

The exemplification and surprise meanings associated with two types of focus construction in Japanese and in French¹

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1. Introduction

This paper deals with an ambiguity observed in two seemingly very different constructions in Japanese and in French, and aims to advance, in semantically explicit terms, a new analysis for the derivation of this ambiguity. According to Numata (2000: 194), Japanese constructions involving the focus particle (*toritate-si* in her terms) NANKA serve to enumerate a representative member of a set of contextually relevant candidates: (1a) thus indicates that the focalized item *Mr. Takemoto* is a representative member of the set of people who will marry next spring. This type of use will be called below “exemplification (*reeji* in Japanese)²:

- (1)a. Takemoto san nanka raisyun kekkon-suru 10 kumi no nakani haitteiru- n- ja- nai-no?
Takemoto Mr the like³ next spring marry 10 pair Gen among included-Comp-Cop.Top isn't he
“Mr. Takemoto or the like is included among 10 pairs who will marry next spring, isn't he?”
(Numata 2000: 194)
- b. yorinimo yotte Taro nanka ga bokuno tanjoo- paatii ni yattteki-ta (idem.195)
of all others Taro the like Nom my birthday-party Loc come- Pst
“Of all others, the like of Taro came to my birthday party”

On the other hand, NANKA construction in (1b) indicates that the focalized item *Taro* is, under the speaker's perspective, a surprising or inappropriate member of the set who came to the party. In other words, “the appropriateness of the truth of the proposition that *Taro came to the speaker's birthday party* is denied by the speaker, who considers that such an event should not have occurred” (Numata 2000: 196). This use will be called “negative evaluation (*hiteeteki-hyooka*)” in what follows.

A similar ambiguity is observed in a sequence NP + Complementizer (abbreviated by Comp) + subordinate clause (abbreviated by XP) in French. This construction may provide a partial (non exhaustive) answer, when preceded by the existential matrix *il y a* (*there is*): (2a) thus indicates that *Pierre* is a representative

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² Some authors distinguish, from exemplification NANKA, cases like in (I) where NANKA is added after a coordinated constituent and may be translated by *and so on*. For example, Teramura (1991) analyzes it not as a focus particle, but as a suffix (*setubiji*):

(I) Inu ya neko nanka [*nado* in the original text] made oo-sawagi da (Martin 1987: 161)
Dog or cat NANKA until be-in-an-uproar
“What with dogs, cats, and all, what an uproar!”

³ It is Shūichi Yatabe (p.c.) that suggested to me that NANKA should be translated in English by *the like*. Martin (1987) effectively adopts this translation.

member among those who are working, suggesting that there may be other workers⁴:

- (2)a. Est-ce que quelqu'un travaille ici ? "Is anyone working here?" (Léard 1992: 47)
– Oui, il y a Pierre qui travaille. "-- Yes, {Lit. there's Pierre that is working /
Pierre or the like (for example) is working}"
- b. Ah! Mon dieu! dit-il, Monsieur Michel qui est mort! (Sandfeld 1965: 155)
"Oh, my God! said he, {Lit. Mr. Michel that is dead! / Mr. MICHEL died!}"

On the other hand, in (2b) lacking a matrix, the sequence *NP Comp XP* indicates that the death of *Michel* is surprising and conflicting with the speaker's expectation. In effect, traditional grammarians Le Bidois & Le Bidois (1971: 379) note that this construction expresses "the strongly affective value of the sentence (surprise, regret, vivid opposition, etc.)"⁵. In the same vein, another traditional grammarian Sandfeld (1965: 156) argues that "most often, this construction marks a disagreement or contrast with a situation or an actual fact"⁶. These authors further claim that the (2b) construction should be analyzed as an independent clause without being accompanied by any implicit matrix clause⁷.

This ambiguity associated with Japanese NANKA construction and French *NP Comp XP* construction leads to ask what is common between the two constructions and how the two apparently unrelated meanings, exemplification meaning and surprise / negative evaluation, are derived. In this paper, I will claim i) that not only Japanese construction involving a focus particle NANTE, but also French *NP Comp XP* construction are focus constructions involving a WH operator, that is syntactically activated in French or lexically provided in Japanese, and ii) that exemplification meaning is fully compositionally derived, while the derivation of surprise / negative evaluation meanings requires the intervention of a pragmatics principle in a way similar to rhetorical questions.

The paper is organized as follows. In Section 2, I will claim that the ambiguity of NANKA should be reduced to that of the operator KA, and that a Gricean Conversational Implicature is relevant for negative evaluation cases. In Section 3, I will show that essentially the same analysis may be applied to the ambiguity of French *NP Comp XP*. Section 4 will ask why NANKA, but not *NP Comp XP*, provides the speaker's subjective judgment of inappropriateness. Section 5 will compare my analysis of negative evaluation NANKA in terms of Conversational Implicature with a recent analysis of expressive items in terms of Conventional Implicature. In Section 6, I will suggest that my analyses of negative evaluation NANKA and surprise meaning of *NP Comp XP* may shed a new light upon the analysis of WH exclamatives. Section 7 will summarize the paper.

⁴ *il y a NP Comp XP* is not appropriate when the NP denotes the totality of candidates, as in (I). To provide a total or exhaustive answer, another matrix predicate *c'est (it's)* is necessary, as illustrated by (IIa,b):

- (I) Qui a voté pour toi ? – ? Il y a tout le monde qui a voté pour moi. (Léard 1992: 49) [totality]
"Who voted for you? – ?Everyone, or the like, voted for me."
- (II)a. Qui a voté pour toi ? – C'est tout le monde qui a voté pour moi. (ibid.) [totality]
"Who voted for you? – It is everyone that voted for me."
- b. Qui travaille ? – C'est Pierre qui travaille. (idem.47) [exhaustive answer]
"Who is working? – It is Michel that is working"

Léard (1992) classifies both of *il y a (there's)* and *c'est (it's)* cases among cleft constructions.

⁵ "la valeur fortement affective de la phrase (étonnement, regret, vive opposition, etc.)"

⁶ "le plus souvent, elle [=the (2b) construction] marque un désaccord ou contraste avec une situation ou un fait présent"

⁷ Le Bidois & Le Bidois (1971: 379) claim that the (2b) constructions "are matrix clauses without any dependence with another clause (sont des principales sans aucune dépendance avec une autre proposition)". Sandfeld (1965: 154-156) argues that in "exclamations" as in (2b), "nothing is omitted (rien n'est omis)".

2. Japanese NANKA construction

This section aims to examine, in explicit semantic terms, how the ambiguity of NANKA are derived. After showing that the ambiguity of NANKA cannot be appropriately captured by an analysis previously proposed for other focus particles (Section 2.1.), and introducing Alternative Semantics frame work (Section 2.2.) and the semantic of surprise meaning (Section 2.3.), I will advance a semantics analysis of the ambiguity of NANKA (Section 2.4). Next, reducing the ambiguity of NANKA to that of the operator KA (Section 2.5.) and referring to the derivation of rhetorical questions (Section 2.7.), I will make sense of the derivation of exemplification and negative evaluation meanings (Sections 2.6 and 2.8.).

2.1. Is the ambiguity of NANKA parallel to that of an additive focus particle MO?

As noted in Introduction, NANKA may be grouped among focus particles. It is widely accepted (see König 1991, Krifka 1999, etc.) that focus particles are classified into two major types: I) exclusive particles illustrated by *only* in (3a), which “presuppose that the predication holds for the expression in focus, and assert that it does not hold for any alternative” (Krifka 1999: 111), II) additive (inclusive) particles which are further subcategorized into IIa) simple additive particles as *also* in (3b), which presuppose that “the predication holds for at least one alternative of the expression in focus” (ibid.), and IIb) scalar additive particles, like *even* in (3c), which “assert that the predication holds for the expression in focus, and presuppose that this predication is *prima facie* less likely than the alternative predications” (ibid.). In the glosses of (3a,b,c), the presupposition part is put into parentheses:

- (3)a. Peter *only* invited Pia for dinner. (Krifka 1999: 111) [exclusive]
'(Peter invited Pia for dinner) and he invited no-one else'
- b. Peter *also* invited Pia for dinner. (ibid.) [simple additive]
'Peter invited Pia for dinner (and he invited someone else)'
- c. Peter *even* invited Pia for dinner. (ibid.) [scalar additive]
'Peter invited Pia for dinner (and Pia is an unlikely person for Peter to invite for dinner)'

In Japanese, simple additive and scalar additive particles are instantiated by MO and SAE, respectively illustrated by (4a) and (4c). The particle MO further has a scalar additive use⁸, as in (4b):

- (4)a. nityoobi wa ginkoo mo yasumi desu. (Numata 1995: 19)
Sunday Top bank also day-off Cop “On Sunday, banks are closed, too”
- b. kare wa doryoku-si-te tootoo raten-go mo rikai- dekiru yoo-ninat-ta. (ibid.)
he Top effort-do-and at last Latin-language even (also) understand-can like-become-Pst
“He did efforts and at last he got to be able to understand even (also) the Latin”
- c. kare wa doryokusi-te tootoo raten-go sae rikai- dekiru yoo-ni-nat-ta. (ibid.)
he Top effort-do-and at last Latin-language even understand-can like-become-Pst
“He did efforts and at last he got to be able to understand even the Latin”

⁸ As noted by König (1991: 68), some other additive particles, like *auch* in German, may manifest a scalar additive meaning paraphrased by *even* in English.

(4a) with MO indicates that the property (*be closed*) applies to the focalized item (*bank*) besides some implicit alternative (ex. *post office*). On the other hand, (4b) with MO and (4c) including SAE suggest that there exists a scale of the difficulty for understanding among languages, and that the focalized item (*Latin*) is situated on the top of this scale, and that *he* surprisingly can understand such a difficult language.

It seems at first glance that exemplification and negative evaluation meanings of NANKA may be respectively correlated with simple additive and scalar additive surprise meanings of MO. The additive particles like *also* and *even* are well studied in the formal semantics. A little simplifying the analysis of Krifka (1999: 111), the semantics of (3b) involving a simple additive particle *also* and (3c) including a scalar additive particle *even* are respectively represented by (5a,b) and (6a,b):

- (5)a. [*Invited-for dinner* (pe, pi)] [assertion]
 b. $\exists x$ [*Invited-for dinner* (pe, x) \wedge x \neq pi] [presupposition]
 (6)a. [*Invited-for dinner* (pe, pi)] [assertion]
 b. $\neg \exists x$ [x \neq pi \wedge (*Invited-for dinner* (pe, x) $<_{\text{likely}}$ *Invited-for dinner* (pe, pi))] [presupposition]⁹

(6b) indicates that “there is no-one (x) such that he (x) is not equivalent to *Pia* and the likelihood of the proposition *Peter invited Pia* exceeds the likelihood of the proposition *Peter invited him (x)*”. In other words, (6b) indicates that *Pia is the least likely individual for Peter to invite for dinner*. If the ambiguity of NANKA (exemplification / negative evaluation) were parallel to that of MO (simple additive / scalar surprise additive), the semantics in (5a,b) and (6a,b) might be directly applied to the ambiguity of NANKA.

Numata (2000, 2003) however observes some differences between exemplification NANKA and simple additive MO, and those between negative evaluation NANKA and scalar additive SAE. First, exemplification NANKA does not necessarily entail the existence of alternative members: in (7Ba), NANKA is accepted in a context where the existence of alternatives of *Mr. Takemoto* is explicitly negated, while MO is incompatible with this context, as shown in (7Bb):

- (7)A: kono busyo de wa dare ga kekkonsuru-daroo-ka?
 this section Loc Top person(x) Nom marry will Interrog. “Who will marry in this section?”
 B: a. Takemoto san nanka wa kekkonsuru-daroo. Hokano dare mo kekkonsi-nai daroo kedo.
 T. Mr. the like Top marry- will other person(x) also marry-Neg will though
 “Mr. Takemoto or the like will marry, though no one other than him will not marry”
 b. *Takemoto san mo kekkonsuru-daroo. Hoka-no dare mo kekkonsi-nai daroo kedo.
 “Mr. Takemoto also will marry, though no one other than him will not marry”

Second, Numata (2003: 230) observes that, while SAE presupposes the existence of alternatives of focus item, negative evaluation NANKA lacks such a presupposition. The meaning of this type of NANKA cannot therefore be analyzed in terms of relative likelihood of the focalized item with respect to the alternatives. Furthermore, MO / SAE (*even*) and NANKA manifest distributional differences, as shown by a contrast between

⁹ According to König (1991: 69), the scalarity expressed in (6b) may be analyzed not as a presupposition, but as a Conventional Implicature which “does not make a contribution to the truth conditions of a sentence”, but is “associated with [...] conditions for its use [...] that have to be met if the containing sentence is to be uttered felicitously”. Similar views will be examined in Section 5.

(8a) and (8b):

- (8a) ?yorinimo yotte Taro sae / mo bokuno tanjoo-paatii ni yattteki- ta (Numata 2000: 195)
of all others Taro even my birthday party Loc come- Pst
“Of all others, even Taro came to my birthday party”
- b. yorinimo yotte Taro nanka ga bokuno tanjoo-paatii ni yattteki-ta (ibid.)
of all others Taro the like Nom my birthday party Loc come- Pst
“Of all others, the like of Taro came to my birthday party”

This difference may be reduced to that of their modal nature noted by Yamanaka (1995): SAE (MO) invokes the speaker’s epistemic expectation regarding positive or negative realization of the proposition, while NANKA refers to the speaker’s evaluation of the true proposition. In other words, NANKA, but not SAE (MO), necessarily induces the factivity. The adverb *yorinimo yotte* may be classified as an evaluative one, which therefore is not fully compatible with SAE (MO). These differences clearly suggest that NANKA cannot be treated just as an additive focus particle by means of the semantics in (5a,b) and (6a,b). I will examine how to analyze the ambiguity of NANKA in Section 2.4. after introducing the semantics of focus (Section 2.2.) and surprise meaning (Section 2.3.).

