

True to Fact(s)

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1. Distributional properties

• Notion of *distributional type* (Godard et Jayez 1994)

- Vendler (1967, 1972): types of entities and lexical distributions are correlated. The type assigned to an expression depends on the predicate of which the expression is an argument \Rightarrow type ambiguities with no independent justification.
- In contrast, our distributional types are intrinsic properties of lexical items. They are attached to the lexical head, not compositionally generated (\neq aspects, mass/count alternations, etc.).

Remark: the properties of *fait* ('fact') are NOT the same as those of *faits* ('facts') (already noted in Vendler, 1967 for *fact*).

We are going to show that *fait* has no characteristic distribution which would allow one to assign a distributional type to it.

• *Fait* and eventualities

- A fact is not an eventuality : it may not be the complement of temporal prepositions, the subject of *durer* ('to last'), *commencer* ('to begin'), *finir* ('to end'), *avoir lieu* ('to take place'), *apparaître* ('to appear'), *se créer* ('to be created', 'to emerge').

- (1)
 - a. *Pendant ce/le fait ('During this/the fact')
 - a'. Pendant la construction du bâtiment ('During the construction of the building')
 - b. Au moment du/de ce fait ('During/On the/this fact')
 - b'. Au moment de la construction du bâtiment ('During/On the construction of the building')
 - c. ??Après le/ce fait ('After the/this fact')
- (2)
 - a. *Le fait a duré trois ans ('The fact lasted three years')
 - a'. La construction a duré trois ans ('The construction lasted three years')
 - b. Un chauffeur de bus s'est fait agresser hier soir. *Le fait a eu lieu vers 20 heures ('A bus driver was assailed last night. The fact took place around 8 pm')
 - b'. Un chauffeur de bus s'est fait agresser hier soir. L'incident a eu lieu/s'est produit vers 20 heures ('... The incident took place/happened around 8 pm')

- Yet, *fait* can sometimes be the argument of *se produire* ('to happen') or of predicates like *nouveau* ('new'), *recent* ('recent'), *inopiné* ('sudden') which pertain to the temporal domain.
- (3)
- a. Un chauffeur de bus s' estait agresser hier soir. [?]Le fait s' est produit vers vingt heures
(‘A bus driver was assailed yesterday night. The fact happened around 8 pm’)
 - b. Il s' est produit un fait intéressant/grave/significatif ce matin
(‘A(n) interesting/important/significant fact happened this morning’)
 - c. Vu la tête qu' il a ce matin, il a dû se produire un fait quelconque
(‘In view of his expression this morning, some fact must have happened’)
 - d. * Le fait qu' un chauffeur s' est fait agresser s' est produit vers vingt heures
(‘The fact that a driver got assailed happened around 8 pm’)
- (4) Je voudrais attirer votre attention sur un fait nouveau/récent
(‘I’d like to draw your attention to a new/recent fact’)

• *Fait* and informational objects

To some extent, *Fait* resembles informational objects (of type *info-obj*).

- *Info-obj* nouns like *hypothèse* ('hypothesis'), *idée* ('idea'), *proposition* ('proposition'), *théorie* ('theory') are not compatible with temporal information.
- (5)
- a. *Pendant cette proposition/hypothèse/théorie
(‘During this hypothesis/proposition/theory’)
 - b. ^{??}Au moment de cette hypothèse (‘During/On this hypothesis’)
 - c. [?]Après cette hypothèse (‘After this hypothesis’)
 - d. *Cette hypothèse a commencé il y a quelque temps
(‘This hypothesis began some time ago’)
 - e. *Cette hypothèse s' est produite l' année dernière
(‘This hypothesis happened last year’)
- When they are spelled out by a proposition, some of these *info-obj* are uniquely determined by it.
- (6)
- a. Le/*Un fait que le président a/ait démissionné
(‘The/A fact that the president resigned/[lit.] have_{SUBJ} resigned’)
 - b. La/*Une proposition/hypothèse que la terre n' est pas une sphère parfaite
(‘The/A proposition that the earth is not really a sphere’)
- *Fait* is compatible with intellectual/epistemic predicates
- (7)
- a. Ce fait est simple/élémentaire/clair/sans équivoque
(‘This fact is simple/elementary/clear/unambiguous’)
 - a'. Cette théorie est simple/élémentaire/claire/sans équivoque
(‘This theory is simple/elementary/clear/unambiguous’)
 - c. Le fait est douteux/irréfutable (‘The fact is dubious/indisputable’)

c'. Cette théorie est douteuse/irréfutable ('This theory is dubious/indisputable')

However, *fait* has *not* the properties of *info-obj* nouns (Godard et Jayez 1994).

