate in (26) applies to a nominal or adjectival predicate P, and an eventuality v, and yields the conditions that there is a property S such that S is a stereotype of P, S holds of v, and v is an event or a state.
- Applying this relation to the nominal predicate in (24), we obtain the following analysis of *diplomatiser*_{stereo}:
- (27) diplomat-iser_{stereo} $\leadsto [\lambda P \lambda v. \exists S(\text{stereotype}(S, P) \land S(v))](\lambda x'. \text{diplomat}(x')) = \lambda v. \exists S(\text{stereotype}(S, \lambda x'. \text{diplomat}(x')) \land S(v)) \land (\text{event}(v) \lor \text{state}(v))$
- \circ To obtain the unergative use, the eventuality predicate in (27) is combined with a Voice head (Kratzer 1996) that introduces an external argument x of an eventuality v that is an event:
- (28) Voice_{ag} $\rightsquigarrow \lambda P \lambda x \lambda v$.agent $(v, x) \land P(v) \land \text{event}(v)$
- \circ Applying (28) to (27), we obtain the unergative predicate (29), where the alternative that v is a state is eliminated.
- (29) Voice_{ag} [diplomat-iser_{stereo}] \sim [$\lambda P \lambda x \lambda v$.agent(v, x) $\wedge P(v) \wedge \text{event}(v)$]($\lambda v'$. $\exists S(\text{stereotype}(S, \lambda x'.\text{diplomat}(x')) \wedge S(v')) \wedge (\text{event}(v') \vee \text{state}(v'))) = \lambda x \lambda v.\text{agent}(v, x) \wedge \exists S(\text{stereotype}(S, \lambda x'.\text{diplomat}(x')) \wedge S(v)) \wedge (\text{event}(v) \vee \text{state}(v)) \wedge \text{event}(v)$
- \circ Applied to an individual x and an eventuality v, this relation yields the conditions that x is the agent of v, and there is a property S such that S is a stereotype of diplomats and S holds of v and v is an event.

- We can now apply the relation in (27) to the individual constant juliette (for *Juliette*), we derive the predicate of eventualities (more precisely, of events) in (30).
- (30) Juliette [Voice_{ag} [diplomatiser_{stereo}]] \rightsquigarrow λv .agent(v, juliette) $\land \exists S$ (stereotype(S, $\lambda x'$.diplomat(x')) $\land S(v)$) \land event(v)

5. Deadjectival behavior-related verbs

5.1. Semantic analysis

- \circ We now apply the analysis to **deadjectival** behavior-related verbs, using *bêtifier* 'behave in a stupid way' as an example.
- The adjective *bête* 'stupid' is analyzed as a predicate of individuals:
- (31) bête ('stupid') $\rightarrow \lambda x$.stupid(x)
- \circ Applying the relation stereotype in (20) to this predicate, we derive the set of stereotypes S of stupid individuals:
- (32) $[\lambda P \lambda S. \text{stereotype}(S, P)](\lambda x. \text{stupid}(x)) = \lambda S. \text{stereotype}(S, \lambda x. \text{stupid}(x))$ 'The set of stereotypes *S* of stupid individuals'
- \circ We give the verbalizing suffix -ifier_{stereo} the same analysis as for -iser_{stereo} (see (26)):
- (33) $-ifier_{stereo} \rightsquigarrow \lambda P \lambda v. \exists S(stereotype(S, P) \land S(v)) \land (event(v) \lor state(v))$
- o Applying the predicate *-ifier* to the adjectival predicate in (31) and combining the resulting predicate with the Voice head (28), we obtain the following analysis for $b\hat{e}tifier_{a/n}$ (again, where the alternative that v is a state is eliminated).
- (34) Voice_{ag} [bête-ifier_{stereo}] \sim

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[\lambda P \lambda x \lambda v. \operatorname{agent}(v, x) \wedge P(v) \wedge \operatorname{event}(v)](\lambda v'. \\ \exists S(\operatorname{stereotype}(S, \lambda x'. \operatorname{stupid}(x')) \wedge S(v')) \wedge (\operatorname{event}(v') \vee \operatorname{state}(v'))) = \\ \lambda x \lambda v. \operatorname{agent}(v, x) \wedge \exists S(\operatorname{stereotype}(S, \lambda x'. \operatorname{stupid}(x')) \wedge S(v)) \wedge \\ (\operatorname{event}(v) \vee \operatorname{state}(v)) \wedge \operatorname{event}(v)
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- \circ Applied to an individual x and an eventuality v, this relation yields the conditions that x is the agent of v, and there is a property S such that S is a stereotype of stupid individuals and S holds of v and v is an event.
- We can apply the relation in (34) to the individual constant juliette (for *Juliette*), and derive the predicate of eventualities (more precisely, of events) in (35).
- Juliette [Voice_{ag} [bête-ifier_{stereo}]] ('Juliette behave like stupid individuals') $\rightsquigarrow \lambda v$.agent(v, juliette) $\land \exists S$ (stereotype($S, \lambda x'$.stupid(x')) $\land S(v)$) \land event(v)

5.2. Deriving the entailment patterns between the verb and the adjective

 $V \not\rightarrow stupid$ -adj. The absence of entailment from the sentence with the deadjectival behavior-related unergative verb – e.g., *Juliette bêtifie* – to the sentence with the corresponding adjective – e.g., *Juliette est bête* (ignoring tense) is accounted for: the former sentence requires Juliette to perform an act e such that a stereotypical property of stupid individuals holds of this act e, which can be done without being stupid.

 $V \rightarrow naughty$ -adj. Remember, though, that sentences with behavior-related verbs derived from a *naughty*-adjective do seem to entail the corresponding adjective (recall (15a-c), partly repeated below:

(15) a. Juliette **tatillonne** #mais c'est ne t'y trompe pas, c'est juste de la façade, elle n'**est pas tatillonne**.