2.2. Alternative Semantics

As regards the semantics of focus, I refer to Rooth’s Alternative Semantics whose main idea is that “evoking alternatives is the general function of focus” and that the focus “can be illustrated with the question-answer paradigm” (Rooth 1996: 276). According to this framework, the alternative set induced by the focus (marked by C, abbreviation for Context) is analyzed as a covert semantic variable quantified by the ‘focus interpretation operator’, whose function is essentially the same as that of an interrogative operator. The focus interpretation operator further introduces two presuppositions: i) the alternative set C is a subset of the “focus semantic value” (corresponding to the question part of the question-answer paradigm), and ii) C contains the “ordinary semantic value” (corresponding to the answer part) and at least one other element¹⁰. The focus semantic value (FSV) of a sentence ϕ , written $[[\phi]]^f$, is a set of propositions derived by abstracting over the focus part of the sentence. The ordinary semantic value (OSV), written $[[\phi]]^o$, is obtained by ignoring the focus effect. It is often argued that the focus should be defined intensionally in terms of possible world¹¹ (see Kadmon

¹⁰ Another influential analysis of focus is Structured Meaning approach (see Krifka 1999). According to this approach, the semantics of (Ia) is represented by the pair of two parts as in (Ib), the first part ($\lambda x \lambda w [x \text{ is dead in } w]$) representing the background of the answer, and the second part (*Michel*) expressing the focus:

(Ia) [MICHEL]_{Focus} is dead.

b. $\langle \lambda x \lambda w [x \text{ is dead in } w], \textit{Michel} \rangle$

Crucially, Alternative Semantics, but not Structured meaning, admits that the focus value is included among the alternative values. In this paper treating partial answer cases, where the focus value is one of alternative values, the former approach seems more appropriate. Krifka (1999) however criticizes Alternative Semantics because of its inability to deal with cases where the superficial focal stress does not correspond to the semantic focus, as in (II):

(II) What did John do? – John [read Ulysses]_F.

In (II), only the word *Ulysses* is phonologically focalized, but the entire VP *read Ulysses* is semantically focalized. Krifka shows that Structured Meaning is able to make sense of such a form / content discrepancy. As shown in Section 3, French NP *Comp XP* exactly permits such a form/ content discrepancy. In order to properly treat such cases, more sophisticated version of Alternative Semantics will be necessary.

¹¹ Under the extensional semantics, a property is defined as the set of entities satisfying this property. In a model where

2001, etc.). Adopting this intensional semantics view, the OSV and the FSV of (9a) including an exclusive particle *only* are respectively represented by (9b) and (9c), and the semantics of (9a) is represented by (9d):

- (9)a. Only Michel is dead.
 b. $[[[Michel]_F \text{ is dead}]^o = \lambda w [Michel \text{ is dead in } w]]$ [OSV]
 c. $[[[Michel]_F \text{ is dead}]^f = \lambda p [w \in p \wedge p = \lambda w [\exists x (x \text{ is dead in } w)]]]$ [FSV]
 d. $\lambda C \forall q [q \in C \wedge q = \lambda w [\exists x (x \text{ is dead in } w) \leftrightarrow q] = \lambda w (Michel \text{ is dead in } w)]$
 (adapted from Rooth 1996: 280)

(9a) denotes a proposition (a set of worlds) such that *Michel is dead in a world w*. (9b) denotes a set of propositions such that *x is dead in w*, where a variable *x* is bound by the focus interpretation operator, and interpreted as *who*. (9c) reads “every proposition *q* true in the set *C* and such that *x is dead in w* is the proposition *p* such that *Michel is dead in w*”.

As regards the informational nature of the two types of NANKA, Teramura (1991: 187) points out that they manifest at least two different behaviors. First, exemplification NANKA may be attached either to a specific noun or to a non-specific noun as in (10a). On the other hand, negative evaluation NANKA only focalizes a specific or generic noun as in (10b), and not a non specific noun, as shown by the inacceptability of (10c).

- (10)a. tukue no ue ni wa tetyoo, nooto, enpitu nanka ga nokos-are- tei- ta.
 desk Gen over Loc Top pocketbook, note, pencil, the like Nom leave-Passive-Progressive-Pst
 “On the desk were left behind a pocketbook, a notebook, a pencil, or the like (and so on)” (adapted from Teramura 1991: 185¹²)
 b. {ningen / sono otoko} nanka takaga sire-teiru. (ibid.)
 {mankind / that man} the like at the most trifling “The like of {mankind / that man} is trifling”
 c. *kesa eki de otoko nanka ga taore-tei- ta. (ibid.)
 this morning station Loc man the like Nom fall-Progressive-Pst
 “This morning, at the station, the like of a man stayed fallen down”

Secondly, a sentence involving exemplification NANKA may occur out of blue without being mentioned in the preceding discourse, while a sentence containing negative evaluation NANKA normally serves to reply to some preceding statement. For instance, in the answer in (11a), the expression *Fred*, which appears in the preceding question, is contrastively focalized, and Kratzer (2005: 13) notes that “(contrastive) focus on *Fred* induces a scalar interpretation, comparable to the overt effect of *even*”. The answer sentence is properly¹³ translated by way of negative evaluation NANKA, as in (11b):

two conditions of (Ia,b) are satisfied, the property *intelligent* should be the same as the property *beautiful*. As a result, the answer in (IIb) to the question in (IIa) should be appropriate, which is not the case actually (Kadmon 2001):

- (I)a. intelligent = {Mary, Sue}
 b. beautiful = {Mary, Sue}
 (II)a. Who is intelligent? b. – SUE is beautiful.

¹² In all of the original examples, another particle NADO rather than NANKA is used. NADO is almost synonymous to NANKA, but occurs in more formal registers. See footnote 21.

¹³ More exactly, as shown in Section 2.1., contrary to an scalar additive particle *even*, negative evaluation NANKA does not induce an extremity with respect to alternatives.

- (11)a. Guess what? Fred passed. -- If [FRED] passed, bar exams have become too easy.
 b. Fred-NANKA ga pasusi-ta nara, sihoosiken wa yasaki-nari-sugi- ta no da
 Fred-the like Nom pass-Pst if bar exams Top easy-become-exceed-Perf Comp Cop
 “If the like of Fred passed, it is that bar exams have become too easy”

These two phenomena suggest that negative evaluation NANKA bears some topicality. It might be possible to analyze, as Olivier Bonami (p.c.) points out, this type of NANKA as instantiating “contrastive topic” discussed by Büring (1999). Büring applies Alternative Semantics approach to two special kinds of topic, that he calls “contrastive topic” and “partial topic”, respectively illustrated by (12b) and (13b):

- (12)a. A: Which book would Fritz buy? (Büring 1999: 148) [contrastive topic]
 b. B: Well, [I]_T would buy [The Hotel New HAMPSHIRE]_F.
 (13)a. A: What did the pop star wear? (idem.149) [partial topic]
 b. B: The [female]_T pop stars wore [caftan]_F.

According to Büring (1999: 145), in (12b), “[t]he speaker B obviously doesn’t answer A’s question. Instead, she gives a different, though related statement. The constituent that is “replaced” (i.e., *I* instead of *Fritz*) is marked [by a kind of stress] as a topic.” In (13b), “speaker B does not really answer A’s question, at least not exhaustively. The part where she deviates from the original question is marked by the topic accent”.

So as to appropriately make sense of these types of topic, Büring proposes the notion of “topic semantic value” parallel to focus semantic value (FSV). For example, the FSV of (12b) involving a contrastive topic denotes a set like (14a). And the topic semantic value (represented by $[[\alpha]]^t$) denotes “a set of such sets, with alternatives to the Sentence-topic replacing *P*” (idem.148), as illustrated by (14b):

- (14)a. $[[[I]_T \text{ would buy } [The \text{ Hotel New HAMPSHIRE}]_F]]^f =$
 {I would buy *War and Peace*, I would buy *Hotel New Hampshire*, ...} (idem.147)
 b. $[[[I]_T \text{ would buy } [The \text{ Hotel New HAMPSHIRE}]_F]]^t =$
 {{I would buy *War and Peace*, I would buy *Hotel New Hampshire*, ...}, {Refus would buy *War and Peace*, Refus would buy *Hotel New Hampshire*, ...}, ...} (idem.148)

Similarly, the FSV of (13b) involving a partial topic denotes a set like (15a). Its topic semantic value denotes a set of such sets, with alternatives to the partial topic replacing *female*”, as in (15b):

- (15)a. $[[[The [Female]_T \text{ pop stars wore } [caftan]_F]]^f =$
 {the female pop stars wore caftan, the female pop stars wore dresses, ...}
 b. $[[[The [Female]_T \text{ pop stars wore } [caftan]_F]]^t =$
 {{the female pop stars wore caftan, the female pop stars wore dresses, ...}, {the male pop stars wore caftan, the male pop stars wore dresses, ...}, {{the female or male pop stars...} ...}}

It might be possible to analyze exemplification NANKA as giving a partial topic, and negative evaluation NANKA as expressing a contrastive topic. In any way, since contrastive and partial topics are defined as evoking their alternatives, I will treat them, in what follows, among instances of focus in a broad sense.

2.3. The semantics of surprise meaning: von Fintel (1999)

As noted in Section 2.2., negative evaluation NANKA does not induce an extremity with respect to alternatives. This type of NANKA rather suggests a non-membership of the focalized item among a set of contextually relevant alternatives. In this sense, negative evaluation meaning seems to be similar to the surprise meaning: (16) including a matrix predicate *be surprised* intuitively suggests that the speaker considers the event *he stole the watch* is not found among a set of contextually relevant events possible to occur:

- (16) I was surprised that he stole the watch

For this reason, in order to explicitly represent the semantics of negative evaluation NANKA, I refer to von Fintel (1999)'s analysis of *surprised*. This author first adopts Kadmon & Landman (1993: 381)'s remark according to which “*To be surprised that A* is always relative to a certain perspective on A, a perspective that determines what is about A that is surprising and in virtue of what it is surprising. The perspective is a contextually determined parameter in the interpretation of *surprised*, very much in the same way that a ‘modal base’ is a contextually determined parameter in the interpretation of modals”.

The ‘modal base’ proposed by Kratzer (1981-2002) is a conversational background provided by the utterance situation, against which modal expressions are interpreted. It is semantically defined as a function from pairs of an individual α (in principle, the speaker) and a world w to a set of accessible worlds¹⁴, signaled by $f(\alpha, w)$ (von Fintel 1999: 115). For example, when interpreting a modal auxiliary *must* in (17a), we normally don't take into account far-fetched worlds where *Jackl* doesn't exist, nor where a Martian was the murderer. The modal base, a set of accessible worlds, serves to exclude such contextually irrelevant worlds¹⁵:

- (17)a. Jockl must have been the murderer. (Kratzer 1991: 639)
b. In view of the available evidence, Jockl must have been the murderer. [epistemic modal base]

The accessible worlds in the modal base further are ordered following some criteria. This criteria is called ‘ordering source’ and is semantically defined as a function from pairs of an individual α and a world w to a set of accessible propositions, signaled by $g(\alpha, w)$. For instance, when (17a) is interpreted as in (17b), the expression *in view of the available evidence* provides an epistemic ordering source. Other types of ordering sources discussed by Kratzer are circumstantial one (in view of the present facts), stereotypical one (in view of the normal course of events), deontic one (in view of what the law says), bouletic one (in view of certain wishes), doxastic one (in view of certain beliefs), etc.

von Fintel (1999) argues that the semantics of factive adversative predicates, like *be surprised*, similarly refers to a selection function selecting the set of best worlds from the set of accessible worlds (modal base, $f(\alpha, w)$), with respect to an ordering source, $g(\alpha, w)$. This selection function is signaled by $\max_{g(\alpha, w)} f(\alpha, w)$. From this perspective, simplifying von Fintel's formalization, the semantics of *surprised* is represented by

¹⁴ Kratzer (1991: 642) characterizes the notion of “accessible worlds” in the following manner: “A world w' is epistemically accessible from a world w iff w' is compatible with everything we know in w . A world w' is deontically accessible from a world w iff w' is compatible with everything the law provides in w .”

¹⁵ The necessity to exclude contextually irrelevant worlds from the semantic representation of *surprised* was pointed out by Shigeru Sakahara (p.c.). The application of the notion of accessible worlds for this purpose was suggested by Satomi Ito (p.c.).

definedness condition in (18a) and appropriateness¹⁶ condition in (18b):

- (18)a. $[[surprised]]^f(p)(\alpha)(w)$ is defined iff $w_0 \in p$
 b. if defined, $[[surprised]]^{fg}(p)(\alpha)(w)$ is appropriate iff $\forall w' \in \max_{g(\alpha,w)}(f(\alpha,w)) : w' \notin p$

In words, (18a) means that the proposition *α is surprised that p in w* is defined if and only if the proposition *p* is true in the actual world w_0 . (18b) indicates that the same proposition *α is surprised that p in w* is appropriately used if and only if the proposition *p* is not true in any relevant accessible world maximally corresponding to *α*'s expectation¹⁷. These semantic representations reflect well our intuition that one feels a surprise when there is a discrepancy between the actual state of affairs and his expectation. According to this analysis, the semantic of (19a) is represented by definedness conditions (19b) and appropriateness condition (19c):

- (19)a. Given my high opinion on his moral character, I was surprised that he stole the watch. (von Fintel 1999: 113)
 b. $[[surprised]]^f(p)(I)(w)$ is defined iff $w_0 \in p = \{u: \text{he stole the watch in } u\}$ [factivity]
 c. if defined, $[[surprised]]^{fg}(p)(I)(w)$ is appropriate iff $\forall w' \in \max_{g(I,w)}(f(I,w)) : w' \notin p$

In words, definedness condition (19b) indicates that the proposition *I was surprised that he stole the watch in w* is defined if and only if the proposition *he stole the watch in w* is true in the actual world w_0 . Appropriateness condition (19c) reads as the proposition *I was surprised that he stole the watch* is appropriately used with respect to the modal base $f(I,w)$ and the doxastic ordering source $g(I,w)$ reflecting *the speaker's high opinion on his moral*, if and only if the proposition *he stole the watch in w* is not true in any relevant accessible world maximally corresponding to doxastic ordering source. The function of the modal base, against which a proposition is presented as surprising, is essentially the same as the contextually determined alternative set *C* relevant for the focus interpretation under Alternative Semantic's framework, except that the modal base is defined not as a set of propositions, as in the latter case, but as a set of accessible worlds.