- It does not accept some combinations of predicates which are the hallmark of *info-obj* nouns.
- It may not denote a part of any other *info-obj*.
- It is not compatible with *vrai* ('true') and *false* ('false').

- (8)
- a. *Ce fait est évident mais superficiel ('This fact is obvious but superficial')
 - a'. Cette idée est évidente, mais superficielle ('This idea ...')
 - b. ??Ce fait se trouve dans l' œuvre de Favre ('This fact is to be found in Favre's work')
 - b. Cette idée/observation se trouve dans l' œuvre de Favre ('This idea/observation ...')
 - c. * Ce fait est parfaitement vrai/faux ('This fact is entirely true/false')
 - c. Cette idée est complètement fausse/vraie ('This idea ...')

• *Fait* has no characterization of its own in terms of predicates. Compare with *avoir lieu/se produire* ('to take place/to happen') or aspectual verbs, which select eventualities, and with physical predicates which select physical objects. Vendler proposes that only facts can be subject of *cause*. However, events also can (Peterson, Asher). Actually the *causer* test does not tell anything substantial.

- (9)
- a. Le fait que Jean a démissionné a causé de nombreux ennuis ('The fact that John resigned caused a lot of troubles')
 - b. L' orage a causé de nombreux dégâts ('The storm caused great damage')
 - c. La proposition spinoziste que Dieu est la Nature a causé un énorme scandale dans certains milieux ('Spinoza's proposition that God is Nature caused a deep shock in some quarters')
 - d. Le patron/Ce livre/ votre attitude a causé une certaine surprise ('The boss/This book/Your behaviour caused some surprise')

Conclusion

Fait is neither eventuality-denoting nor of type *info-obj*.¹ More importantly, it has no specific distribution.

2. *Fait* as an abstract object in the sense of Zalta (1997, 1999)

• Our analysis in a nutshell

1. *Fait* denotes an *abstract object* (a.o.). This means that: (i) it is of type *object*, (ii) this object is not in the world.

¹ In this respect, note that Vendler mentions propositions but not informational objects.

2. *Fait* does not denote an *info-obj*, no matter whether it is abstract or not. This contrasts with the analysis of facts in situation semantics, where they are *infons* supported by actual situations (see Zalta,1993 for a discussion of situation semantics).
- (10) a. *Regardez le fait que j'ai écrit au tableau, et dites-moi s'il est pertinent
(‘Look at the fact I wrote on the blackboard and tell me whether it is relevant’)
b. *Dessiner/photographier un fait (‘To draw/take a picture of a fact’)
c. *Rappelez-nous quel est le haut personnage mentionné dans le fait que vous venez de citer
(‘Remind us who is the VIP mentioned in the fact you just quoted’)
d. * Le maître a rappelé le fait selon lequel la terre n'est pas n'est pas une sphère parfaite
(‘The school master reminded us the fact that the earth is not really a sphere’)
- (11) a. *Regardez la maison que j'ai écrite au tableau, et dites-moi si elle est belle
(‘Look at the house I wrote on the blackboard and tell me whether it is beautiful’)
b. Dessiner/ photographier une maison (‘To draw/take a picture of a house’)
- (12) a. Regardez la proposition que j'ai écrite au tableau, et dites-moi si elle est correcte
(‘Look at the proposition I wrote on the blackboard and tell me whether it is correct’)
b. Rappelez-nous quel est le haut personnage mentionné dans la déclaration que vous venez de citer
(‘Remind us who is the VIP mentioned in the declaration you just quoted’)
c. Le maître a rappelé l'hypothèse selon laquelle la terre n'est pas une sphère parfaite
(‘The school master reminded us the hypothesis according to which the earth is not really a sphere’)
3. A fact warrants either that a certain event takes place or a certain proposition is true (at least to some ‘degree’) \Rightarrow intrinsic (\neq accidental) connection between a fact and an event or a proposition.
- (13) a. Le président a démissionné. C'est un fait/Ce fait est surprenant
(‘The president resigned. This is a/This fact is surprising’)
b. La démission du président constitue un fait nouveau
(‘The president’s resignation constitutes a new fact’)
c. La première révolution constitue un fait majeur de notre histoire
(‘The first revolution constitutes a major fact of our history’)
d. Que le président a/ait démissionné constitue un fait surprenant, mais c'est un fait
(‘That the president resigned is a surprising fact but it’s a fact’)
- (14) – Le président a-t-il démissionné ?
(‘Did the president resign ?’)
– Il ne semble pas que le fait soit avéré/Le fait est douteux
(‘The fact does not seem to be ascertained/The fact is dubious’)