'Juliette nitpicks, but don't get her wrong, it is just a show, she is not nitpicking.'

 \circ Here, the contradiction is unavoidable because it is close to impossible for an agent a to perform an act such that a stereotypical property S of nitpicking individuals (e.g., pay an excessive attention to details in the case of tatillonner) and in the same time not being nitpicking. (And finding a context making this possible is also a context that makes (15) non-contradictory.)

 $Adj \not\rightarrow V$. We also account for why in general, the sentence with the adjective – e.g., *Jean est patient* 'Jean is patient' – does not entail the sentence with the corresponding behavior-related verb – e.g., *Jean patiente* 'Jean is waiting':

- i. With most of these adjectives (e.g., *patient*), the copular sentence only requires the subject's referent to be in a *state*, while the corresponding verbal sentence requires the agent to perform an *act*.
- ii. With these adjectives, the context may nevertheless make clear through, e.g., the perfective aspect that the propensity the adjective ascribes to the subject's referent is actualized in an *act* (see, e.g., *Jean a été patient*). However, even in this case, the entailment towards the corresponding behavior-related verb is blocked, because the verb, but not the adjective, requires a *stereotypical* eventive property of patient individuals to hold of *e*.

6. The (anti)causative use

o Almost any behavior-related verb formed with the suffix *-iser* have an (anti)causative use, even if this latter use is sometimes not in dictionaries (as is the causative use of *diplomatiser*, which is not listed in the *TLFi*).

(Internet)

(3) Sarkozy **diplomatise** le Hezbollah.

Literally: 'Sarkozy diplomatizes the Hezbollah.'

o Furthermore, some behavior-related *-iser* verbs are mainly used as (anti)causatives rather than unergative verbs, see, e.g., (36):

- (36) a. crétiniser 'cretinize' < crétin 'dumb'
 - b. *droitiser* '(cause to) get typical properties of right people' < *droit* 'right'
 - c. fasciser '(cause to) get typical properties of fascist people' < fasciste 'fascist'
 - d. gauchiser '(cause to) get typical properties of left people' < gauche 'left'
 - e. *infantiliser* 'infantilize' < *enfant* 'child'
 - f. *psychotiser* 'cause/get to have typical properties of psychotic people' < *psychotique* 'psychotic'
- In order to capture this use, we start again with (27):
- (27) diplomat-iser_{stereo} \rightsquigarrow $\lambda v. \exists S(\text{stereotype}(S, \lambda x'. \text{diplomat}(x')) \land S(v)) \land (\text{event}(v) \lor \text{state}(v))$
- \circ In the causative sentence (3), v is a state or an event of which the object's referent is the theme. We assume that the theme of v is not introduced by the verbal predicate (27) itself, but by the VP structure (cf. Williams 2008 for Igbo and Mandarin), as in (37).
- Supposing that *diplomatiser le Hezbollah* 'diplomatize the Hezbollah' enters the structure (37), we obtain the following semantic analysis for this VP:
- (38) diplomat-iser_{stereo} le Hezbollah \rightsquigarrow $\lambda v. \exists S(\text{stereotype}(S, \lambda x'. \text{diplomat}(x')) \land S(v)) \land (\text{event}(v) \lor \text{state}(v)) \land \text{theme}(v, \text{hezbollah})$
- \circ In the next step, the VP represented in (38) is combined with the Cause head in (39), in charge of introducing the causing event e'' and the causal relation between e'' and v.
- (39) Cause $\rightsquigarrow \lambda P \lambda v.\text{event}(v) \land \exists v'(\text{cause}(v, v') \land P(v') \land ((\text{event}(v') \lor \text{state}(v')))$
- Applying (39) to (38), we obtain the following predicate of events:
- (40) Cause [diplomat-iser_{stereo} le Hezbollah] \sim $\lambda v.\text{event}(v) \land \exists v'(\text{cause}(v, v') \land \exists S(\text{stereotype}(S, \lambda x'.\text{diplomat}(x')) \land S(v')) \land (\text{event}(v') \lor \text{state}(v')) \land \text{theme}(v', \text{hezbollah}) \land (\text{\textit{liphyepyt}}(v'))) \land \text{\textit{phypyt}}(v')))$
- \circ The analysis of *diplomatiser* in (40) captures the anticausative use, exemplified in (41) (where *se* is semantically inert; see Schäfer 2008).
- (41) Le Hezbollah s'est diplomatisé. 'The Hezbollah became a diplomatic organization.'
- o In order to obtain the transitive causative use of this predicate, we combine (40) with the Voice head (29) (Alexiadou et al. 2006):

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Voice<sub>ag</sub> [Cause [diplomat-iser<sub>stereo</sub> le Hezbollah]] \rightsquigarrow \lambda x \lambda v.agent(v, x) \land \text{event}(v) \land \exists v'(\text{cause}(v, v') \land \exists S(\text{stereotype}(S, \lambda x'.\text{diplomat}(x')) \land S(v')) \land (\text{event}(v') \lor \text{state}(v')) \land \text{theme}(v', \text{hezbollah})) \land \text{event}(v)
```

- \circ Applied to an individual x and an eventuality v, this relation yields the conditions that x is the agent of v, v is an event, there is an eventuality v' such that v causes v', there is a property v such that v is a stereotype of diplomats, v holds of v', v' is an event or a state, and Hezbollah is the theme of v'.
- \circ Finally, we capture the fact that only behavior-related verbs in *-iser* have the (anti)causative (and not those built with the null suffix) by stipulating that the verbal head v_{stereo} must be spelled out by *-iser* in order for the Cause head to be combined to the predicate.

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