Semantic and Conceptual Blocks
From Language to Concepts

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1. The SBT Approach to Linguistic Meaning

A recent article with this title could be read in the press:

(1) A convict hangs himself with his anti-suicide kit.

It seems obvious to me that a representational description, hence a propositional one, would not capture what this utterance communicates, at least in relation to a particular word linking that I will try to make explicit.

In a propositional framework, this kind of sentence is said to have a particular structure, as it does not attribute a property to an object — as would a sentence with a proper noun or a definite NP in the subject position. Indefinite subject sentences like (1) are believed to have a ‘thetetic’ structure (Kuroda, 1973): they do not presuppose the existence of an object, as ‘categorical’ sentences such as The dog is barking do. A thetic sentence, instead, posits the existence of an object, which in this case would give something like It exists a prison convict that hanged himself with his anti-suicide kit. From this point of view, the sentence posits a sum of properties that defines a given object: being a prison convict + to have hanged himself with his anti-suicide kit. Now, the structure of the sentence establishes something very different to a set of properties or even the existence of an object having certain attributes. This sentence states something rather odd, something ‘pretty weird’. Moreover, this incongruity does not seem to stem from a cultural belief or from some knowledge about the world. It stems from the wording of the sentence. The sentence brings together two semantically distant elements: to hang one-self and to use the anti-suicide kit. But this distance is of a particular kind, as the elements are connected in a way that, given their proximity, creates a feeling of oddness, like being a child and having white hair or to work a lot and not to be tired. This sentence proposes a stunning connection. What kind of connection is it?

Another example of this sort of link is found in this sentence:

(2) Peter has become greedy.

A propositional description would typically say that two informations are conveyed: one that attributes the property of not being greedy in a particular period (in the past) and another one stating that Peter is greedy in the present. However, imagine that someone asks why (do you think he’s become greedy)? The question targets neither a reason for Peter's lack of greed in the past, nor to a reason for Peter's greed in the present. A why question would here target the transformation from Peter not being greedy to Peter being greedy (Lescano, 2012). This fact would suggest that what counts in (2) is not a kind of package containing two contradictory informations, but a transition, a transformation from one state to the other. The same thing applies to the sentence in italics, taken from Recanati (2004):

(3) In the summer of 1829, Aloysia Lange, née Weber, visited Mary Novello in her hotel room in Vienna. Aloysia, the once celebrated singer, now an old lady of sixty-seven... gave Mary the impression of a broken woman lamenting her fate.

The adverb now posits a transformation from being a celebrated singer to being an old lady of sixty-seven and does not allow us to properly describe the sentence using a propositional structure content such as $\exists x (\text{Aloysia}(x) \& \text{celebrated in } T1(x) \& \text{old lady of sixty-seven in } T2(x))$. 
The point I want to make here is that there are syntactic structures and lexical items that seem to express a special link that brings together distant semantic elements. Utterances expressing this sort of link are sometimes the statement of an odd situation, as in (1), and sometimes look pretty much like the statement of a transformation, as in (2) and (3).

However, what we are provisionally calling ‘semantic linking’ does not only concern distant elements, be it odd combinations or transformations. Take a generic sentence like:

(4) Bankers are greedy.

By saying (4) you will not be stating that there is some accidental property in bankers that make them greedy, you will be saying that being a banker is connected by something like a coherence link, to greed. You won’t either be uttering any statistically proven or (provable) information. This kind of remark guides some of the work carried out on genericity, for example Krifka et al. (1995), who try to account for the intuition that in order to interpret (5) as a generic sentence (hence not speaking about a particular child) you have to accept the fact that being born in Rainbow Lake is the cause of left-handedness.

(5) A child born in Rainbow Lake is left-handed.

Just as our first three examples expressed a link between distant elements, (4) and (5) express a ‘proximity’ link between semantic elements. One of the notions that has been proposed to theorize this feeling is nomicity (Dahl, 1975), which is, as a matter of fact, the notion used by Krifka et al. (1995) in their analysis of (5), based on an inductive approach to meaning, that is, an approach where what counts is rather the elements that verify the proposition than the conceptual component of meaning. Nomic (or ‘law-like’) judgments are judgments that are true in a set of ‘alternative worlds’ (physically possible worlds) in addition to being true in the ‘real world’. They are opposed to accidental judgments, which are true only in the actual world. Krifka et al. reinterpret this notion by saying that this kind of sentence concerns ‘essential properties’ — even if they confess that there is no available definition of such a thing. Be that as it may, an inductive description of this proximity link is not appropriate, as it does not describe the link, namely between being a banker and being greedy or between being born in Rainbow Lake and being left-handed. It only says that a correspondence is verified everywhere, and this is not at all the same thing. A perfect correspondence between being a banker and being greedy (in other words, the fact that if you take a banker there is a 100% probability that he or she is greedy) is not the same thing as seeing ‘bankerhood’ interpenetrated with greed.

One way to explain these semantic links is to apply the Semantic Blocks Theory, (SBT) (Carel, 2011). In this section, I will briefly expose the SBT, and I will argue, in section 2, that this theory is not only adequate for the description of linguistic meaning but that it is also useful to account for what a ‘concept’ is.