In view of (3), a fact contains some information on its ‘companion event’ or its ‘companion state of affairs’ (in (13) the president’s resignation or the state of affairs in which the president resigned).

• Zalta’s abstract objects (a.o.)

The notion of a.o. is intended to capture the difference between satisfying a property (in the ordinary sense of model theory) and being essentially characterized by it. Ordinary objects *exemplify* properties while a.o. *encode* them.

Numbers, fictional characters (Ulysses, Sherlock Holmes), and, for us, certain *info-obj* denotations of nouns (*proposition*, *hypothèse*, etc.) are a.o.

A.o. are sets of properties. An a.o. encodes a property F iff F is a member of the set which constitutes this a.o.

A.o. are non spatio-temporal but can be the argument of spatio-temporal predicates. If we say that *Mary dreamt of Sherlock Holmes*, presumably this dream took place at some time and spatial location. In this case, the property of Mary dreaming of t (λt . Mary dreams of t) applies to the *proxy* of the a.o. Sherlock Holmes. Proxies are necessary to avoid non well-foundedness: they are the delegates of a.o. in the domain of individuals. Their abstract origin surfaces in the fact that they have no intrinsic spatio-temporal property (they don’t last, begin, etc.).

• *Fait* as an a.o.-denoting noun

We propose that *fait* denotes an a.o. which encodes the property of warranting that a certain proposition is true or a certain event takes place. This is consistent with, but not equivalent to, the two contradictory intuitions found in the literature (facts are parts of the world vs facts are informational).

This does NOT entail that facts are truthmakers in the usual sense, since, being abstract (not ordinary) objects, they are not parts of the world. This does NOT entail either that facts are truthbearers or informational entities.

Facts are those a.o. which encode the *function* of being a truthmaker. An admissible paraphrase for *le fait que Marie est venue* (‘the fact that Mary came’) is : “this object which, *by definition*, is such that Mary came”. This contrasts with the event of Mary coming or the s.o.a. described by *Mary came*, which are objects such that Mary came, but which are not so by definition.

• How do we take care of distributional problems?

1. Why is *fait* argument of only certain predicates for eventualities ? It is well-known that certain predicates can use informations associated to a noun, in addition to its main distributional type(s). See, for instance, Mel’čuk’s lexical functions, Pustejovsky’s coercion or Godard and Jayez’s interpolation. If the lexical representation of *fait* includes the eventuality which constitutes the ‘companion’ of the fact, predicates which have the ability to fetch this information can combine with it and appear externally to be ‘compatible’ with *fait*. This is the case for *se produire* (‘to happen’), *nouveau* (‘new’), *recent* (‘recent’), *inopiné* (‘sudden’), etc.

2. This does not square well with the incompatibility of *se produire* with *le fait que* S. In our hypothesis, *fait* includes the property of being such that ϕ , for ϕ a certain formula. In contrast with NPs which can denote events, that is dynamic s.o.a. (*Mary's coming, l'arrivée de Marie*), the truthmakers of S's are 'static' s.o.a. In what sense?
 - The eventuality *mentioned* in S can be an event or a state (*Mary read the book, Mary is parked next to the library*),
 - the truthmaker of S is not the eventuality itself but its persistence. When Mary's coming is over, this does not destroy the truth of *Mary came*. The eventuality disappears, but the existence (at some time) of the eventuality is a permanent aspect of the world.²

So, we assume that the companion of the fact in *le fait que* S is a static or persistent truthmaker. Since states cannot *happen*, *se produire* is anomalous.
3. Why can't a fact be true or false while it can be *douteux* ('dubious') or *avéré* ('ascertained')? Redundancy cannot be an explanation (*contra* Vendler), since *un fait avéré* should be redundant and *un fait douteux* contradictory in this case. We use the same strategy as in 1. Certain predicates (*vrai* and *faux*) require that the noun be a truthbearer (a proposition, an hypothesis, etc.), while others can inspect associated information, the 'companion' proposition in this case.