2.4. The semantics of exemplification and negative evaluation

I next try to represent the semantics of NANKA in explicit terms. For (20a) including exemplification NANKA, the ordinary semantic value and the focus semantics value are respectively represented by (20b) and (20c):

- (20)a Takemoto san nanka ga kekkon-suru daroo.
 Takemoto Mr. NANKA Nom marry will "Mr. Takemoto or the like will marry."

¹⁶ von Fintel (1999) himself uses the term *truth condition* so as to speak of the semantics of factive adversative predicates. I will rather make use of the term *appropriateness condition* in order to clarify that the content of the subject's expectation or prevision doesn't influence the truth in the actual world.

¹⁷ von Fintel (1999: 114) notes that "for attitudes like *want, wish, glad, regret, sorry*, the ordering source will be one of 'preference'. For attitudes like *expect, amazed, surprise*, the ordering source will be one of 'expectation / likelihood'". The first and second types may be considered as respectively corresponding to bouletic and doxastic / epistemic ordering sources in Kratzer's terms. As shown below, the ordering source of negative evaluation NANKA is rather of a bouletic type.

- b. $[[[Mr. Takemoto]_F \text{ will marry}]]^0 = \lambda w [t \text{ will marry in } w]$ [OSV]
 c. $[[[Mr. Takemoto]_F \text{ will marry}]]^f = \lambda p [p = \lambda w [\exists x (x \text{ will marry in } w)]]$ [FSV]
 c'. $= \lambda w \lambda w' [\lambda x . x \text{ will marry in } w = \lambda x . x \text{ will marry in } w']$
 d. $\lambda w \lambda w' [w' \in f(I, w) \wedge \lambda x [x \text{ will marry} \wedge \exists x(x=t)]^w = \lambda x [x \text{ will marry} \wedge \exists x(x=t)]^{w'}]$ [exempl.]

The denotation of FSV is essentially the same as a WH question *Who will marry?* In (20c), the FSV is formalized as a set of propositions under Karttunen (1977-2002)'s analysis of interrogatives as a set of true answers. The contextual background against which a focus is interpreted is a subset of this FSV. In Section 2.3., we saw that the contextual background might be expressed as a set of accessible worlds (modal base). Applying this perspective to focus cases, the FSV containing the contextual background may be reconsidered in terms of possible worlds. This modification makes sense under Groenendijk & Stokhof (1989-2002)'s analysis of interrogatives as a set of sets of possible worlds. The semantics of (20c) is paraphrased by (20c'): in (20c'), the FSV is defined as a set of sets of possible worlds w , where the set of individuals x who *will marry* is the same.

From this viewpoint, exemplification meaning of (20a), that is, the fact that the OSV is included in the FSV, is represented by (20d). (20d) denotes a set of sets of accessible worlds where the set of those who *will marry*, which contains a member equivalent to *Mr. Takemoto*, is the same. In more intuitive terms, the denotation of (20d) is the same as the restricted WH question *Who including Mr Takemoto will marry?*¹⁸

For negative evaluation NANKA in (21a), the focus semantic value and the ordinary semantic value are represented by (21b) and (21c):

- (21)a. [Taro] nanka ga yattteki-ta
 Taro NANKA Nom come-Pst "The like of TARO came"
 b. $[[[Taro]_F \text{ came in } w]]^0 = \lambda w [Taro \text{ came in } w]$ [OSV]
 c. $[[[Taro]_F \text{ came in } w]]^f = \lambda w \lambda w' [\lambda x . x \text{ came in } w = \lambda x . x \text{ came in } w']$ [FSV]

Applying the semantics of *surprised* introduced in Section 2.3., the semantics of negative evaluation is represented by definedness condition (22) and appropriateness condition (23):

- (22) $[[[Taro \text{ came in } w_0]]] = 1$ [factivity=definedness condition]
 (23) $\forall w [w \in \max_{g(I, w)} f(I, w) \wedge \neg \exists w (w=w_0)] [\neg (Taro \text{ came in } w)]$ [appropriateness condition]

(22) indicates that (21a) is defined if and only if the proposition *Taro came in w* (i.e. the OSV) is true in the actual world w_0 . (23) indicates that (21a) is appropriately used if and only if in any accessible world included in a set of

¹⁸ For example, in a model M1 consisting of two members {Mary, Mr. Takemoto}, accessible worlds are partitioned into four groups (sets of worlds), with respect to a question *who will marry?*, as illustrated in (1a):

- (1)a. group 1: No one will marry: {w1, w2}
 group 2: Mary will marry : {w3, w4, w5}
 group 3: Mr. Takemoto will marry: {w6, w7}
 group 4: Mary and Mr. Takemoto will marry: {w8}
 b. $[[[20a]]]^{M1} = \{\{w6, w7\}, w8\}$

In the group 1 containing w1 and w2, no one will marry: in the group 2 consisting of w3, w4 and w5, only *Mary* will marry: in the group 3 including w6 and w7, only *Mr. Takemoto* will marry: in the group 4 which contains only w8, *Mary* and *Mr. Takemoto* will both marry. With respect to the model M1, the semantics (20a) denotes, as represented by (1b), a set of two sets of accessible worlds, that is {w6, w7} and {w8}.

contextually relevant accessible worlds, $f(I,w)$, maximally corresponding to the ordering source, $g(I,w)$, and which don't contain the actual world, it is not the case that *Taro came*. In more intuitive terms, (23) says that according to the speaker's wishes (expectation), Taro should not have come.

The semantics of negative evaluation NANKA represented in (23) is well suited to Teramura (1991)'s remark that this type of NANKA is a kind of modal expression¹⁹, and to his generalization cited in (24), where the expression *some very <high existence [criteria]>* may be considered as corresponding to the ordering source:

- (24) *X NANKA* [in the original text, *NADO*] *P* indicates that the fact that *X* is valid in *P* [...] is far from the truth or the speaker's thought. [...] The speaker has, in her / his head, some very <high existence [criteria]> with respect to which the fact that the <low> *X* is valid in *P* is far from his prediction. (Teramura 1991: 188)

Next, let's examine the nature of the ordering source of negative evaluation NANKA. Yamanaka (1995: 215-216) points out that NANKA does not invoke the speaker's simple prevision, but her / his subjective preference or evaluation²⁰: (21a) suggests that *Taro* is not included in the set of those whom the speaker *wants* to come or he considers as having a right to come. Its ordering source may thus be of a bouletic type (in view of certain wishes) or, in some cases, of a deontic type (in view of certain obligation).

In sum, the semantics of exemplification and of negative evaluation of NANKA seem to be appropriately represented, respectively by (20d) and (22) / (23). But it is not clear how these meanings are derived from the same focus particle NANKA. In the next section, I will examine this question, paying a special attention to the ambiguity of KA.

2.5. Ambiguity of NANKA reduced to that of KA

According to *Nihon Kokugo Daijiten*, the particle NANKA stems out from the abbreviation of a quantifiable item NANI and an operator KA. NANI is an indefinite noun lacking its proper quantificational force, and bears lexical features [-human], [-place], [-time], etc.. It is glossed by *Thing (x)*. The operator KA marks disjunction and may be translated by *whether* in English. Martin (1987: 162) glosses NANI + KA by *or what*²¹.

¹⁹ Teramura (1991: 187) suggests that negative evaluation NANKA is merged, in a manner similar to modal elements, after the relation between a predicate and their arguments (and / or adjuncts) is established. An argument in favor of this hypothesis will be presented in Section 2.5. See also footnote 23.

²⁰ It is often observed that, if NANKA follows the first person, the "deference" meaning emerges as in (Ia), while with the third person, NANKA is "often used for belittling" (Martin 1987: 161), as in (Ib):

(I)a. *watasi nanka (original NADO) totemo dame desu. (idem.161) [deference]*
 I the like largely inappropriate Cop
 "Poor me, I'm just no good at it"

b. *konna yatu boozu nanka zya-arimase-n ya. (Teramura 1991: 188) [belittling]*
 this guy priest the like Cop -Neg I-tell-you
 "The like of this guy is far from a (Buddhist) priest"

²¹ The particle NANKA has its variants, NADO / NANTE / NANZO, illustrated in (I)-(III):

(I)a. *tatoeba yuusyoku no toki nado wa konna-huu da. (Martin 1987: 161) [exemplification]*
 for instance dinner Gen time NADO Top like-this Cop
 "For instance, at, say, dinner time, it's like this" (trad. by Martin)

b. *yorini yotte Taro nado ga gakko ni kuru (Numata 2003: 230) [negative evaluation]*
 of all others Taro NADO Nom school Loc come
 "Of all others, the like of Taro comes to school"

(II)a. *Hawai nante doo? Ima ga itiban-ii koro yo. (Yamada 1995: 338) [exemplification]*
 Hawaii NANTE how-about? now Nom the best season I-tell-you

If KA is locally attached to NANI as in (25a), NANI is existentially quantified as in (25b), and the meaning of “something” is obtained. On the other hand, if KA takes wide scope, as in (26a), a WH interrogative meaning of *what* is obtained as in (26b):

- (25)a Michel wa nani- ka o tabe- ta. [KA : existential]
 Michel Top thing(x) -OP_{exist} Acc eat- Pst “Michel ate something”
 b. $\lambda w [\exists x. \text{Michel ate } x \text{ in } w]$
- (26)a Michel wa nani o tabe- ta no ka ? [KA : interrogative]
 Michel Top thing(x)-Acc eat- Pst Comp OP_{interrog} “What did Michel eat?”
 b. $\lambda w \lambda w' [\lambda x. \text{Michel ate } x \text{ in } w = \lambda x. \text{Michel ate } x \text{ in } w']$

A parallelism is observed between the ambiguity of NANKA and that of KA. As observed by Martin (1987: 162), Teramura (1991: 187), Yamada (1995: 341), etc., the meaning of NANKA may depend on its position with respect to case markers (postpositions). When directly attached to a NP and preceding a case marker, NANKA permits both of exemplification and negative evaluation meanings: the sequence *friend* + *NANKA* + *from* in (27a) is thus ambiguous:

- (27)a. tegami ga tomodati nanka kara ki- ta. (adapted from Martin 1987: 162)²² [exempli/ neg. evalu.]
 letter Nom friend the like from come-Pst
 “Letters came from friends or the like”
 b. tegami ga tomodati kara nanka ki- ta. (ibid.) [*exempli/ neg. evalu.]
 letter Nom friend from the like come-Pst
 “Letters came from the like of my friends”

On the other hand, when following a case marker, NANKA cannot be interpreted as exemplification type, but only negative evaluation type: the sequence *friend* + *from* + *NANKA* in (27b) is not ambiguous. In effect, we attest examples of the sequence *NP* + *NANKA* + *case* instantiating exemplification meaning, as in (28a), and those of the sequence *NP* + *case* + *NANKA* inducing negative evaluation meaning as in (28b)²³:

-
- b. piano nante kyoomi nai- yo. (ibid. 339) [negative evaluation]
 piano NANKA interest Neg-I-tell-you
 “I’m not interested in the like of piano (music)”
- (III)a. anata-no ozii-san nanzo ga iroiro omosiroi mono o o-kaki ni nat-ta kara... [exemplification]
 you-Gen grandfather NANZO Nom various interesting things polite-write Pst, so
 “Your grandfather (or the like) has written a lot of interstings, so...” (Martin 1987: 162)
- b. mukashi no yooni turi nanzo nonkini si-teiru mono wa hitori d’atte arimasen (idem.161)
 old days Gen like fishing NANZO idly doing guy Top anyone there isn’t
 “there isn’t a soul idly fishing, say, the way they used to” [negative evaluation]

As Martin (1987: 160) notes, among these variants, “NANKA and NANTE are informal and lively, hence more susceptible to special connotations, such as sarcasm”. Etymologically, NADO “comes from an abbreviation of NAN(I) + TO” (ibid.). TO may be analyzed as a conjunction marker corresponding to *and*. Martin effectively translates NAN(I) + TO by *and what*.

²² The originals of the examples (27a,b) and (28a,b) involve a particle NADO, rather than NANKA.

²³ It is this contrast that leads Teramura (1991) to suggest that negative evaluation NANKA is a kind of modal element. See footnote 19.