1.1 Argumentative Predicates

The whole architecture of SBT is mounted on the assumption that there are two major semantic entities: argumentative predicates and semantic blocks. Let us first introduce argumentative predicates.

Argumentative predicates were first defined by Carel as ‘sets of argumentative linked sentences’ (cf. for instance Carel, 2005). There are two fundamental kinds of links: ‘normative’ and ‘transgressive’. The normative link is something like a cause-consequence connection between two terms. In this sense, the sentences I was late and there was a traffic jam are normatively linked in (6). Subsequently, (6) is a member of the set of normatively linked sentences determined by the argumentative predicate that can be named traffic jam SO (to be) late, where SO indicates that the predicate belongs to the normative class:

(6) I was late because there was a traffic jam.
The argumentative predicate is a ‘set of argumentative linked sentences’ in this sense that the very same predicate traffic jam SO to be late contains, as well as (6), other connected sentences like (7):

(7) A huge traffic jam produced a delay of two hours in the arrival of the President.

In fact, traffic jam SO to be late is but the name of the normatively linked sentences where the English expression traffic jam is ‘normatively’ connected to the English expression ‘to be late’. Of course, you have noticed the ‘something like a cause-consequence connection’ in the definition of normative predicates: in fact, they are not cause-consequence connections. Let us develop this point.

Traditionally, causality is defined on a rational basis, as it is seen as a complex process involving rational activity. On the contrary, normativity is not a process (no intermediate steps form it) neither, hence, a rational activity. It is just the kind of a predicate, like when linguists say that the predicate ‘being round’ is a ‘stative’ predicate. Now, the only way to get to know that ‘being round’ is a ‘stative’ predicate is by showing that you cannot easily say something like It is being round right now. That is to say that when you accept that something is a predicate and that you classify predicates into kinds, you can determine the kind of predicates on a linguistic basis. Normativity, unlike causality, is defined on a linguistic basis. To put it plainly, normative predicates are predicates that can be paraphrased by connecting two terms by a so-called ‘causal’ or ‘consecutive’ linguistic element, like A hence B, if A then B, A therefore B, B because A, and so on. A normative predicate is noted A SO B, where ‘SO’ indicates only that it is a normative predicate and not that the actual word so belongs to the predicate.

The other kind of argumentative predicates are sets of argumentative linked sentences where the link is (again) ‘something like’ the opposition usually analyzed as an ‘inefficient cause’:

(8) I wasn’t late in spite of the traffic jam.

In (8), the sentences I wasn’t late and the traffic jam (that can be considered a complete sentence if we suppose that it stands for the traffic jam I was in) are linked by a transgressive connection thanks to the expression in spite of. We have here the same pattern as before: SBT sees only one entity where traditional analysis posits a two-step description. Indeed, it is usually accepted that when we say something like (8), we are giving two informations: 1) that traffic jams make people late and 2) that it was not the case in this particular situation that a traffic jam made me late. Notwithstanding, SBT’s originality is to give transgressive connection the same primitive status that it gives to normative ones. In the SBT framework, the semantic content of utterance (8) would be (partially) described as one single transgressive predicate, noted traffic jam HOWEVER not to be late, where HOWEVER indicates the transgressive nature of the predicate. One of the properties of transgressive predicates is their ability to be paraphrased by using ‘contrastive’ connectors like however, although, even if and so on.

One can wonder what it means to say that a given utterance ‘communicates a set of argumentative linked sentences’, that is what is stated when we say that the semantic content of an utterance ‘contains an argumentative predicate’ if we recall the definition of argumentative predicates given above. One way to answer is that what is retained of the set of (infinite) argumentative linked sentences that constitute an argumentative predicate is not the simple list of the linked sentences but what they have in common, that is, the normative or the transgressive link between two linguistic elements. Thus, to say that by uttering I wasn’t late in spite of the traffic jam we can communicate the argumentative predicate traffic jam HOWEVER not to be late means that the utterance expresses a particular argumentative link between traffic jam and not to be late.

Let us turn back now to our first sentences. I have presented (1), (2) and (3) as instantiating a sort of ‘distance link’, and (4) and (5) as manifesting something like a ‘coherence link’. These intuitive terms can be replaced now by the technical SBT terms by saying that the first group expresses transgressive predicates, while the second expresses normative predicates. I will note the communicated argumentative predicates under the sentences in question.
A prison convict hangs himself with the anti-suicide kit.

Peter has become greedy. not (to be) greedy at a certain past period HOWEVER (to be) greedy

In the summer of 1829, Aloysia Lange, née Weber, visited Mary Novello in her hotel room in Vienna... Aloysia, the once celebrated singer, now an old lady of sixty-seven... gave Mary the impression of a broken woman lamenting her fate.

Bankers are greedy.

to be a banker SO to be greedy

A child born in Rainbow Lake is left handed.

to be born in Rainbow Lake SO to be left handed

I will argue that taking in account the nature of argumentative predicates can be useful to describe what is generally called a ‘concept’. However, in order to conceive this project, I will have to reject what I will call the ‘restrained vision’ of SBT predicates. I will try to show that this vision has two problems, and that one way to solve them both is to move from a purely linguistic conception of argumentative predicates to a more abstract one.