3 Zalta's system

• Syntax

A 'third-order' predicative language with λ -expressions.

1. Terms
 - individual variables and constants,
 - a.o. variables and constants,
 - def. descriptions $\iota(\phi)$, where ϕ is a formula.

We use t as a metavariable for terms, a as a metavariable for a.o.

2. Predicates
 - n-ary predicate variables and constants (metavariable F). The number of places is indicated by a superscript. F^1 denotes properties. Propositions are F^0 entities. 1-place predicates *happen* and *obtain*.
 - λ -predicates $\lambda t_1, \dots, t_n. \phi$, where ϕ is a formula containing no encoding subformula,
3. Formulas
 - Atomic exemplification formulas $F^n(t_1 \dots t_n)$,

² Cf. the persistence of infons in situation semantics, the Davidsonian logical form $\exists e \phi$, the notion of resulting state in Moens' approach, etc.

- atomic encoding formulas aF^1 ,
- $\neg\phi, \forall t \phi, \Box\phi$, etc.

• Logic

Essentially **S5** + the usual treatment of λ -terms (lambda conversion, variable renaming, etc.)

• Models (intuitive presentation)

As usual, predicate extension varies across worlds. So, for a given set of worlds, a predicate is a function $\text{Worlds} \rightarrow \text{powerset of the set of entities in the domain of interpretation}$. An a.o. is a set of properties, hence a set of such functions. An a.o. a encodes a property F iff $F \in a$.

The idea behind encoding is that of *stipulation*. Properties are encoded by a.o. because they constitute their definition (not because the a.o. *satisfy* them).

Remark This does *not* entail that the theory of a.o. acknowledges only rigid definitions, thus excluding prototypes, similarities and the like in conceptual systems. We can perfectly well use *sets* of abstract objects to model concepts, meanings, etc.

Problem If a.o. are arguments of predicates, non well-foundedness can ensue. E.g., $F(a), G \in a, G(a')$ (with $a \neq a'$), $F \in a'$, so G is predicated of a' , that is of a set of properties which contains a property (F) which applies to a set of properties (a) which contains G .

Since it would not be interesting to assume that a.o. are intrinsically circular (they have no liar-like properties *qua* a.o.), a.o. have to be kept separated from other (ordinary) objects in some way.

• Models (basics)

We use a standard modal model (with a many-sorted ordinary universe).

- **W** : a set of worlds,
- **O** : a set of ordinary objects. $\mathbf{O} = \mathbf{O}^i \cup \mathbf{O}^e \cup \mathbf{O}^{\text{soa}}$ (individuals, events, s.o.a.),
- **S** : a set of special objects, which are, technically, individuals ('urelements'),
- **A** : a set of abstract objects,
- \mathbf{R}_n for each $n < \omega$: the domain of n-place relations, with $\mathbf{R} = \cup_{n < \omega} \mathbf{R}_n$.
For $n > 0$, each relation $\mathbf{R}^n \in \mathbf{R}_n$ is a subset of $(\mathbf{O} \cup \mathbf{S})^n$.

Remark One has a distinct universe of relations (instead of just the usual predicate/extension pairing) because we are in higher-order logic.

Predicates can have normal (ordinary) *and* abstract object names as arguments. Special objects replace the a.o. when the latter would be arguments of predicates.

E.g., let *read* be a reading relation between readers and things read. This relation is a set of pairs (x,y) such that x reads y . Presumably $x, y \in \mathbf{O}$ (readers and things read are only ordinary

objects). In contrast, for an *imagine* relation, things imagined can be a.o., in which case $y \in \mathbf{S}$ (*Conan Doyle imagined Sherlock Holmes*).

• A.o. and Proxies

A special object is the representative in the ordinary life of one or several a.o.
 \mathbf{A} : the domain of a.o., $\mathbf{A} = \mathcal{P}(\mathbf{R}_1)$,³ π a function $\mathbf{A} \rightarrow \mathbf{S}$, which, returns, for each a.o., its *proxy*. If o is ordinary, $\pi(o) = o$, else $\pi(o) \in \mathbf{S}$.