- (28)a. *yuuzin nanka kara kii-ta.* (ibid.) [exemplification]
 friends the like from hear-Pst
 “I heard it from friends or the like”
- b. *aitu kara nanka hanagami iti-mai de mo morai-taku nai* (ibid.) [negative evaluation]
 him from the like kleenex one-CL even receive-want Neg
 “From the likes of him, I wouldn’t even accept a Kleenex”

Nishigauchi (1999: 65-66) points out the same kind of contrast between (29a) where KA is situated between a NP *dare* and a case marker *kara* (*from*) and (29b) where KA follows *kara* (*from*):

- (29)a. *dare- ka-kara henna tegmi ga todoi-ta.* (Nishigauchi 1999: 65)
 Person(x)-KA-from strange letter-Nom arrive-Pst
 “I received a strange letter from someone [specific / non-specific]”
- b. *dare- kara-ka henna tegmi ga todoi-ta.* (idem.66)
 Person(x)-from-KA strange letter-Nom arrive-Pst
 “I received a strange letter from I don’t know whom [*specific / non-specific]”

DARE in these examples is a quantifiable item bearing a lexical feature [+human]. It is glossed by *Person (x)*. Nishigauchi observes that the sequence *person (x) + KA + from* permits both of a specific (i.e. the speaker can identify the person in question) and a non-specific meaning (the speaker doesn’t identify whom), while the sequence of *person (x) + from+KA* doesn’t accept a specific reading. Recognizing a similarity between an interrogative and a non-specific reading, Nishigauchi relates this observation to the idea that the operator KA following the case marker is of interrogative nature.

In view of the relative position with respect to a case marker, exemplification NANKA manifests a parallel distribution with existential KA, and negative evaluation NANKA, with interrogative KA. From this viewpoint, I propose the following hypotheses:

- (30)a. KA of exemplification NANKA assumes a function similar to existential operator KA.
 b. KA of negative evaluation NANKA assumes a function similar to interrogative operator KA.
 c. An indefinite item NAN of the particle NANKA introduces a variable and a restriction of the same type as the focalized item, (ex. an entity variable and a restriction [+human] in the case of *Mr. Takemoto-NANKA*), with a feature [-human] of NAN being neutralized²⁴.

2.6. Compositional derivation of exemplification use and negative evaluation use

In terms of the hypotheses (30a~c), I will show in this subsection that the semantics of exemplification meaning is compositionally derived, and next examine the derivation of negative evaluation meaning. According to the hypothesis (30c), NAN of NANKA introduces the same type of variable and restriction as the focalized item. Under Alternative Semantic’s framework, the variable is quantified by the focus interpretation operator (responsible for the creation of the FSV and similar to the interrogative operator). As a result, NAN is interpreted just as an WH item in WH questions, as shown in (31a):

²⁴ An effect of this neutralization will be discussed in Chapter 4.

- (31)a. $[[NAN]] = \lambda P \lambda w \lambda w' [w \in f(I, w) \wedge \lambda x. P(x)(w) = \lambda x. P(x)(w')]$
 b. $[[KA]] = \lambda w. \exists x (x = X)(w)$
 c. $[[NANKA]]$
 $= \lambda P \lambda w \lambda w' [w \in f(I, w) \wedge \lambda x [P(x)(w) \wedge \exists x (x = X)(w)] = \lambda x [P(x)(w') \wedge \exists x (x = X)(w')]]$
 d. $[[M. Takemoto]] = \{t\}$
 e. $[[will marry]] = \lambda w \lambda x. Will-marry (x)(w)$
 f. $[[Takemoto-NANKA will marry]] = \lambda w \lambda w' [w \in f(I, w) \wedge \lambda x [Will-marry (x)(w) \wedge \exists x (x = t)(w)]]$
 $= \lambda x [Will-marry (x)(w') \wedge \exists x (x = t)(w')]$

In other words, I assume that the operator KA of the particle NANKA does not directly quantify the indefinite NAN, as in (25a) and (26a), but serves to indicate the relation between the focalized item and NAN (independently quantified and interpreted as a set of alternatives). By way of the hypothesis (30a), the operator KA indicates an existence of a value of the variable x equivalent to the focalized item²⁵, rather than a simple existence of a value of the variable (ex. existence of an individual equivalent to *Mr. Takemoto* among a set of contextually relevant individuals, for *Mr. Takemoto-NANKA*). Representing the focalized item by X, the semantics of KA is represented by (31b). It should be noted that the existence of an alternative other than the focalized item is not presupposed in the semantics of (31b). In other words, the operator KA indicates the inclusion relation of the OSV among the set depicted by the FSV. In this way, the semantics of a proposition *Mr. Takemoto-NANKA will marry in w* is derived fully compositionally, as shown in (31f).

In the case of negative evaluation NANKA, the meaning of NAN is equally interpreted as a WH item, as shown in (32a). According to the hypothesis (30b), KA in this case is an interrogative operator asking whether the focalized item X is included in a set of contextually relevant alternatives denoted by NAN (ex. whether *Taro* is included in a set of contextually relevant alternatives who came). This meaning boils down to asking whether the OSV is included among the set of FSV. This question is reduced to a polar question asking whether the OSV is true in an accessible world w. In this way, the question “Is the focus *Taro* included in a set of those *who came* in w?” boils down to a polar question “Did *Taro* come in w?”, as shown in (32f):

- (32)a. $[[NAN]] = \lambda P \lambda w \lambda w' [w \in f(I, w) \wedge \lambda x. P(x)(w) = \lambda x. P(x)(w')]$
 b. $[[KA]] = \lambda w \lambda w' [\exists x (x = X)(w) = \exists x (x = X)(w')]$
 c. $[[NANKA]] = \lambda P \lambda w \lambda w' [w \in f(I, w) \wedge P(X)(w) = P(X)(w')]$
 d. $[[Taro]] = \{t\}$
 e. $[[came]] = \lambda w \lambda x. Came (x)(w)$
 f. $[[Taro-NANKA came in w]] = \lambda w \lambda w' [w \in f(I, w) \wedge (Came (t)(w) = Came (t)(w'))]$
 $= [[Did Taro come in w?]]$

The semantics in (32f) obtained in a usual compositional way doesn't correspond to that of the appropriateness

²⁵ There exist cases where the expression attached to NANKA is not a simple individual, but a generalized quantifier, as in (I), or an adjectival predicate, as in (II):

- (I) subeteno hito nanka ko-nai.
 All people NANKA come-Gen “It is not the case that all people-NANKA will come”
 (II) (watasi wa) kiree nanka de wa nai.
 I Top pretty the like Cop Top Neg “It is not the case that I'm pretty-NANKA”

The proper treatment of these cases will be a subject of future research.

condition in (33b), introduced in Section 2.4.:

- (33)a. $[Taro\ came\ in\ w_0] = 1$ [defindness condition]
 b. $\forall w [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w_0)] [\neg Came(t)(w)]$ [appropriateness condition]

We should next ask how the true proposition in (33a) and the polar question in (32f) give birth to a negation observed in (33b). For this purpose, I will refer to Han's analysis of rhetorical questions.

2.7. Rhetorical WH questions

A rhetorical question literally denotes a set of propositions (i.e. a set of sets of possible worlds), but express a negative proposition. Thus, a polar question in (34a) literally denotes a set of two possible answers (i.e. positive one and negative ones), as in (34b), and, when interpreted as a rhetorical one, expresses a negative answer in (34c). Similarly, a WH question involving a WH item *who* in (35a) literally denotes a set of possible answers (a set of sets of possible worlds where the set of those who *finished the paper* is the same), as in (35b). When interpreted as a rhetorical one, it expresses a negative answer *no one finished the paper*, as in (35c)²⁶:

- (34)a Did John finish the paper? (Han 2002: 214)
 b. $\lambda w \lambda w' [(John\ finished\ the\ paper\ in\ w) = (John\ finished\ the\ paper\ in\ w')]$
 c. $\lambda w [w \in f(I,w) \wedge \neg [John\ finished\ the\ paper\ in\ w]]$
 (35)a Who finished the paper? (idem.217)
 b. $\lambda w \lambda w' [\lambda x. x\ finished\ the\ paper\ in\ w = \lambda x. x\ finished\ the\ paper\ in\ w']$
 c. $\lambda w [w \in f(I,w) \wedge \neg \exists x [x\ finished\ the\ paper\ in\ w]]$ ²⁷

The question raised by rhetorical questions boils down to asking why, among possible answers, a negative one (ex. *John didn't finish the paper* for (34a) and *no one finished the paper* for (35a)) is selected. Han proposes an analysis combining the semantics of interrogatives and a pragmatic principle, 'Make your contribution as informative as is required'. This principle is a derived from the Gricean Quantity Principle requiring that the information value of a statement be maximal in the relevant discourse. The most valuable information to the speaker is one contrary to his predication. Han further claims that, uttering a question, the

²⁶ The presence of a negation in rhetorical questions is confirmed by their compatibility with a strong negative polarity minimalizer *a*, as shown in (I):

(I) Who lifted a finger to help Mary? (Han 2002: 205)

²⁷ In terms of denotation, the interrogative meaning of (34a) indicates a partition of possible worlds into two groups, in one of which *John finished the paper*, and in another *John didn't finished the paper*, as exemplified in (Ia). Similarly, in a model M3 consisting of two members {John, Mary}, the possible values for the WH item *who* in (35a) is a power set of the set containing two individuals, that is, { ϕ , John, Mary, {John, Mary}}. (35a) then means, with respect to M3, a partition of possible worlds into four groups, as illustrated in (Ib):

(I)a. $[[Did\ John\ finished\ the\ paper\ ?]]^{M1,g^w=}$
 group 1 : John finished the paper in w1, w3, w5, ...
 group 2 : John didn't finish the paper in w2, w4, w6...
 b. $[[who\ finished\ the\ paper\ ?]]^{M1,g^w=}$
 group1: no one finished the paper in w1...
 group2: John finished the paper in w2,...
 group3: Mary finished the paper in w3,...
 group4: John and Marie finished the paper in w4,...

speaker selects the form that would be the most informative if it were true, that is, the form the least compatible with his predication. As well known, negative polar questions like in (36a) “implicate that the speaker expects a positive answer” (Han 2002: 214), as illustrated by (36b):

- (36)a Didn't John finish the paper?
 b. speaker's expectation: John finished the paper (idem. 214)

According to Han (idem.214), “in general, a positive *yes-no* question has no implications as to the speaker's expectation towards the answer. However, sometimes it implicates the speaker's expectation towards the answer, in particular when the auxiliary verb is focused, and when it does, it implicates that the speaker expects a negative answer”, as shown in (37b):

- (37)a Did John finish the paper?
 b. speaker's expectation: John didn't finish the paper. (idem. 214)

- (38)a Who finished the paper?
 b. speaker's expectation: most people did not finish the paper (idem.217)

Similarly, a positive WH question, like (38a), sometimes implicates that “the set of individuals who satisfy the question is smaller than the set of individuals who do not satisfy the question” (p.217), as shown in (38b). Therefore, in the rhetorical reading by which the speaker intends a unique answer among possible answers, the selected answer is one which arises the most naturally from his prediction, that is, a negative one, both for a positive polar question like in (37a) and for a positive WH question, as in (38a).

Han assumes further that not only WH questions, but also polar questions include a WH item (implicit *whether* in the second case). This author then claims that “the LF output of a rhetorical *wh*-question interacts with pragmatics, and undergoes a post-LF derivation where the *wh*-phrase maps onto a negative quantifier” (idem.220). According to this analysis, after an implicit WH item *whether* in (37a) or *who* in (38a) are respectively replaced, at the post-LF level, by the negative operator (\neg) or by the empty set *no one*, the compositional interpretation of the whole sentence is effected. Consequently, although mediated by a pragmatic implicature, the semantics of rhetorical questions may be derived compositionally.

2.8. Derivation of negative evaluation NANKA revisited

Now, it is possible to make sense of the derivation of the appropriateness condition in (39c) from the situationally obtained definedness condition in (39a) and the semantically obtained meaning in (39b) of a proposition *Taro-NANKA came in w*:

- (39)a. $[Taro\ came\ in\ w_0] = 1$ [definedness condition]
 b. $[[Taro-NANKA\ came\ in\ w]] = \lambda w \lambda w' [w \in f(I,w) \wedge [(Taro\ came\ in\ w) = (Taro\ came\ in\ w')]]$
 c. $\forall w [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w_0)] [\neg (Taro\ came\ in\ w)]$ [appropriateness condition]

In view of the Grician Quantity Principle, the factive proposition *Taro came in w₀* provides a maximal information when the fact that *Taro came* is true only in the actual world, and not in other accessible worlds. A pragmatic implicature is thus derived according to which Taro did not come in an accessible world distinct from

the actual world. Intuitively, the speaker intentionally utters a positive polar question *Did Taro come* in (39b), in a situation where the proposition *Taro came* is clearly true in the actual world w_0 , as shown in (39a). The positive polar question in (39b) is interpreted as a rhetorical one: at the post-LF level, the interrogative operator KA maps onto the negative operator, as in (40b):

- (40)a. $[[NAN]] = \lambda P \lambda w \lambda w' [w \in f(I, w) \wedge \lambda x. P(x)(w) = \lambda x. P(x)(w')]$
 b. $[[KA]] = \lambda w [\neg \exists x (x = X)(w)]$
 c. $[[NANKA]] = \lambda P \lambda w \lambda w' [w \in \max_{g(I, w)} f(I, w) \wedge \neg \exists w (w = w_0) \wedge \lambda [P(X)(w) \wedge \neg \exists x (x = X)(w)] = \lambda [P(X)(w') \wedge \neg \exists x (x = X)(w')]]$
 c'. $= \lambda P \lambda w [w \in \max_{g(I, w)} f(I, w) \wedge \neg \exists w (w = w_0)] [\neg P(X)(w)]$
 d. $[[Taro-NANKA \text{ came in } w]] = \forall w [w \in \max_{g(I, w)} f(I, w) \wedge \neg \exists w (w = w_0)] [\neg (Taro \text{ came in } w)]$
 $= [[Taro \text{ didn't come in } w \text{ distinct from } w_0.]]$

Consequently, at the post-LF level, *X-NANKA* is interpreted as denoting a restricted set of alternatives such that they are distinct from the focus *X*, in an accessible world maximally corresponding to the ordering source and distinct from the actual world, as shown in (40c): *Taro-NANKA* is interpreted as denoting *who other than Taro in w distinct from w0*. In other words, a sentence including negative evaluation NANKA is interpreted as indicating that in any accessible world maximally corresponding to the ordering source and distinct from the actual world, the focus *X* does not satisfy the proposition denoted by the sentence, as shown in (40c'). As a result, the semantics of the appropriateness condition in (40d) is derived, which indicates that in any accessible world maximally corresponding to the speaker's wishes and distinct from the actual world, *Taro didn't come*.