1.2 What are Argumentative Predicates? Lexical and Utterance Meaning

One can wonder what kind of existence argumentative predicates have. In other words, if one accepts that argumentative predicates are communicated by utterances, it is legitimate to specify whether argumentative predicates are just generated by particular syntactic arrangements of words (i.e. sentences) or whether ready-to-use argumentative predicates can be found somewhere else.

When we look for where argumentative predicates are placed by the theory, a two-part answer appears. The first part of the answer comes from the SBT conception of lexical meaning. The meaning of words (actually of nouns, verbs and adjectives) is formed by sets of argumentative predicates. For instance, it is imaginable that the adjective careful can easily be used to convey the argumentative predicate (14):

SBT would say that (14) is encoded in the lexical meaning of careful. So for SBT there are argumentative predicates in some ‘area’ of the language system (Saussurean ‘langue’).

The other part of the answer is a consequence of the SBT vision not of lexical but of utterance meaning, of ‘what is communicated’, to borrow Recanati’s terminology. We have seen that (a part of) what is communicated by an utterance is constituted by argumentative predicates. The communicated argumentative predicate can emanate from the meaning of the lexical items of the sentence or be entirely created by it. For instance, imagine that the argumentative predicate to be the victim of a spiteful act HOWEVER not to give back is lexicalized in the verb to forgive. It follows that in certain contexts you can use the verb to forgive to communicate that predicate. It can be the case if you utter the sentence John will forgive Peter (as one can imagine that this utterance, in a given context, may express something near to John’s been the victim of a spiteful act coming from Peter, yet he’ll not give it back to him). But you can also say something like To forgive is pitiful and then you will be communicating a linguistically (probably) unexpected predicate, namely to forgive SO to be pitiful, its unexpectedness coming from the fact that it will be surprising to find that this predicate is somehow stable in the general usage of the verb to forgive or the adjective pitiful in English.

Let us call this vision of argumentative predicates the ‘restricted conception’ of argumentative predicates, as it limits their existence to their record into a lexical item or an effective utterance. This is not some kind of a priori ‘defect’ of the theory, for as long as what is described is lexical or utterance meaning, it would not be necessary to change this conception, unless some particular linguistic phenomenon proves otherwise. Instead, if what we want to analyze is concepts, some
arrangements must be made in order to admit the principles of SBT in our approach. In particular, to analyze concepts as ‘SBTian’ entities, is to abandon the ‘restricted conception’ of argumentative predicates. One of the main reasons for abandoning the restricted conception is that if we assume that SBT gives the right vision of linguistic meaning, then we cannot escape from the assumption that concepts are somehow ‘SBTian’. Otherwise we would have to accept that an SBTian language system would function in parallel with a non SBTian conceptual domain. And, by saying that, I am not denying that language system has its own nature, its own rules. I am just arguing that it would be counterintuitive that lexical meaning and the semantic content of utterances, on the one hand, and concepts, on the other, had totally different natures. Most readers may ask why I insist on the need of keeping some degree of homogeneity between linguistic meaning and conceptual entities. But if this homogeneity is certainly widely taken for granted by the tenants of the representational approach of concepts and linguistic meaning, like Jerry Fodor and others, it is not the case for the Semantic Blocks Theory. In fact, SBT explicitly excludes any non linguistic motivation for linguistic phenomena. Nevertheless, contrary to the authors of the theory, I think that we must consider the possibility that the structure of linguistic semantic units is determined by the nature of concepts. So, this is the door (or maybe the Pandora’s box) I would like to open. I will explore the thesis that SBT supplies the key notions for the study of what are usually conceived as ‘concepts’, for the simple reason that the ‘discoveries’ of the SBT concern concepts as well as lexical meaning and the semantic content of utterances. I will then work on the assumption that the productivity of SBT statements goes far beyond the description of lexical items and utterance meanings, and will characterize what is traditionally called a ‘concept’ in the light of SBT principles — and what will ultimately lead to questioning the relationship between the linguistic system and what I shall call the ‘conceptual space’.

1.3 Semantic Blocks

The next key notion of the SBT that must be studied is the one after which the theory is named: ‘semantic blocks’ . It is easy to show that there are argumentative predicates that share what can be intuitively called a ‘local world conception’, or a ‘micro-ideology’. Let us imagine that someone says that the artist Lucien Freud was a successful painter because of his family name. That would express a predicate like (15):

\[ \text{to be a celebrity’s descendant SO to be easily successful} \]

One can oppose that by asserting that not every celebrity’s descendant who has tried to be successful has reached this goal. Here, the predicate would be (16):

\[ \text{to be a celebrity’s descendant HOWEVER not to be easily successful} \]

These two predicates, even if they are in some way opposite, capture a more abstract link between being a celebrity’s descendant and to be successful, a link that conceives the fact of being a celebrity’s descendant as an advantage on the road to success. This single idea is captured by the two predicates, hence they do certainly share something. Let us give another example, this time a more traditional one. When seeing a monkey that does not eat bananas but something else, we can say this monkey doesn’t eat bananas meaning (17):

\[ \text{to be a monkey HOWEVER not to eat bananas} \]

You would not express another conception on ‘monkeyness’ and bananas if you said and that one does, be it, by expressing the argumentative predicate (18):

\[ \text{to be a monkey SO to eat bananas} \]

Even if they capture it in different ways, these two predicates instantiate the same kind of link between monkeys and bananas. The idea that these examples attempt to illustrate is that every argumentative predicate comes under a more general semantic entity: a ‘semantic block’. Predicates (15) and (16)
belong to the same semantic block and predicates (17) and (18) also belong to the same semantic block.