• Interpretation

Finally a model is a 6-tuple $(\mathbf{W}, \mathbf{R}, \mathbf{O}, \mathbf{S}, \pi, \|\cdot\|)$. With respect to a given assignment g , we have in particular:

- $\|t\|_{g,w} = g(t) \in \mathbf{O} \cup \mathbf{S}$, if t is a variable, $\|t\|_{g,w} = \|t\| \in \mathbf{O} \cup \mathbf{S}$ if t is a constant,
- $\|a\|_{g,w} = \|a\|_g \in \mathbf{A}$, $\|a\|_{g,w} = \|a\| \in \mathbf{A}$ (a.o. variable/constant)
- $\|F^n\|_{g,w} \in \mathbf{R}_n$,
- $\|F(t_1 \dots t_n)\|_{g,w} = \text{True}$ iff $(\pi(\|t_1\|_{g,w}), \dots, \pi(\|t_n\|_{g,w})) \in \|F\|_{g,w}$,
- $\|tF\|_{g,w} = \text{True}$ iff $\{\|F\|_{g,w} : w \in \mathbf{W}\} \in \|t\|$.
- The usual conditions on $\&$, \neg , \square , etc.

For *Conan Doyle imagined Sherlock Holmes*, we have:

$\|\text{C.D. imagined S.H.}\|_{g,w} = \text{True}$ iff $(\|\text{C.D.}\|_{g,w}, \pi(\|\text{S.H.}\|_{g,w})) \in \|\text{imagined}\|_{g,w}$.

Note that $\|\text{S.H.}\|_{g,w}$ denotes the set of properties which characterize the fictional entity *Sherlock Holmes* and that $\pi(\|\text{S.H.}\|_{g,w})$ is a special object (a member of \mathbf{S}).

4 Abstract objects of several kinds

• Abstract objects

In Zalta's system, a.o. necessarily exemplify the property of not being spatio-temporal. However, the property of not being spatio-temporal is constitutive of a.o. (like the property of being a detective for Sherlock Holmes), so we propose that a.o. *encode* it.

An a.o. is a set of properties which contains the property $\lambda t. \square(t \text{ is not spatio-temporal})$.

• Propositional properties and warranting properties

Propositional property: any property of form $\lambda t. p$, where p is a proposition: "being such that p ". This is what we used in the paper.

Easy extension: a warranting property is any property of form $\lambda t. \phi$ where ϕ is a closed formula.

³ Note that \mathbf{R}_1 is the set of subsets of $\mathbf{O} \cup \mathbf{S}$, that is $\mathcal{P}(\mathbf{O} \cup \mathbf{S})$. So, $\mathbf{A} = \mathcal{P}(\mathcal{P}(\mathbf{O} \cup \mathbf{S}))$.

- **Abstract truthmakers and abstract truthbearers**

- (15) Let ϕ be a closed formula. An object is an abstract truthmaker for ϕ iff it is an a.o. which encodes the warranting property $\lambda t. \phi$.
- (16) The word *fait* denotes an abstract truthmaker.

Symmetrically, An object is an abstract truthbearer iff it is an a.o. which encodes the property $\lambda t_1. (\exists t_2 (\lambda t. t_1 [t_2]) \vee \neg \exists t_2 (\lambda t. t_1 [t_2]))$.

An abstract truthbearer encodes the property of being warranted or excluded.

- **Actuality and factuality**

If *fait* is not factive, how do we explain a contrast such as *Jean a nié le fait que la suspect était dans la maison* ('John denied the fact that the suspect was in the house') vs **Je nie le fait que le suspect était dans la maison* ('I deny the fact that the suspect was in the house')? In the latter case, the speaker expresses the belief that the propositional description 'the suspect was in the house' has no ordinary warrant (no corresponding s.o.a.). In contrast, *Je mets en doute le fait que le suspect était dans la maison* ('I [lit.] cast doubt upon the fact that the suspect was in the house') is possible because the speaker does not express so strong a belief.

If we assume that the set \mathbf{W} of possible worlds corresponds to an information state (Stalnaker, Veltman), the restriction on *fait* is simply (17).