2.9. Recapitulation

In Section 2, I claimed that exemplification meaning of NANKA is fully compositionally derived from the meaning of NAN (introducing the same type of variable and restriction as the focalized item) and that of KA (existential quantifier), while its negative evaluation meaning needs, not only a compositional meaning of NAN (which is the same as in exemplification case) and KA (interrogative operator), but also the intervention of a Grician Conversational Implicature (Quantity Principle).

3. French NP Comp XP constructions

In this section, I will show that the analysis advanced in Section 2 for the ambiguity of NANKA may be applied to the ambiguity of French *NP Comp XP*. After confirming the focus analysis (Section 3.1.), I will show that existential matrix *IL Y A* is responsible for giving birth to exemplification meaning, in the same way as existential operator KA of NANKA (Section 3.2.) I will next claim that surprise meaning of French *NP Comp XP* is derived via Grician Conversational Implicature, in a way similar to but a little different from Japanese negative evaluation NANKA (Section 3.3.)

3.1. Focus analysis

According to an influential analysis, the *NP Comp XP* construction like in (41a,b) should be analyzed as including a kind of relative clause:

- (41)a Est-ce que quelqu'un travaille ici ? – Oui, il y a Pierre qui travaille. (Léard 1992: 47)
 “Is anyone working here? – Yes, Pierre or the like (for example) is working”
 b. Ah! Mon dieu! dit-il, Monsieur Michel qui est mort! (Sandfeld 1965: 155)
 “Oh, my God! said he, Mr. MICHEL died!”

I will first examine the relative clause analysis and point out its problems (Section 3.1.1), and next provide some arguments in favor of the focus analysis (Section 3.1.2).

3.1.1. Pseudo-Relative analysis

French *NP Comp XP* may express the existence of an event, rather than of an entity, as in (42a,b):

- (42)a. Que se passe-t-il ? – Il y a Pierre qui regarde la télé. (Léard 1992: 71)
 “What’s going on? –(Lit.) There’s Pierre that is watching TV.”
 b. Que se passe-t-il quand elle écrit ? Et l’émotion qui s’empare d’elle quand elle lit certaines lettres !
 “What happens when she is writing? (Lit.) And the emotion that is emancipating from her when she is reading certain letters!” (Roger Grenier, *Les Larmes d’Ulysse*: 128)

Doetjes, Rebuschi & Rialland (2004) argue that such an event reporting type should be analyzed as “pseudo-relative”, and that the presuppositional part is elliptical. According to this analysis, (42a) may be paraphrased by (42a’) :

- (42)a’. Il y a [Pierre qui regarde la télé] qui se passe (the underlined part is elliptical)
 “There’s [Pierre who is watching TV] that is going on”

Pseudo-relatives typically occur as a perception verb complement, as in (43a), and manifest a subject / object asymmetry. This restriction is equally observed in event-reporting cases of *IL Y A NP Comp XP* or independent *NP Comp XP*: it must be the subject of *XP* that is superficially focalized, as shown by the low acceptability of cases involving a object NP in (43b) with a perception verb, (44a) with *IL Y A*, and (44b) without a matrix. In other words, the complementizer must be a subject form *qui*:

- (43)a. Je le vois qui marche dans les ténèbres. (Flaubert, *Hérodias*: 103)
 “I see him that is walking in the darks”
 b. *Je le vois qu’on décore des palmes académiques. (Muller 1995: 312)
 “I see him that they are decorating with academic palms”
 (44)a. ?Il y a le livre que Pierre lit. (Léard 1992: 131) [not fully acceptable with an event-reporting reading]
 “(Lit.) There’s the book that Pierre is reading.”
 b. ?Oh, le facteur que Pierre renverse ! (Furukawa 1996: 64)
 “(Lit.) Oh, the postman that Pierre is upsetting!”

There however exist at least three distributional differences between perception verb cases and *IL Y A /* independent cases. First, severe aspectual and temporal restrictions are imposed on perception verb cases: *XP* should denote an event simultaneously occurring with that of the matrix and therefore of an imperfective /

durative type (Radford 1975, Prebensen 1982, Kleiber 1988). Furthermore, the tense of *XP* depends on that of the matrix: a present tense in the matrix requires the same present tense in *XP* as in (45a), and a past tense (*passé simple*, *passé composé*, or *imparfait*) in the matrix needs a *XP* in *imparfait* tense representing a past state²⁸. Other past tenses denoting a perfective event (*passé simple* or *passé composé*) are excluded in *XP*, as in (45b) (Radford 1975, Prebensen 1982, Willems 1983, Benzakour 1984). On the other hand, the matrix *il y a* in present tense admits a *XP* in *passé composé* tense denoting a past event, as in (46a). Independent cases equally accept *passé composé* tense, as in (46b)²⁹:

- (45)a. Je le vois qui {renne / *est rentré} tard.
 “I see him that {is coming back / has come back} late” (adapted from Willems 1983: 149)
- b. Je l’ai vu qui {rentrait / *était rentré / *est rentré / *rentre} tard hier soir.
 “I saw him that {was coming/*had come/*has come/*is coming} back late yesterday evening”
- (46)a. Ya mon chien qui a disparu hier.
 “(Lit.) There’s my dog that disappeared yesterday”
- b. Le gracieux camarade qui m’est venu là par hasard ! (Marivaux, *Les Fausses Confidences*: 1182)
 “(Lit.) The graceful friend that has come to me here by accident!”

Secondly, a restriction concerning predicate type is imposed on pseudo-relatives of perception verbs: *XP* should be a directly observable stage-level predicate and thus cannot be an individual-level type representing an inner state, like an idea, a feeling, an intention, as illustrated by the low acceptability of (47a) (Cadiot 1976, Rothenberg 1979, Benzakour 1984): independent *NP qui XP* is indifferent to this restriction, as shown in (47b):

- (47)a. *Je le regarde qui déteste Marie. “I watch him that dislikes Marie” (Benzakour 1984)
- b. Moi qui la hais. “(Lit.) Me that hate her” (Genet, *Les Bonnes*: 38)

Furthermore, a person restriction is observed in perception verb cases: the first and second persons are excluded for the *NP* of *NP qui XP*, as in (48a) (Radford 1975, Rothenberg 1979, Kleiber 1988, Guasti 1992, Cinque 1995). This restriction is not observed in *NP qui XP* without a matrix, as illustrated by (48b):

²⁸ *Passé simple* and *passé composé* tenses represent a past perfective event, while *imparfait* tense denotes a past state or a past habitude.

²⁹ In an independent *NP qui XP* underlined in (I), a present tense denotes a perfective event occurring in a discourse sequence reported in *passé simple* (simple past) tense. This type of present tense may be analyzed as “historical present”. Such a use of present tense is impossible in perception verb cases:

(I) [When the speaker was playing as an accompanist in a club, a lot of unpredictable accidents happened. One of such episodes is reported below]

Un autre jour, j’accompagnais un violoniste qui jouait la *Danse des lutins* de Bazzini. Au bout de quelques mesures, ce fut la cacophonie. Ce qu’il jouait ne correspondait plus du tout avec ce que j’apercevais sur la partition. On m’avait tourné deux pages d’un coup! Nous recommencâmes, franchîmes sans encombre le passage périlleux, et... nouvelle catastrophe! Encore une page sautée ! Et lui qui tapote l’épaule : « Alors, petit gars, ça commence à suffire! ».

“Another day, I was accompanying a violinist playing *the Dance of fairies* of Bazzini. After some measures, that was the cacophony. What he was playing did not at all correspond to what I was looking at on the partition. Two pages were turned at once! We restarted, jumped without hesitation the difficult passage, and... another catastrophe! One page was jumped again! (Lit.) And him that taps my shoulder: «Then little boy, now it is sufficient (it needs not to continue) »”

(Bruno Monsiegeon, *Richter: écrits, conversation*, Actes Sud: 46)

- (48)a. ?/*Pierre me voit qui parle à Jean. “Pierre sees me that am talking to Jean” (Guasti 1992: 251)
 b. Moi qui croyais qu’il ne comprenait pas ! “(Lit.) Me that believed that he didn’t understand!”
 (Dostoevsky, *Le Joueur*: 91)

These differences seem to suggest that the event-reporting type of *NP qui XP* with IL Y A (there’s) or without a matrix should not be analyzed on a par with pseudo-relatives of perception verb complements.

3.1.2. Arguments for focus analysis

Next, I will present two arguments in favor of the focus analysis of French *NP Comp XP* with or without IL Y. First, a similar surprise meaning is conveyed in English by “emphatic focus” constructions involving contrastive stress, as in (49):

- (49) John would distrust Albert SCWEITZER. (Krifka 1995: 15)

This kind of focus construction is called “quantificational superlative” (Fauconnier 1975) or “pragmatic superlative” (Haspelmath 1997). According to Krifka (1995: 15), this construction induces alternatives and “The function of emphatic focus is to indicate that the proposition that is actually asserted is *prima facie* a particularly unlike one with respect to the alternatives [...] in the current common ground”: (49) suggests that “it must be considered that *John* would trust *Albert Schweitzer* than [...] any other person” (idem. 15). It is true that this emphatic focus meaning does not exactly correspond to surprise meaning of *NP Comp XP*, but rather to an extremity meaning evoked by scalar additive particles like *even* (see Section 2.1.). But a surprise meaning equally observed suggests a validity of similar treatment of French *NP Comp XP* and English emphatic focus.

Secondly, as noted in Section 3.1.1., French *NP Comp XP* may express the existence of an event, and in this case, a subject / object asymmetry is observed. Such an event reading is equally available for English emphatic focus constructions, as in (50a) (called “sentence focus” by Lambrecht 1994), where a similar subject/ object asymmetry is observed as shown by the low acceptability of object focus in (50b)::

- (50)a. [What happened?] – Her FATHER died. (Lambrecht 1994: 143)
 b. Why didn’t she come to work today? – # Her husband made a SCENE. (idem.308)

This common restriction justifies the parallel treatment of French and English constructions as focus sentences.

By the way, Olivier Bomani (p.c.) is skeptical to the focus analysis of *IL YA NP Comp XP* construction, which is not fully acceptable in a typical focus environment, that is, question-answer pair, as in (51):

- (51) Qui travaille ? – ?Il y a Pierre (qui travaille). (Léard 1992: 47)
 “Who is working? – (Lit.) There is Pierre (that is working).”

He also suggests that this construction involves rather a ‘partial topic’ in the sense of Büring (1999) (see Section 2.2.): the fact that it essentially represents a partial (non-exhaustive) answer allows it to be used in event reporting cases which are obliged to be partial answers: when the dialogue in (52) is uttered, one may not be able to enumerate exhaustively what is happening:

- (52) Qu'est-ce qui se passe ? -- Il y a Michel qui est tombé dans l'escalier.
 "What happened? -- MICHEL has fell down on the stairs"

It should be noted that the focus intended by Bonami is the one which transmits a new information (information focus). It seems possible to maintain that *NP qui XP* instantiates a different type of focus, that is, a contrastive focus whose defining feature is to introduce a contrast with respect to alternatives, rather than transmitting a new information. Even if it turns out to be appropriate to analyze this construction in terms of "contrastive topic", it remains possible to analyze it as a focus in a broad sense defined in the present paper. In the following two sections, I will examine the derivation of exemplification and surprise meanings of *NP Comp XP*.

3.2. Compositional semantics of exemplification meaning

I first claim that exemplification meaning of *NP Comp XP* should be analyzed semantically on a pair with that of exemplification NANKA. In effect, in the IL Y A cases, the existence of other candidates satisfying the relevant proposition is not presupposed, just as in exemplification NANKA, and may be cancelled, differently from cases involving an additive particle *aussi (too)*, as shown by the contrast in (53a,b):

- (53)a. Qui a voté pour toi ? -- Il y a François qui a voté pour moi et personne d'autre.
 "Who voted for you? -- (Lit.) There's François that voted for me and no one other than him" (adapted from Léard 1992: 49)
- b. Qui a voté pour toi ? -- *François aussi a vote pour moi et personne d'autre.
 "Who voted for you? -- *François also voted for me and no one other than him."

On the basis of the hypothesis that *NP Comp XP* instantiates a focus construction, I will propose, for the example (54a), the structure in (54b):

- (54)a Il y a Pierre qui travaille.
 b. There's Pierre [_{CP} OP_k that e_k is working]

Taking into account the fact that the focus interpretation operator is essentially the same as an interrogative operator, it seems reasonable to assume that the denotation of the CP part in (54b) is the same as that of a WH question (which boils down to the focus semantic value), as shown in (55a):

- (55)a. $[[OP_k \text{ qui } e_k \text{ travaille in } w]] = \lambda w \lambda w' [\lambda x . \text{Be-working}(x)(w) = \lambda x . \text{Be-working}(x)(w')]$
- b. $[[il y a]]$
 $= \lambda P \lambda w \lambda w' [w \in f(I, w) \wedge (\lambda x [P(x)(w) \wedge \exists x(x=X)(w)] = \lambda x [P(x)(w') \wedge \exists x(x=X)(w')])]$
- c. $[[Pierre]] = \{p\}$
- d. $[[il y a Pierre \text{ qui travaille in } w]] = \lambda w \lambda w' [w \in f(I, w) \wedge$
 $(\lambda x [\text{Be-working}(x)(w) \wedge \exists x(x=p)(w)] = \lambda x [\text{Be-Working}(x)(w) \wedge \exists x(x=p)(w')])]$

The existential matrix IL Y A assumes the same function as the existential operator KA of NANKA: it indicates an inclusion relation of the focalized item (signaled by *X* in (55b)) among a set of alternatives (that is, an inclusion relation of the OSV among a set of the FSV), as shown in (55b). The exemplification meaning is fully

compositionally obtained, as illustrated in (55d), which denotes a set of sets of accessible worlds where the set of those who are working and who include *Pierre* is the same.