Now, semantic blocks are not formed by just two argumentative predicates but by four of them. Suppose that in the same conversation about Lucien Freud, someone argues that \textit{be it as it may, being the descendant of a non famous person makes it difficult to reach fame.} That would express the argumentative predicate (19): 

\[
\text{(19) not to be a celebrity’s descendant SO not to be easily successful}
\]

This time, another participant of the interaction could reply that lots of non-famous people have become famous easily, and by that, he or she would be expressing the following predicate:

\[
\text{(20) not to be a celebrity’s descendant HOWEVER to be easily successful}
\]

These two predicates instantiate the same semantic block that (15) and (16), a block formed by the set of these four argumentative predicates:

\[
\begin{align*}
\text{(21) to be a celebrity’s descendant SO to be easily successful} \\
\text{(22) to be a celebrity’s descendant HOWEVER not to be easily successful} \\
\text{(23) not to be a celebrity’s descendant SO not to be easily successful} \\
\text{(24) not to be a celebrity’s descendant HOWEVER to be easily successful}
\end{align*}
\]

The same logic applies to the block about monkeys and bananas, which is formed by these predicates:

\[
\begin{align*}
\text{(25) to be a monkey SO to eat bananas} \\
\text{(26) to be a monkey HOWEVER not to eat bananas} \\
\text{(27) not to be a monkey SO not to eat bananas} \\
\text{(28) not to be a monkey HOWEVER to eat bananas}
\end{align*}
\]

A semantic block is the list of the four argumentative predicates that it contains as well as ‘something’ they have in common (we are consciously simplifying: the four argumentative predicates are not just listed, they are organized by formal relationships that exist between them, \textit{cf.} Carel & Ducrot, 1999). This ‘something’ being shared is left underspecified in the theory, maybe because of the fact that one cannot linguistically express it without deploying the whole set of the four predicates that instantiate it. For instance, if you want to have an accurate linguistic manifestation of the block that links monkeys to bananas, you have to reassemble at least four utterances, one for each predicate, by imagining for example the utterances \textit{Monkeys eat bananas} for (1), \textit{Some monkeys don’t eat bananas} (for 2), \textit{Cheetah is not a real monkey, that’s why it doesn’t eat bananas} for (3) and \textit{Peter just loves bananas, that doesn’t make him a monkey!} for (4). But the study of conceptual entities needs to specify further what it is for an entity to be a semantic block. For instance, it turns out that what is usually called a ‘stereotype’ can be easily analyzed as a single semantic block that does not need to exist in the form of four predicates (\textit{cf.} Lescano, 2013). It is then clear that we need to have a more precise definition of what a semantic block is. That is the object of the next paragraph.

2. Conceptual Blocks and their Concepts

The main idea that I intend to introduce is that semantic blocks and argumentative predicates do not only exist as \textit{linguistic meaning}, \textit{i.e.} entities directly associated to a particular lexical item or to a particular uttered sentence, but also populate the ‘conceptual space’ which can be seen as the domain of the semiotic life of social groups. Roughly speaking, the conceptual space is very much what is usually called ‘culture’, but unlike \textit{culture}, the conceptual space is not necessarily attached to a particular social group. The conceptual space does not concern the members of a given society. It concerns social life, where different cultures interact. So that the notion of ‘conceptual space’ tends to
be more general than the notion of ‘culture’. Moreover, a given ‘culture’ is the subset of a conceptual space that is somehow naturalized by a given group at a given time.

Even more, the conceptual space is not only a set of conceptual blocks, it is a domain, the one where blocks are created, imposed, used, negotiated, evoked, evaluated, etc. In other words, the conceptual space is the active symbolic activity, including the conditions for this activity (existent blocks and their relationships) and the results of this activity (new blocks). I am aware that I am being pretty brief and programmatic on this however incalculable complex and arid question, that will need a large amount of work to be fully satisfying, but the notion of ‘conceptual space’ is to be taken rather as a research direction than a notion in itself. I will focus instead on the internal structure of concepts themselves.

One brief remark before going on to what a concept is. Current reflections on concepts are very focused on their function: one of the main questions that oppose philosophers is what are concepts for? Some say concepts are for thinking (that is the Rationalist position), others that they are for doing (the Empiricist position). In my approach, this is simply not a good question. Asking what are concepts for is, in a way, asking what is culture for. The conceptual space does certainly allow thinking and doing, but it is also a consequence of thinking and doing, as new concepts can be created thanks to rational and practical activities. I do not know what the conceptual space is for, I just know it is the symbolic environment within which we live.