- (17) An abstract truthmaker containing $\lambda t. \phi$ cannot be interpreted in a model where the info. state \mathbf{W} accepts $\neg\phi$.

Remark Our treatment does not constrain facts to be actual. E.g., some speakers accept sentences like *Le fait que le ministre soit coupable embarrasserait le gouvernement* ('The fact that the minister [lit.] be guilty would be a hindrance for the government). To take such cases into account, we have to embed facts into conditional info. states. Let \oplus be the update operation defined by: $\mathbf{W} \oplus \phi = \{w : w \in \mathbf{W} \ \& \ \phi \text{ is true in } w\}$. Let \oplus_{cond} the operation defined by:

$$\mathbf{W} \oplus_{\text{cond}} \phi = \{w^{\text{cond}} : \exists w (w \in \mathbf{W} \ \& \ \phi \text{ is true in } w \ \& \ w^{\text{cond}} \equiv w)\}.$$

Let a be the denotation of 'the fact that the minister [lit.] be guilty' and F the property of being a hindrance for the government, then,

$$\mathbf{W} \oplus_{\text{cond}} F(a) = \{w^{\text{cond}} : \exists w (w \in \mathbf{W} \ \& \ F(a) \text{ is true in } w \ \& \ w^{\text{cond}} \equiv w)\}.$$

We know that $F(a)$ is true in w iff $\pi(a) \in \|F\|_w$. This does entail in any way that, if $a = \{\dots, \lambda t. \text{the minister is guilty}\}$, 'the minister is guilty' is true in w .

- **Encoding and exemplification**

While a.o. can exemplify properties, in Zalta's system they have not to exemplify the properties they encode. We propose instead that they have to.

(18) In C.D.'s mind S.H. is a genius detective

Zalta assumes that a.o. enter descriptions of actual cognitive processes as proxies. This makes good sense since such descriptions refer to physical situations. But, in this case the property of being a genius detective applies to a proxy. Virtually any a.o. which enters descriptions of cognitive processes gives rise to a proxy-property association. In addition, if the proxy of an a.o. can exemplify a property of this object, one is inclined to assume that it *must* exemplify it. It would be strange that it does not exemplify the property which contributes the definition of the a.o. of which it is the proxy. This motivates the principle we adopted in the paper.

(19) If an a.o. encodes the property F , its proxy exemplifies it in every world.

However, nothing essential hinges on this choice.

5 Facts and their companions

- Remember that, as the denotation of the word *fait*, facts are abstract warrants. Intuition frequently found in the literature: facts are coupled with states of affairs and propositions. This is to be expected in the present approach since facts mention formulas, including propositions ($\lambda t. \underline{p}$) and warrants (events or s.o.a.) ($\lambda t. \theta$).

However, since facts are *abstract* warrants, it seems there is a radical gap between s.o.a. and facts. Facts are certainly not s.o.a. (in the sense of Armstrong for instance), but they can be associated with them. If, in some information state, it is a fact that ϕ , there is a s.o.a. which corresponds to ϕ (can be described by ϕ). This s.o.a. is not the denotation of the word *fait* but make up the circumstances which motivate the use of the expression *le fait que* ϕ .