3.3. Derivation of surprise meaning

As regards independent *NP Comp XP*, like in (56a), its syntax is equally represented by (56b). The denotation of the CP part is the same as a WH question, just in exemplification case, as shown in (57a). But differently from IL Y A cases, the absence of a matrix leads to a situation where the focus and the CP part cannot be semantically related:

- (56)a. Michel qui est mort ! “MICHEL is dead!”
 b. Michel [_{CP} OP_k qui e_k est mort]
- (57)a. [[OP_k qui e_k est mort in w]] = $\lambda w \lambda w' [\lambda x. Dead(x)(w) = \lambda x. Dead(x)(w')]$ [FSV]
 b. [[*Michel*]] = {m}
 c. [[*Michel is dead in w0*]] = 1 [factivity]
 d. $\neg \exists x (x=m) \wedge \neg \exists w (w=w0)$ [by Grician Quantity Principle]
 e. [[*Michel OP_k qui e_k est mort in w*]]
 = $\lambda w \lambda w' [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w0)$
 $\wedge \lambda x [Dead(x)(w) \wedge \neg \exists x (x=m)(w)] = \lambda x [Dead(x)(w) \wedge \neg \exists x (x=m)(w')]]$
 = $\forall w [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w0)] [\neg (Michel\ is\ dead\ in\ w)]$ [appropriateness condition]

Crucially, this construction is uttered in a context where the ordinary semantic value is presupposed as true in the actual world *w0* (factivity), as shown in (57c), just as in the cases of negative evaluation NANKA. I will argue that a Grician Quantity Principle makes sense of the derivation of the appropriateness condition (57e) from the semantically obtained WH question meaning (a set of sets of possible worlds) in (57a) and the situationally obtained true proposition in (57c): the speaker intentionally utters a WH question *who is dead in w?* in a situation where the proposition *Michel is dead* is clearly true in the actual world *w0*. According to the Quantity Principle, the factive proposition is maximally informative when it is true only in the actual world *w0*, that is, when the variable *x* is not equivalent to the focalized item *Michel* and a possible world *w* is not equivalent to the actual world *w0*, as shown in (57d). As a result, the semantics in (56e) is derived, which indicates that in any accessible world in the modal base $f(I,w)$, maximally corresponding to the ordering source $g(I,w)$ (reflecting the speaker's expectation), and which is not equivalent to the actual world, the proposition *Michel is dead* is not true.

According to this analysis, the absence of a matrix in French focus constructions substantially contributes to the derivation of their surprise meaning, and therefore it needs not be restored by any syntactic or semantic process³⁰. In this chapter, I showed that exemplification and surprise meanings of French *NP Comp XP* focus constructions may be analyzed in a way fundamentally similar to the ambiguity of Japanese focus particle NANKA.

³⁰ Stinton (2004) recently defends an idea that a syntactic or semantic ellipsis is not always required for the interpretation of non-sentential speeches, like “Sam’s mom” (uttered in a situation where both the speaker and the hearer are looking at the referred woman in the doorway), and suggests that the gap between a literal meaning (i.e. entity) and the intended meaning (i.e. proposition) of such one-word sentences is bridged via the inferential process treating perceptual information and extra-linguistic knowledge. My claim concerning the French focus construction is that the inferential process mentioned by Stinton is irrelevant for its surprise meaning which arises not via such an inference process, but by way of Conversational Implicature.

4. Special ordering source induced by negative evaluation NANKA

In Section 2.4., I cited Yamanaka (1995)'s characterization of negative evaluation NANKA, according to which the focalized item is not only out of the speaker's expectation, but contrary to her / his preference (wishes). Such an implication of inappropriateness is not observed with French *NP Comp XP*. This special evaluative meaning may be captured by saying that the ordering source activated by negative evaluation NANKA is a boulectic one (in view of the speaker's wishes) rather than a doxastic one (in view of the speaker's beliefs) or an epistemic one (in view of available evidences). I will examine this question, by pointing out a similarity between negative evaluative NANKA and a special kind of rhetorical WH question.

4.1. Special rhetorical questions involving a *what*-like item

The analysis advanced in Sections 2.7 and 2.8. boils down to treating negative evaluation NANKA on a par with rhetorical questions. This parallel treatment is supported by the existence of a special kind of rhetorical question inducing a similar inappropriateness, illustrated, by (58a) in French, (58b) in German and (58c) in Japanese:

- (58)a *Que n'a-t-il [=the Serb régime] choisi la discussion et l'échange au lieu de soutenir dans le plus grand cynisme le pilonnage de Sarajevo ou les exécutions collectives?* [French]
"Why (Lit. What) haven't they chosen discussion and exchange instead of supporting in the utmost cynicism the shelling of Sarajevo or collective executions?" (Munaro & Obenauer 1999: 209, note 15)
- b. *Was schaut du mich so an ?!* (idem.) [German]
what look you at-me so "Why (Lit. What) are you looking at me like that?!"
- c. *nani (o) nai-teru- no ?* (Adachi 2001: 131) [Japanese]
thing(x) (Acc) cry-Progressive-Interrogative "Why (Lit. What) are you crying?!"

According to Munaro & Obenauer (2002), this construction expresses "the speaker's surprise, annoyance or disapproval with respect to the event referred to". This meaning is strikingly similar to that of negative evaluation induced by NANKA. These authors further observe that a formal particularity of this construction is to involve a WH item corresponding to English *what*, but interpreted as *why*. They suggest that the origin of this special use of *what-like* WH item may be traced back to its lexically poor and underspecified features: other WH items like *who*, *where*, or *why* bear some positive feature like [+human], [+place] or [+reason], while the features of *what-like* WH items are only negatively specified, such as [-human], [-place], [-reason].

4.2. Feature neutralization of focus particle NANKA

As noted in Section 2.5., NANKA also includes a *what-like* item NAN(I) whose features are only negatively specified. NAN(I) in independent uses is restricted to denote an entity bearing features like [-human], [-place], [-time], [-reason], etc. For example, a boundable item bearing [+human] feature in Japanese is DARE (see Section 2.5.). Therefore, DARE but not NAN(I) is compatible with a verb that requires a human subject, like *ronbun o kaku* (*write a paper*), as in (59a). On the other hand, in order to focalize a human NP, only NAN-KA is possible, and DARE-KA is excluded, as observed in (59b):

- (59)a. {dare / *nani} ga ronbun o kai- ta no ?
{person(x)/*thing(x)} Nom paper Acc write- Pst Interrog. "{Who / *What} wrote a paper?"

- b. Taro {**dareka /nanka*} ga ronbun o kai- ta
 Taro {**DAREKA/NANKA*} Nom paper Acc write-Pst “The like of Taro wrote a paper!”
- (60)a. {*doko / *nani*} e iku no?
 {place (x) / *thing(x)} to go Interrogative “{Where / *To what} do you go?”
- b. Simoda e {**dokoka /nanka*} nani-si ni iku no? (Teramura 1991: 182)
 Simoda to {**DOKOKA/NANKA*} what-do in-order-to go Interrogative
 “What makes you to go to the like of Shimoda?”

Similarly, a boundable item with [+place] feature is DOKO. In a context where a location is in question, as in (60a), DOKO but not NANI is used. On the other hand, in order to focalize a postpositional phrase with [+place] feature, NAN-KA and not DOKO-KA is used, as shown in (60b). Such a neutralization of feature restriction commonly observed in NANKA and *what-like* WH items in surprise rhetorical questions seems to justify the parallel treatment of them.

Then why is the neutralization of feature restriction associated with “the speaker’s surprise, annoyance or disapproval”? I advance the following hypothesis: i) by using a *what-like* WH item whose feature is too vague in the context where a more specified feature (normally [+reason] feature) is expected, it is suggested that there is no appropriate reason, ii) similarly, in the case of *XP-NANKA*, by using a form NAN whose feature doesn’t exactly correspond to that of XP, it is suggested that the type of alternatives should be widened from the default type in order to find the value corresponding to XP. This widening gives rise to an effect that XP is not included among default and appropriate alternatives in the relevant context.

5. Negative evaluation NANKA as a Conventional Implicature item?

I claimed above that the derivation of negative evaluation meaning of NANKA and surprise meaning of *NP Comp XP* is mediated by a Gricean Conversational Implicature. By the way, these meanings don’t contribute to the truth condition of the sentence, but concerns only its appropriateness condition in a way similar to some other focus particles like *even*. The scalar additive meaning of *even* is often analyzed in terms of Conventional Implicature (see footnote 9). Recently, Kaplan (1999), Potts (2005), and Kratzer (2005) argue that expressive items, illustrated by an adjective *damn* in (61a) or an epithet *jerk* in (61b), should be analyzed by way of Conventional Implicature:

- (61)a. Ed refuses to look after Sheila’s damn dog. (Potts 2005: 158)
 b. Right after Chuck agreed to help out, the jerk boarded a plane for Tahiti (ibid.)

In this section, I will compare my analysis of negative evaluation NANKA and surprise *NP Comp XP* in terms of Conversational Implicature with such a recent analysis in terms of Conventional Implicature.

5.1. Criteria identifying expressive contents

Potts (2005) proposes some criteria, in order to identify expressive items.

(I) The expressive item, evoking a discrepancy between superficial structure and content, needs not to semantically take as argument its nominal sister, but the entire clause³¹. For example, negative evaluation

³¹ Two different views are proposed concerning syntax / semantics interface for items semantically scoping over the

expressed by *damn* in (62a) and in (62b) may not concern only *Sheila's dog* or *the machine*, but the fact that *we have to look after Sheila's dog* or the fact that *the machine didn't come with an electric plug*:

- (62)a. We have to look after Sheila's damn dog. (idem.166)
- b. Nowhere did the instructions say that the damn machine didn't come with an electric plug! (ibid.)

(II) The expressive content is not presupposed, but entailed. For instance, the presupposition evoked by *stop* in (63a), such that *John used to smoke before* may be cancelled. On the other hand, the speaker's evaluation expressed by *bastard* in (63b) cannot be canceled:

- (63)a. John stopped smoking. But in fact, he has never smoked.
- b. That bastard Corner was promoted. # But probably he in fact is a nice guy. (modified from Potts 2005: 157)

The hearer may contest the appropriateness of the speaker's evaluation, as in (64a), but the negation of the appropriateness does not at all influence the truth of the fact that *Corner was promoted*, differently from the ordinary negation, illustrated in (64b):

- (64)a. Anne: That bastard Corner was promoted. — Kyle: Corner is not a bastard. (idem.157)
- b. Anne: Corner got promoted. — Kyle: Corner did not get promoted. (ibid.)

(III) The expressive content is attributed in principle exclusively to the speaker. For example, in (65a), negative evaluation expressed by *damn* cannot be due to the subject of the sentence *Clinton*, but only to the speaker of the sentence *Bush*: (65a) can be followed by "although Clinton doesn't say that the Republicans are damn guys", but not by "but I am not sure if the Republicans are really damn guys". Similarly in (65b), we cannot get an interpretation such that each *Democrat* judges his *proposal* as *stupid*, but only the speaker may assume a role of the evaluator:

- (65)a. Bush: Clinton says the damn Republicans should be less partisan. (idem.160)
- b. Every Democrat with a *proposal for reform*_k claims the stupid thing_k deserves public support. (ibid)

(IV) The expressive content is independent from the truth conditional content. This is confirmed by (65b) which indicates that the expressive meaning expressed by *stupid* cannot enter into scope relation with the c-commanding quantificational operator *every*. Similarly, the expressive meaning of *damn* in (66a) and of *jerk* in (66b) can be influenced neither by negation or past tense:

whole sentence. Rooth (1996) claims that focus particles (*only*, *also*, etc.) in general take a proposition as their argument. He proposes, for (1a) involving a focus particle *only*, the LF syntax in (1b), where the sentence operator *only* takes scope over the whole sentence and refers, in its lexical semantics, to the alternative set C:

- (1)a. Only [MICHEL]_{Focus} is dead.
 - b. [_{IP} only(C) [_{IP} [_{IP} MICHEL_F is dead]~C] [~ is the focus interpretation operator, see Section 2.2.]
- On the other hand, Potts argues that an expressive adjective like *damn* is syntactically just an ordinary nominal modifier, and that the semantic composition of Conventional Implicature contents is effected totally independent from that of truth conditional contents.

- (66)a. It is just not true that Sheila's damn dog is on the couch! (idem. 159)
 b. That jerk Ed skipped work last week. #But Ed isn't jerk now, since he has started showing up regularly. (ibid.)

5.2. Negative evaluation NANKA and NP Comp XP construction

Negative evaluation NANKA and surprise meaning NP Comp XP effectively satisfy these four criteria.

(I) Even if NANKA is superficially attached to a nominal, it semantically takes a propositional argument: in (67a), what is put into question is the membership of Taro among those who came: in other contexts, Taro might be a good candidate, for example among members who will succeed in some examination:

- (67)a. Yorinimo yotte Taro nanka ga yattteki-ta
 of all others Taro the like Nom come- Pst “Of all others, the like of Taro came”
 b. Michel qui est mort! “MICHEL died!”