2.1. Imbrication: Direct and Oblique Blocks

As I have just suggested, in the SBT the very notion of semantic block is somehow left underspecified. But if concepts are to be described as ‘blocks’, we cannot afford not to define what a block is, we have to specify the internal structure of a conceptual block. That is what the notion of ‘imbrication’ may help to do.

Let us call A and B the affirmative terms which appear in the notation of argumentative predicates. In the case of our first block, that would give ‘to be a celebrity’s descendant’ as A, and ‘to be easily successful’ as B. I will argue that a ‘conceptual block’, i.e. a block belonging to the conceptual space (regardless of its existence in the language system or as the semantic content of a particular utterance), consists in the ‘imbrication’ of two terms. I understand by ‘imbrication’ the linking of two terms in one out of two possible ways: a direct imbrication or an oblique imbrication. In our example, ‘to be a celebrity’s descendant’ (A) is ‘directly’ imbricated to ‘to be easily successful’ (B), that is, A and B are imbricated in such a way that brings together the two terms, so that when only one of them is negated, it is necessary — if you do not ‘go outside’ this block — to capture the block with a predicate instantiating a transgressive connection. That is what happens when A or B are negated in the case mentioned above:

(29) to be a celebrity’s descendant HOWEVER not to be easily successful
(30) not to be a celebrity’s descendant HOWEVER to be easily successful

To put it otherwise, a direct imbrication between A and B admits a SO connection only if A and B are both affirmative or both negative. Let us turn now to the oblique imbrication. It is theoretically plausible that in a certain conceptual space, being a celebrity’s descendant is conceived as an obstacle to attaining celebrity; in that conceptual space the work of individuals who have famous ancestors is seen as being of intrinsic poor quality, and this only on the basis of his or her ancestry being famous — this individual would be condemned to be the ‘shadow’ of the famous ancestor. The block corresponding to this conception imbricates ‘obliquely’ its terms. An oblique connection between A and B is defined by the fact that a HOWEVER connection is only allowed when A and B are both affirmative or both negative, and that a SO connection takes place when only one of the terms is negated.
I will note ‘&’ the direct imbrication and ‘!’ the oblique one. We can now say that given the terms ‘celebrity’s descendant’ and ‘success’ we can have these two different — opposite — blocks:

(31) [celebrity’s descendant & success]
(32) [celebrity’s descendant ! success]

From now on, I will call ‘concepts’ the normative or transgressive manifestations of a conceptual block. In other words, what Carel calls ‘argumentative predicate’ in the linguistic domain, is transposed here to the conceptual space with the label ‘concept’. Thus, a conceptual block is a(n) (direct or oblique) imbrication that constitutes the micro-ideology differentially grasped by the four concepts belonging to that block. The concepts (33) to (36) belong to the direct block (31) [celebrity’s descendant & success] and the concepts (37) to (40) belong to the oblique block (32) [celebrity’s descendant ! fame].

(33) to be a celebrity's descendant SO to be easily successfull
(34) to be a celebrity's descendant HOWEVER not to be easily successfull
(35) not to be a celebrity's descendant SO not to be easily successfull
(36) not to be a celebrity's descendant HOWEVER to be easily successfull

(37) not to be a celebrity's descendant SO to be easily successfull
(38) not to be a celebrity's descendant HOWEVER not to be easily successfull
(39) to be a celebrity's descendant SO not to be easily successfull
(40) to be a celebrity's descendant HOWEVER to be easily successfull

Moreover, terms, such as ‘to be a celebrity’s descendant’, will be taken as not having any conceptual value in themselves: terms are conceptual elements only when considered as imbricated to another term (unless it enters into some kind of relationship with a semantic block, but that will not be treated here). There is no concept ‘to be a celebrity’s descendant’, there is (possibly in a given conceptual space) a concept to be a celebrity’s descendant SO to be easily famous. Imbrication allows us to define semantic blocks as conceptual entities where two terms are imbricated.

Two remarks concerning the form of concepts. Firstly, the attentive reader have probably noted that concepts are ‘richer’ than blocks: compare [celebrity’s descendant & success] to to be a celebrity’s descendant SO to be easily successful. That stems only from the fact that I intend to give concepts a form close to an ‘utterable’ suite of words, even if it is an abstract element, but it is sure that the formal annotation of concepts and blocks deserves further attention. Secondly, the negative particle ‘not’ in the annotation of a concept has been used until now as a shortcut for something different from the ‘negation’ English morpheme. I will introduce here the operator ‘Inversor’ (INV), an adaptation of Ducrot’s ‘modificateur déréalisant inverseur’ (Ducrot, 1995), which actualizes the ‘inversion’ operation. ‘Inversion’ takes a term and transforms it into its semantic ‘opposite’ within a given block. In the politically incorrect stereotyped (and maybe even nowadays archaic) concept INV man SO fond of cooking the fragment INV man would normally be actualized in discourse by something like woman. You could certainly be tempted of actualizing INV man with any entity that is not a man, like God or table. The result would be absurd sentences like God’s fond of cooking or Tables are fond of cooking that in any case do not seem to express the concept INV man SO fond of cooking. This could be seen as a possible problem of the inversion operation: it would produce absurd results. But this procedure would not take into account that inversion functions ‘within a given block’: you do not simply obtain ‘God’ or ‘Table’ by ‘inverting’ the term man in the concept INV man SO fond of cooking, unless you are situated in a conceptual space where God’s or tables’ are fond of cooking as an effect of their lack of manhood.