(20) **Ordinary truthmaker**

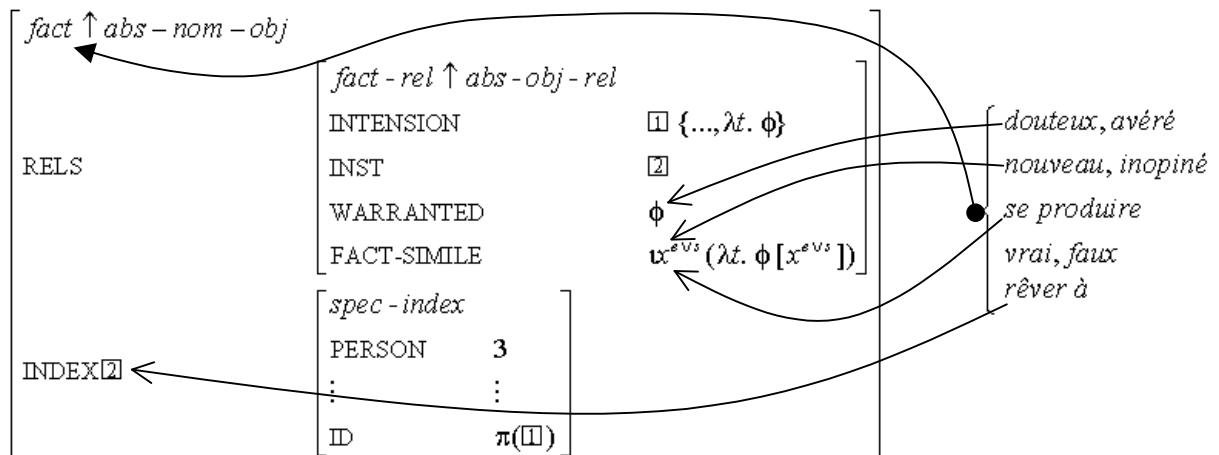
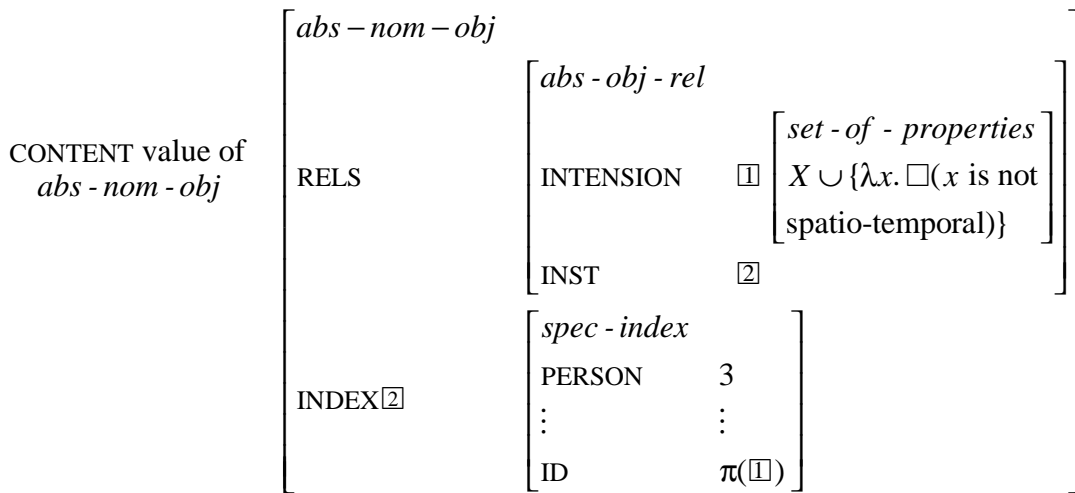
If ϕ is a formula, its ordinary warrant is this ordinary object which exemplifies the property of being such that ϕ (i.e. $\iota (\lambda t'. \phi [t])$).

(21) **Fact-simile**

The *fact-simile* of a fact $\{ \dots, \lambda t. \phi \}$ is the ordinary truthmaker of ϕ .

• Basic lexical representation in HPSG

The CONTENT value of nouns is of type *nom-obj*. We divide this type into *ord-nom-obj* (*book, declaration, etc.*) and *abs-nom-obj*. Nouns of type *abs-nom-obj* get the same features RELS and INDEX but the values are different from those of *ord-nom-obj*.



• General combination constraints

Following in part (Jayez & Godard 1995), we assume that predicates apply to nouns according to the following rules.

1. The predicate first checks whether the distributional type is appropriate, then whether the CONTENT sort (e.g. *fact*) is appropriate. At this stage, any failure is fatal. This is why *vrai* and *faux* do not combine with *fait*.
2. Depending on the CONTENT sort and on the predicate itself, the predicate can fetch information from different parts of the CONT structure. There are at least three different cases.
 - a. The predicate bears on the INDEX value (example: *rêver de*, ‘to dream of’, with an a.o.)
 - b. The predicate can consult the RELS value and the RELS value only.
 - c. Peripheral information is also accessible. The predicate can consult the value(s) of associated information attributes (e.g. a QUALIA attribute as in Pustejovsky, 1995). See the famous *to begin the book*.

6 Conclusion

- Importance of the notion of a.o. It transposes ontological functions (being a truthmaker or a truthbearer) to the definitional level.
- Our account offers a description of *fait* but also of the main reason why its description raises so many problems: confusion between the intrinsic properties of the word and the interpretive properties of the predicates.