In the case of NP Comp XP, the form / content discrepancy is more clear. As noted in Section 3.1., when the complementizer is a subject form *qui*, this construction tends to be interpreted as conveying a surprise about an event rather than about a NP: (67b) is naturally interpreted as expressing a surprise towards the death of *Michel*.

(II) Negative evaluation of NANKA and surprise meaning of NP Comp XP cannot be canceled: it is impossible to follow (67a) by a clause suggesting a positive evaluation, as in (68a), or to follow (67b) by a clause expressing the subject's expectation, as shown in (69a):

- (68)a Yorinimo yotte Taro nanka ga yattteki-ta. #watasi wa manzoku dat- ta.
 of all others Taro the like Nom come- Pst I Top satisfied Cop-Pst
 “Of all others, the like of Taro came. #I was satisfied (with that)”
 b. A: Yorinimo yotte Taro nanka ga yattteki-ta.
 of all others Taro the like Nom come- Pst
 B: demo nani ga ikenai no?
 But what Nom wrong Interrogative “But what's wrong (about the fact that Taro came)?”
 (69)a. Michel qui est mort ! # J'ai prévu ça.
 “MICHEL died! # I predicted that”
 b. A: Michel qui est mort ! “MICHEL died!”
 B: Mais ce n'est pas étonnant. Il était malade depuis longtemps.
 “But it is not surprising. He was sick for a long time”

The hearer may contest the appropriateness of the speaker's evaluation or expectation, without influencing the truth conditional content, as observed in (68b) and (69b), just like in the expressive adjective *damn* in (64a).

(III) Negative evaluation of NANKA and surprise meaning of NP Comp XP are attributed in principle exclusively to the speaker: negative evaluation in (70a) or surprise meaning in (70b) are attributed to an individual other than the speaker, and these sentences are not fully acceptable:

- (70)a. *[Michel nanka ga yattteki-ta] koto ni John wa odoroi-ta, ga watasi wa manzokusi-ta.
 [Michel the like Nom come-Pst] fact to John Top surprised-Pst but I Top satisfied-Pst
 “John was surprised that the like of Michel came. But I was satisfied (with his coming)”
- b. *Ça lui est étonnant Michel qui est mort ! Mais je ne suis pas surpris.
 “It is surprising to him that MICHEL died. But I’m not surprised”

(IV) The independence of negative evaluation of NANKA with respect to the truth conditional content is confirmed by the fact that it is not influenced, as an expressive adjective *damn*, by a c-commanding quantifier: in (71), a sentential negation does not influence an evaluation given towards *Taro*, who remains negatively judged as a member who comes³²:

- (71) Taro nanka ko- nai.
 Taro the like come- Neg “It’s not the case that the like of Taro comes”³³

Taking into account these phenomena, the Conventional Implicature analysis of negative evaluation NANKA and French *NP Comp XP* seem to be appropriate. It should however be noted that, according to Potts (2005: 7), an expressive content is part of lexical meaning: “No lexical item contributes both an at-issue [=truth-condition] and a CI [=Conventional Implicature] meaning”³⁴. Following this definition, *NP Comp XP* should be excluded from the category of Conventional Implicature, since its expressive meaning might not be reduced to its lexical meaning. Furthermore, exemplification meaning of NANKA lacking an emotive content should be analyzed as pertaining to the truth-conditional content. The Conventional Implicature analysis strictly distinguishing truth conditional contents and expressive contents is forced to admit that negative evaluation NANKA is a completely different lexical item from exemplification NANKA. In a unificational viewpoint, such an analysis seems to be less appealing than the analysis advanced here recognizing, between the two uses of NANKA, both a similarity (i.e. common indefinite NAN) and two differences (i.e. different function of KA and

³² To *NP Comp XP* construction lacking a matrix, this test pertaining to the relevance of a c-commanding operator is difficult to apply.

³³ Another phenomenon seems to indirectly support Conventional Implicature analysis of negative evaluation NANKA. Potts (2005) argues that Conventional Implicature is instantiated not only by expressive contents, but also by parentheses conveying the speaker’s comment about the truth conditional content. This author observes that such parentheses cannot be related to a non referential nominal, like in (Ia), where the antecedent of a parenthesis, *a psychiatrist of hers* is bound by a universally quantified NP *every student*:

(I)a. *Every student spoke with a psychiatrist of hers, a caring individual who welcomes housecalls. (Potts 2005: 176)

b. *dare nanka / *dareka nanka (ibid.)
 who NANKA / someone NANKA

As noted in Section 2.4., Teramura (1991: 185) observes that negative evaluation NANKA cannot be attached to a non-specific or quantified nominal: NANKA cannot focalize a boundable item *dare* (*Person(x)*), indefinite pronoun *dareka* (*someone*), as observed in (Ib). For this test, *NP Comp XP* construction manifests different distributions: this construction seems to accept quantified NP, as shown in (II):

(II) Tout le monde qui est mort! “EVERYONE died!”

³⁴ According to this definition, a concessive conjunctive marker *but*, which is often cited as instantiating Conventional Implicature, is excluded from this category, just because it equally contributes the truth conditional meaning, that is, conjunction (\wedge). A similar perspective is advanced by Kaplan (1999) and Kratzer (2005), who claim that expressive items contribute not to the descriptive / truth-conditional content of a sentence, but to its appropriate use: Kratzer (2005: 8) argues that “the expressive meaning [...] would be the set of possible situations in which [the truth conditional content] is uttered appropriately.”

(ir)relevance of Conversational Implicature), and which further applies to WH exclamatives, as will be shown in Section 6.

6. Implication for WH exclamatives

In this section, I will suggest that the analysis proposed for negative evaluation NANKA and surprise *NP Comp XP* may provide a fresh look upon the analysis of WH exclamatory constructions. In effect, an indefinite boundable NAN(I) (*what*) is observed in both the focus particle NANKA and the adverbial NANTE observed in Japanese exclamatory clauses, like in (72a)³⁵:

- (72)a. kono hana-wa nante kireena no- da. (Ono 2002: 305)
 this flower-Top NANTE beautiful Comp Cop
 “Lit. It’s (surprising) that this flower is WHAT beautiful!”
 “How beautiful this flower is !”
- b. omae, [aitu-no idokoro] nante sit- teiru no- ka! (Numata 2003: 236)
 you, him-Gen place NANTE know-Progr. Comp-Interrog / Surprise
 “It’s (surprising) that you know his place-NANKA!”
- c. [jikan ni seekaku-na kimi ga tikoku-suru] nante! (*Gendai Nihongo Bunpoo* 4: 88)
 [hour Loc exact-be you Nom be-late] NANTE
 “It’s (surprising) that you who are punctual, YOU ARE LATE!”

It should be noted that NANTE may also be used as a focus particle in a way essentially similar to negative evaluation NANKA³⁶: in (72b), NANTE is attached to a nominal argument and may be replaced by NANKA, while, in (72c), it is attached to the whole sentence.

Similarly, in French (and in English too), a degree exclamation may be expressed by a construction superficially very similar to surprise *NP Comp XP*, that is, independent relative constructions, called Nominal Exclamatives and illustrated by (73a) which is semantically equivalent to a WH exclamative in (73b):

- (73)a. Les beaux biceps que tu as ! “The handsome muscles that you have!”
 b. Quels beaux biceps tu as ! “What handsome muscles you have!”

Such superficial similarities between i) focus particle NANKA / surprise *NP Comp XP* and ii) adverbial NANTE / Nominal Exclamative *NP Comp XP* seem to suggest semantic similarities between i) negative evaluation / surprise and ii) degree exclamation. From this perspective, I will examine the semantics of WH exclamatives below.

³⁵ According to Ono (2002), the syntax of (72a) is represented by (I): an adverbial NANTE remains in situ and is licensed by a copular DA, situated in the head of FocusP and bearing a feature [+ focus]:

(I) [_{FocusP} [_{FinitudeP} [this flower NANTE beautiful]] [_{Finitude} NO (nominalizer)] [_{Focus} DA]]!

Following this analysis, an adverbial NANTE is endowed with a [+focus] feature, as focus particle NANTE.

³⁶ In fact, diachronically, the immediate source of focus particle NANTE is not the same as that of exclamatory adverbial NANTE. According to *Nihongo Daijiten* (2003: 341), an adverbial NANTE stems from NANI+TO+IU (what + quotation + say), while focus particle NANTE is originated from NADO+TO (NADO +quotation) where NADO included NANI+TO (*Thing(x)*+quotation) (see footnote 21). Therefore, in spite of their different sources, both uses of NANTE etymologically involve a boundable item NANI (*Thing(x)*).

6.1. Previous semantic analyses of WH exclamatives

WH exclamatives are superficially similar to WH interrogatives in that both of them involve a WH item. In this section, I will review three recent semantic analyses of WH exclamatory clauses recognizing such a formal similarity³⁷.

6.1.1. Rexach (1996)

Rexach (1996: 154) claims that “interrogatives and exclamatives have basically the same denotations”, and that a semantic difference between them is that exclamatives are endowed with an illocutionary operator EXC: a WH interrogative in (74a) and a WH exclamative in (75a) thus are respectively represented by (74b) and (75b), where d indicates a degree variable, and a constant a , the speaker³⁸:

- (74)a. How tall is John? (Rexach 1996: 153)
 b. $\lambda w' [\iota d. Tall(w')(j,d) = \iota d. Tall(w)(j,d)]$ (idem.154)
- (75)a. How tall John is! (idem.156)
 b. EXC(a)(w) ($\lambda w' [\iota d. Tall(w')(j,d) = \iota d. Tall(w)(j,d)]$)

The semantics in (74b) “denotes a set of possible worlds in which *John* is as tall as he is in the actual world w ” (idem.154)³⁹. The semantics in (75b) expresses the speaker (a)’s “attitude (surprise, admiration, amazement) towards the fact that *John* is d -tall, where d is *John*’s degree of tallness” (idem.156).

WH degree exclamatives like in (75a) further evoke an extremity according to which “the degree of *John*’s tallness is greater than any other degree in a scale of degrees of tallness [which] is determined by the speaker’s expectations” (ibid.). Rexach represents such an extremity “through an ordering relation between degrees according to the speaker’s expectations ($<_a$) that generates the implicature in (76a) “where $w' \sim w$ is the accessibility relation between worlds” (idem.157). (76a) indicates that for every degree d' concerning tallness and for every world w' accessible from the actual world w , if, on the scale $<_a$ determined by the speaker’s expectation, d' is less great than the degree d observed in the actual world, then the fact that *John* is d' -tall in w' does not invoke a special attitude (ex. surprise) to the speaker⁴⁰. In other words, (76a) indicates that only the

³⁷ On the other hands, Elliott (1974) and Grimshaw (1979) convincingly show syntactic differences between them by means of several tests: (im)possibility of subject / auxiliary inversion, (im)possibility of polarity item *any*, (im)possible occurrence of an intensifying adverb like *very*, (im)possible occurrence of an indefinite article *a(n)*, as in *What a pretty girl she is!!* / **What a pretty girl is she?*, etc.

³⁸ More exactly, Rexach (1996: 154) argues that the illocutionary operator EXC is of a type $\langle i, \langle s, \langle \langle s, \iota \rangle, \iota \rangle \rangle \rangle$, where i is a type of the speaker’s variable and s is a type of the world variable, and is defined as in (I). According to this definition, the semantics of (75a) is represented by (II):

(I) Let a be the speaker, w a world (typically the actual world), p a proposition, and $P \in EMOT$ (the set of emotive properties). Then, $EXC =_{df} \lambda a_i \lambda w_s \lambda p_{\langle s, \iota \rangle} \exists P_{\langle s, \langle \langle s, \iota \rangle, \iota \rangle \rangle} [P(w)(p)(a)]$

(II) $EXC(a)(w) (\lambda w' [\iota d. Tall(w)(j,d) = \iota d. Tall(w')(j,d)])$ iff
 $\exists P \in EMOT [P(w) (\lambda w' [\iota d. Tall(w)(j,d) = \iota d. Tall(w')(j,d)])(a)]$

³⁹ It should be noted that in (74b), the degree variable is quantified by the iota operator ι responsible for the definitude, so as to suggest that the degree of tallness of *John* is determined in the actual world. In terms of Groenendijk & Stokhof’s definition of interrogatives, the semantics of (74a) may be represented rather by (I):

(I) $\lambda w \lambda w' [\lambda d. Tall(w)(j,d) = \lambda d. Tall(w')(j,d)]$

The semantics in (I) denotes a set of sets of possible worlds in which the set of degrees of *John*’s tallness is the same.

⁴⁰ This representation making use of accessible worlds may be correlated with the analysis proposed by von Stechow (1999) for a predicate *be surprised* if the scalarity is defined not between degrees themselves, but between accessible worlds. This modification will be effected in Section 6.2.

d-degree tallness of *John* in the actual world may be surprising to the speaker:

- (76)a. $\forall d' \in D_{tall} \forall w' \sim w [d' <_a d \wedge Tall(w)(d') \Rightarrow \neg EXC(a)(w) (\lambda w'' [\iota d'. Tall(w')(j, d') = \iota d'. Tall(w'')(j, d')])]$ [extremity]
- b. $\forall P \in EMOT \forall p_{\langle s, t \rangle} \forall x [P(w)(p)(x) \Rightarrow p(w)]$ [factivity]

Rexach further adopts widely accepted view that exclamatives are factive, and represents the factivity by (76b) indicating that, for every emotive properties *P*, every proposition *p* of type $\langle s, t \rangle$ (a set of possible worlds), and every entity *x*, if the speaker *a* shows an emotive property *P* towards a proposition *p* including an entity *x* in the actual world *w*, then the proposition *p* is true in *w*.