Let us resume. By now, we have seen two kinds of conceptual entities: conceptual blocks and concepts. A conceptual block is a particular link between two terms, we call this kind of link ‘imbrication’. Concepts are partial manifestations of a block, in the sense that each concept ‘grasps’ in a particular way the block within which it exists. There is a difference in what concerns the link between the terms of blocks and the link between the terms united in a concept. In fact, conceptual blocks and concepts are defined by a kind of particular link between two terms. Blocks imbricate two
terms; concepts connect them. If we recall that a concept is nothing but a particular way to ‘grasp’ a semantic block, it appears that the connection link is a more ‘precise’ link between terms than ‘imbrication’. This ‘precision’ can be observed by the fact that there are words in language to express connections (hence or because can express the SO-connection, though or in spite of are specialized in the expression of the HOWEVER-connection) and so a single sentence is enough to explicitly express a predicate. But to express an imbrication link, the four predicates of the block must be made explicit in discourse.

Let us make it clear: SBT is a theory about language, more precisely about linguistic meaning, conceived by Carel and Ducrot as a way to account for what words and sentences convey, that is, in their view, mainly argumentative predicates. Furthermore, argumentative predicates (our ‘concepts’) are seen by the SBT approach as discursive models, kind of schemes that allow us to form new discourses or to interpret them. It is even clear to Carel that this theory does not understand meaning as reflecting the structure of ‘something else’, namely ‘thought’: language has its own rules — Carel works within a ‘non parallelist thesis’, be it the idea that linguistic meaning does not relay on any other symbolic reality. Semantic blocks and argumentative predicates are linguistic entities made by words, and nothing but words. Nevertheless in a ‘SBTian’ view of conceptual entities, this Saussurean declaration has to be revised for at least two reasons.

Firstly, imbrication is not linguistically expressible. As we have already seen, imbrication is the relationship kept between the A and B terms of a block, which can be ‘direct’ (&) or ‘oblique’ (!). And, as we have also observed, this relationship has no linguistic equivalent. Therefore we cannot maintain the idea that this kind of entity is formed by ‘words and nothing but words’: the link that unites the terms of a block escapes the pure linguist domain. Hence, there is something other than language that enters in the formation of a block.

Secondly, the existence of blocks can be justified independently of particular words and sentences. For instance, a block like [women & cooking], as the stereotype by which women are fond of cooking, might be inferred by some particular behaviors of a given social group, be it or not discursively expressed in an explicit way. As a linguistic theory, SBT is not concerned with the non-discursive existence of blocks, but an SBTian vision of the conceptual space obviously is. This idea will be developed in §0.

The hypothesis that the interest of the Semantic Blocks Theory goes far beyondlexical and utterance meanings has to be explored is a chance to reconsider every single assumption about conceptual entities, as the notion of ‘semantic block’ does not fit into any of the traditional categories. Just to give some fundamental examples, semantic blocks are not true-conditional, are not intentional, are not compositional (nor do they combine compositionally) and have no possible extensional meaning. I would even say the main function of SBTian concepts is not to ‘represent’ the world but rather to ‘make sense’ of the world. ‘Making sense’ is very different from ‘categorizing’, it is to exist in a symbolic environment. The question to which a SBTian approach to concepts is an answer is how do we inhabit culture.

2.2 Conceptual Blocks, Concepts, Terms

What are the consequences of the assumption that concepts are ‘SBTian’ entities? For a first approximation, let us compare ‘conceptual blocks’ (i.e. conceptual entities having the same structure and properties as semantic blocks) to propositions. The first difference between conceptual blocks and propositions is the kind of elementary entities that form them. Propositions are made of a Fregean concept ‘saturated’ by an object, a block is formed by an abstract link (‘imbrication’) between two terms. We have seen what imbrication is, let us now approach ‘terms’ to better compare blocks to propositions.
I have called ‘terms’ the entities that fill the A and the B slots in the structure of conceptual blocks \([A \{&/!\} B]\) and therefore the same slots in concepts \((INV) A \{SO/HOWEVER\} (INV) B\). For instance, ‘to be in a traffic jam’ is a term of the conceptual block \([\text{to be in a traffic jam} \& \text{to be late}]\).

At first glance, terms look like ‘sentences’, but what are they? As well as ‘sentences’, they could be defined in two different ways: they could be viewed as ‘conceptual’ entities or as ‘linguistic’ entities. If we suppose that terms are conceptual \((i.e. \text{non linguistic})\) entities, they could be defined 1) as propositions or 2) as Fregean concepts.

2.2.1 Terms as propositions The resemblance of terms and sentences may allow us to see terms as propositions. We will see that this would be an incorrect way of seeing them. Let us assume that a proposition is formed by two entities: a Fregean concept and the object that ‘saturates’ it. A proposition is something about something. Now, a term cannot contain an object. For instance, the term \(\text{to be a child in the block [to be a child ! to understand adult stuff]}\) is not ‘something about something’, there are not two entities that can be separated, unlike the object and the concept of a proposition. The term could eventually be applied to a particular situation so that by saying \(\text{John is just a child, he won’t understand if the concept to be a child SO not to understand adult stuff}\) is applied to a given situation that seems to ‘fill the blanks’ of the concept. Thus, in particular, the term \(\text{to be a child}\) seems to be ‘filled’ by the object ‘John’. Therefore a terms looks much more like a Fregean concept that like a complete proposition. But can terms be really described as Fregean concepts (as the second version of the non linguistic definition of terms states)?

2.2.2 Terms as Fregean concepts A Fregean concept is something like \(\text{to be round}\): it needs an object, like the Earth, to become a ‘complete’ thought, which would be \(\text{The Earth is round}\). That is what Frege states by saying that concepts are ‘unsaturated’. The way we annotate terms, sometimes with an infinitive, or a \(\text{to be X}\) expression, may induce the idea that terms are somehow equivalent to Fregean concepts. However, one problem to this vision about terms is that Fregean concepts — even if unsaturated — have, maybe paradoxically, a degree of completeness that terms do not have. In fact, extensional semantic theories see Fregean concepts as ‘meaning’ the set of objects that verify the relation \(x \text{ is } P\), and a set of objects seems to me to be a very complete entity. Many theories, closer to the original Fregean conception, see Fregean concepts as ‘properties’, that is ‘conceptually complete’ entities. I suppose that the reader will accept that even if it is not a complete \(\text{thought}\), the concept ‘to be round’ needs no object to express the concept ‘to be round’. On the contrary, the terms of a conceptual block are not ‘conceptually complete’. Only a conceptual block (or its derivates, concepts), are conceptually complete. An isolated SBTian term has no conceptual value, nothing can be \(\text{conceptually ‘grabbed’}\) in a term, unless it is seen as one of the elements of a conceptual block or a SBTian concept.

2.2.3 Terms as linguistic forms What forms a conceptual block is the imbrication of two \(\text{non conceptual entities}\) that I will define as pure \(\text{formal entities}\). What is linked by imbrication is nothing but \(\text{forms}\), linguistic forms. In other words, terms are not at all conceptual entities; the framework I am presenting here is based on the assumption that SBTian conceptual entities \((i.e. \text{conceptual blocks and concepts})\) are the ‘smallest’ conceptual entities: they cannot be decomposed into smaller conceptual entities (this property of terms is inspired in what Carel (2011) calls the ‘interdépendance sémantique’). One of the consequences of accepting this is that the linguistic expression \(\text{to be a child}\) has no conceptual value unless it is introduced in an imbrication\(^1\). Of course, saying that ‘what a child is’ can be ‘grabbed’ with a non imbricative definition like ‘a human being between birth and 13 years old’ or whatever age you can think of as a limit to childhood. But even assuming that ‘age bracket’ is an appropriate criterion to define childhood, that does not contradict what I am stating. My thesis is that the activity of labeling (or using labels for) the objects of the world does not necessarily involve concepts. The scope of this thesis does not include the nature of the link uniting a word to its lexicographical definition. An SBTian approach to concepts can describe what it is to be a child in a

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\(^1\) Or unless we associate the word to a SBTian block or predicate, like when the word \text{careful} is associated to the predicate \([\text{danger SO precautions}]\) (cf. Carel 2011).
given culture, or to put it more technically, which are the concepts, in a given area of the conceptual space, that concern the linguistic form child.

I choose a ‘linguistic’ solution to the problem of defining terms: terms are the formal side of words, or to put it in Saussurian terminology, terms are *signifiers*. Yet conceptual blocks cannot be characterized as linguistic entities, as imbrication is not a linguistic relationship, it has a mere conceptual nature. A conceptual block is therefore the conceptual union of two linguistic forms. In other words, I am arguing that although concepts are not mere linguistic entities, they are interpenetrated with language.

2.3 Non-linguistic manifestations of concepts

One of the main statements which I am committed to in this paper regards SBT and could be synthesized by saying that I adopt the SBT position according to which the linguistic system of lexical meanings as well as sentences meaning are made of semantic blocks (and their argumentative predicates); but, in my view, this vision must be enlarged to embrace the conceptual space, which must be seen as formed by conceptual blocks (and their concepts). In the first part of this paper, I have presented some examples of the way SBT treats linguistic meaning. In this section, I will present some evidence of the fact that non linguistic phenomena may involve conceptual blocks.