6.1.2. Zanuttini & Portner (2003)

Zanuttini & Portner (2003) claim, with Rexach (1996), that the denotation of WH exclamatives is the same as that of WH interrogatives. Inspired by an analysis of WH interrogatives as denoting a set of true answers (Karttunen 1977), these authors represent (77a) by (77b) denoting a set of contextually relevant propositions such that *there exist things (x) in a possible world w*:

- (77)a. What things he eats!
- b. $[[\textit{what things he eats}]]^{M, g, w} = \{p: w \in p \wedge p \in C \wedge \exists x [p = \{w: \textit{he eats things}(x) \textit{ in } w\}]\}$
(adapted from Zanuttini & Portner 2003: 52)
- c. $[[\exists x (\textit{he eats things}(x) \textit{ in } w_0)]] = 1$ [factivity]

These authors also adopt the factivity of exclamatives. The WH exclamative in (77a) thus presupposes that an appropriate value is given to the variable *x* in the actual world, that is, the proposition “there exist things (*x*) that he eats” is true in the actual world *w*₀, as in (77c)⁴¹.

These authors express the extremity of WH exclamatives in terms of “widening” depicted in (78) and formalized in (79a,b):

⁴¹ For the syntax of WH exclamative, Zanuttini & Portner (2003) argue, based on Paduan exclamatives where a WH item co-occurs with a complementizer, that its two semantic features (denotation of a set of propositions and factivity) are realized by two operators occurring in two distinct syntactic projections. The syntax of (Ia) is thus represented by (Ib), where a WH operator occurs in the specifier of the upper CP, while the specifier of the lower CP is occupied by a factive operator:

- (I)a. What things he eats!
- b. $[_{CP1} [\textit{what (WH) things}]_k [_{CP2} \textit{FACT} [_{IP} \textit{he eats } t_k]]]$ (adapted from Zanuttini & Portner 2003: 64)
- (II)a. The things that he eats!
- b. $[_{DP} \textit{the (FACT)}]_{CP} [_{NP} \textit{things WH}]_k [_{C} \textit{that} [_{IP} \textit{he eats } t_k]]]$ (adapted from Portner & Zanuttini 2005)

These authors further argue that a ‘Nominal Exclamative’ as in (IIa) equally denotes a set of propositions and manifests the factivity, and that these two semantics features are traced to its syntax (relative construction) illustrated by (IIb). Firstly, the movement of the antecedent activates an implicit WH operator accomplishing exactly the same function as an explicit WH item in WH exclamatives. Next the factivity is expressed by an definite article: in ordinary restrictive relatives, a WH operator scans the intersection of two properties offered by the head NP and the subordinate clause, for which the definite article specifies an appropriate value; on the other hand, in (IIa), the definite article only manifests its basic semantic feature, that is, existential presupposition, which is, according to Portner & Zanuttini, on a semantic pair with the factivity (presupposition of the truth of a proposition). Consequently, the semantics of the factivity and of set denotation are fully compositionally derived from the syntactic structure, both in WH exclamatives and Nominal Exclamatives.

- (78) “the WH phrase binds a variable for which an appropriate value cannot be found in the contextually given domain. In order to find the appropriate value, one must look outside of the domain” (idem.50)
- (79) WIDENING: for any clause S containing R_{widening} , widen the initial domain of quantification for R_{widening} , $D1$, to a new domain, $D2$, such that
- $[[S]]^{w,D2,<} - [[S]]^{w,D1,<} \neq 0$ and
 - $\forall x \forall y [x \in D1 \ \& \ y \in (D2 - D1) \rightarrow x < y]$ (idem.52)

According to (78), when stating an exclamation, the speaker looks for, in the initial domain (the context C in (77b)) consisting of a set of contextually relevant propositions, the one corresponding to the actual event. A WH item carries out this scanning function. After the scanning, the speaker cannot find an appropriate value, which he must widen the initial domain to find out. The exclamatory meaning is due to the speaker’s confirmation that the actual event cannot be found in the initial domain.

The formalization in (79) invokes a context change operator R_{widening} , and includes a super set condition in (79a) and a scale condition in (79b), which jointly express extremity. For an exclamatory clause *What things he eats!*, “ $[[S]]^{w,D2,<}$ is a set of true (in w) propositions of the form ‘he eats x ’ where x is drawn from the new domain $D2$, while $[[S]]^{w,D1,<}$ is the corresponding set for the initial domain $D1$. [(79a)] amounts to requiring that new things that he eats [= some surprising food, like very spicy habaneros] be added to the domain.” (idem.52). And (79b) says that for any member x among the initial domain $D1$ and for any member y among the widened part $D2-D1$, y is higher than x on the relevant scale.

6.1.3. Sæbø (2005)

Contrary to Rexach and Zanuttini & Portner, Sæbø (2005) argues that “there is no (need for an) exclamative syntax or semantics” and that “it is misguided to try to encode extremity” According to this author, in WH exclamatives, “the wh-word introduce[s] an equation between two values where one is bound to the actual world” and the other, to an accessible world: an exclamative *how cold it is!* is paraphrased by *that it is as cold as it is [effectively]*, and formalized by (80a):

- (80)a. $\lambda w [\lambda d. Cold(d)(w) = \lambda d. Cold(d)(w0)]$
- Combien il fait froid ! “How it is cold!” [including a WH item *combien*]
 - Qu’est-ce qu’il fait froid ! “Lit. What is it that it is cold!” [including a WH item *que*]
 - Qu’il fait froid ! “That it is cold!” [including a complementizer *que*]

The introduction of a possible world, that is, the “intensionalization” of a sentence” may be effected either by means of raising of a WH item to Spec-CP, as in (80b,c) or by the presence of a complementizer, illustrated by *que* (that) in (80d). Consequently, a degree exclamative denotes a proposition (a set of worlds) of the type $\langle s, t \rangle$, rather than a set of propositions $\langle \langle s, t \rangle, t \rangle$ (Karttunen-style) or a set of sets of worlds $\langle s, \langle s, t \rangle$ (Groenendijk & Stokhof-style), as argued by Zanuttini & Portner.

How does then a simple intensionalized sentence amount to expressing an extremity? Admitting the factivity of exclamatives, Sæbø argues that the intensionalization associated to exclamatives aims to distinguish them from assertions. He then advances an idea that “Utterances of necessarily or ostensively true $\langle s, t \rangle$ sentences are used as Exclamatives”, and that “you utter something because it is worth mentioning [...] and calling attention to a true proposition only makes sense if that proposition is to the speaker’s mind remarkable.”

6.1.4. Recapitulation

In Section 6.1., I reviewed three recent works treating the semantics of WH exclamatives. All of them admit the factivity induced by this construction. Rexach (1996) and Zanuttini & Portner (2003) further argue that the denotation of WH exclamatives is essentially the same as that of WH interrogatives. (Rexach directly inputs the speaker's attitude into the semantic representation by means of an illocutionary operator EXC). These two works also propose to express the scalar extremity; for this purpose, more explicit is Zanuttini & Portner's analysis in terms of a context change operator R_{widening} whose function is to indicate that the actual state is not found in the set of contextually relevant propositions. But it is not very clear how the conjunction of the semantics of a set of propositions (or a set of sets of possible worlds) and the factivity leads to such a semantics of widening.

On the other hand, according to Sæbø (2005), the denotation of WH exclamatives is merely an intensionalized proposition. Furthermore, the extremity should not be taken into account in the semantics, but only in the pragmatics. But such a pragmatic process should be more clarified, especially one must ask why "calling attention to a true [=factive] proposition only makes sense if that proposition is to the speaker's mind remarkable".

In the next section, I will show that the analysis advanced above for negative evaluation NANKA and surprise *NP Comp XP* may shed a new light upon the way how the semantic of widening is derived (Zanuttini & Portner) and how the pragmatics induces the extremity (Sæbø).

6.2. WH exclamatives revisited

Following Rexach and Zanuttini & Portner, I first assume that a WH exclamative in (81a) essentially denotes the same stuff as a WH interrogative *How tall is John?*, as shown in (36b), and induces the factivity in (81c). I then argue that the condition of 'widening' (i.e. the member observed in the actual world is not found in the initial domain consisting of contextually relevant members) is essentially the same as the appropriateness condition of negative evaluation. This claim boils down to representing the 'widening' effect in terms of (81d), which indicates that in any accessible world maximally corresponding to the ordering source, and distinct from the actual world w_0 , there is no degree of tallness of *John* equivalent to (as high as) the degree of his tallness observed in w_0 :

- (81)a. How tall John is!
- b. $\lambda w \lambda w' [d \in D_{\text{tall}} \wedge \lambda d. \text{Tall}(w)(j,d) = \lambda d. \text{Tall}(w')(j,d)]$ [=WH question]
- c. $[[\exists d \text{Tall}(w_0)(j,d)]] = 1$ [factivity]
- d. $\forall w [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w_0) \wedge d \in D_{\text{tall}} [\neg \exists d (\text{Tall}(w)(j,d) = \text{Tall}(w_0)(j,d))]]$ [extremity]

The 'widening' effect represented in (36d) is derived from (81b) and (81c) in a way similar to negative evaluation. In view of the Grician Quantity principle, the true proposition in (81c) conveys the most valuable information when the proposition is true only in the actual world, that is, when the degree of tallness of *John* observed in the actual world cannot be found among the set of degrees of his tallness in other accessible worlds. Intuitively, the WH exclamative in (81a), whose denotation is the same as that of a WH question, asks the degree of tallness of *John* in a situation where a specific value is obviously given to it in the actual world. The WH question is thus interpreted as a rhetorical question evoking a negative operator. As a result, at the post-LF level, the WH item *how* (a set of degrees) in (82a) maps onto a set of degrees excluding the value observed in the actual world (i.e.,

what degree other than the degree observed in the actual world), as shown in (82a'):

- (82)a. $[[\text{how}]] = \lambda P \lambda w \lambda w' [\lambda d. P(w)(d) = \lambda d. P(w')(d)]$
 $a' = \lambda P \lambda w \lambda w' [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w0)$
 $\wedge \lambda d. [P(w)(d) \wedge \neg \exists d. P(w)(d) = \lambda d. P(w0)(d)] = \lambda d. [P(w')(d) \wedge \neg \exists d. P(w')(d) = \lambda d. P(w0)(d)]]$
- b. $[[\text{How tall John is!}]] = \lambda w \lambda w' [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w0)$
 $\wedge \lambda d. [\text{Tall}(w)(j,d) \wedge \neg \exists d. \text{Tall}(w)(j,d) = \lambda d. \text{Tall}(w0)(j,d)]$
 $= \lambda d. [\text{Tall}(w')(j,d) \wedge \neg \exists d. \text{Tall}(w')(j,d) = \lambda d. \text{Tall}(w0)(j,d)]]$
- c. $= \forall w [w \in \max_{g(I,w)} f(I,w) \wedge \neg \exists w (w=w0) \wedge d \in D_{\text{tall}}] [\neg \exists d (\text{Tall}(w)(j,d) = \text{Tall}(w0)(j,d))]$

The WH exclamative *How tall John is!* is thus interpreted as a set of sets of accessible worlds distinct from the actual world and maximally corresponding to the ordering source, where the degree of tallness of *John* distinct from the degree observed in the actual world is the same (i.e. *To what degree distinct from the degree observed in $w0$ is John tall in a best accessible world w distinct from $w0$*), as shown in (82b). This semantics is paraphrased by saying that in any best accessible world distinct from the actual world, the degree of tallness of *John* is not as high as that of the actual world, as represented in (83c).

The relevance of the Quantity Principle is argued by Han (2002) for rhetorical questions (see Section 2.7.). As shown by (83a), rhetorical questions are compatible with a negative polarity minimalizer a :

- (83)a. She didn't say a word. (Zanuttini & Portner 2003: 50)
 b. What a nice guy! (ibid.)

Zanuttini & Portner (2003: 50, footnote 15) suggest a possibility of analyzing an indefinite article observed in WH exclamatives like in (82b) as a kind of negative polarity minimalizer. If this analysis is on the right track, the common compatibility with a negative polarity minimalizer may support a parallel treatment between rhetorical WH questions and WH exclamatives, and confirm the relevance of the Quantity Principle for the latter.

7. Concluding remarks

The ambiguity expressed by Japanese lexical focus constructions with NANKA and French syntactic focus constructions *NP Comp XP* at first glance seems mysterious from a compositionality viewpoint, since this ambiguity pertains to two seemingly opposite meanings: exemplification meaning indicates that the ordinary semantic value IS included in the focus semantic value, while negative evaluation or surprise meaning suggest that, under the speaker's perspective, the ordinary semantic value IS NOT included in the focus semantic value.

The compositional derivation of exemplification meaning is transparent in both constructions: it is achieved by means of an existential operator instantiated by KA in Japanese and by an existential matrix *il y a* in French. On the other hand, the derivation of negative evaluation or surprise meaning requires the factivity of the ordinary semantic value and the intervention of Grician Quantity Principle. In the Japanese cases, the interrogative operator KA maps onto a negative operator at the post-LF level, and NANKA boils down to indicating that the focus is not included in the set of alternatives denoted by NAN. In the French cases, the absence of a matrix leads to interpret the sequence "focus + implicit WH operator" as "x other than the focus in an accessible world distinct from the actual world".

I further argued that an inappropriateness associated with negative evaluation NANKA, but not with

NP Comp XP, might be reduced to feature neutralization of *NAN* part. The advanced analysis of negative evaluation or surprise meaning in terms of Conversational Implicature seems more appropriate than a recent analysis of expressive items by means of Conventional Implicature, and may further shed a new light upon the analysis of WH exclamationives.

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