The first one is based on the ‘Kuleshov experiment’. The Russian motion picture director Lev Kuleshov created in 1920 a short movie in which he inserted the face of an actor showing an intense look before 1) a dish of succulent food, 2) a seductive woman, 3) a dead child. The actor was just filmed once, but his intense gesture is showed three times, one before the image of the dish, another one before the image of the woman and the last one before the image of the child. Unaware of the experiment, the audience is said to have acclaimed the extremely expressive look of the actor, that, according to the reactions of the audience, very strongly conveyed consecutively 1) hunger, 2) desire and 3) sorrow. What was afterwards called in film theory the ‘Kuleshov effect’ is that the watching of two successive images tends to form a single unit in interpretation. I will just keep the idea that the audience of the experiment could not interpret the actor’s face unless they had in mind something else, and that that ‘expected something else’ was provided by the image that followed each time. In my view, the actor’s face needs an imbrication to be interpreted, and its absence is a hardly interpretable ‘moment’. The experiment shows that the images of the food, the woman or the child do not only ‘give the cause’ of the feeling of the actor, they give the full sense of it. Each time, the face is absolutely interpreted by an imbrication after seeing the corresponding image.

Another way I will justify the idea of conceptual blocks underlying phenomena that do not involve necessarily a ‘linguistic existence’ is based on ‘stereotypes’. It is widely accepted that a stereotype is a socially shared belief about a social group. For instance, the belief that Italians are romantic can be considered as a stereotype. One of the main recognized characteristics of stereotypes is their ‘essentialism’ (inspired mainly by Medin, 1989), that is, the fact that stereotyped properties are considered to be in the ‘nature’ of the social group which it characterizes. That means that a stereotyped belief does not consist in the simple attribution of a property to a social group, there is instead a sort of ‘merging’ between the group and the property that produces, in our case, that being Italian is the same as being a romantic. I see this as a manifestation of the imbricative nature of stereotypes, whose internal structure is not therefore different from non stereotypical concepts. It could be objected that stereotypes cannot be conceptual blocks like [Italian & romantic] (which includes the concepts Italian SO romantic, Italian HOWEVER romantic, INV Italian SO INV romantic and INV Italian HOWEVER romantic) but rather the single normative concept Italian SO romantic. The objector could say that what is believed is that ‘Italianhood’ produces ‘romanticness’ and not the whole set of the four concepts of the block. Nevertheless, the stereotype in question would be exploited if someone said Gianni is not very Italian, he’s so unromantic! instantiating by there the concept INV Italian SO INV romantic: he is not romantic because he is not a ‘good’ Italian. The same could be imagined for the rest of the concepts of the block [Italian & romantic], which, all of them,
manifest the same stereotype: *You can be very romantic, even if you are not Italian!* (INV Italian HOWEVER romantic). So I would say that the stereotype is better described by the conceptual block [Italian & romantic] than by the singular normative concept [Italian SO romantic].

Non-verbalized SBTian concepts are everywhere, even when they are neither lexicalized nor contained in the semantics of utterances. For instance, there are designers who have conceived ceramic cups that quite accurately imitate paper cups, in particular, they imitate the ‘dentiness’ of used paper cups. In my view, these objects have an explicit conceptual reality, as to ‘interpret’ them is to realize that *even if they look like paper cups they are ceramic cups*, what I represent with the concept to be a ceramic cup HOWEVER to look like a paper cup. This concept manifests a more abstract one, to be something HOWEVER to look like something else, which is the shared concept of every trompe-à-l’œil. Someone not having had a previous experience of a paper cup would not be able to capture the conceptual reality of this new design.

From what has just been said, it follows that conceptual blocks (and their concepts) are neither necessarily associated to words as their linguistic meaning, nor to utterances as their semantic content. The set of the lexical meanings of a particular language is but a subset of a given conceptual space, surely with a particular internal organization and characteristics. The concept to be a ceramic cup HOWEVER to look like a paper cup has been set up by some designers in the conceptual space, and it is there even if no word has lexicalized it, even if it is never put into the semantic content of an utterance.

### 2.4 The SBTian Approach to Concepts and Categorizing

One objection that could be made to this approach is that, unlike RTMian concepts, semantic blocks are necessarily very bad in categorizing. By their nature, there are often more than one conceptual block by (traditional) category. In RTM, the concept TABLE functions as the label of a set of things of the world. On the contrary, in an SBTian approach, we should have lots of concepts involving the linguistic form table. Among them, there should be a concept like [table & discussion], that allows president Obama to give this advice to young feminists: *Don’t just get involved. Fight for your seat at the table.* To sit at the table is nothing here but to be a legitime participant of a discussion. It is clear that, as far as concrete objects are concerned, the conceptual blocks are not their ‘labels’, but the way they exist in culture. SBTian concepts are schemes of socialized thought: I do not think that ‘categorizing’, i.e. the ability that humans have for determining whether an object belongs to a given category, is the most important one in this domain. Far from it, I am convinced that labeling objects is not a function of the conceptual space. In a word, ‘categorizing’ is a psychological activity, and a SBTian theory of concepts is not a psychological theory. However, I think that a psychological theory must include a SBTian component to account for the way that SBTian concepts are managed by the mind.

### 3 Conclusion

SBTian conceptual entities allow us to study the components of social interaction related to ideology and culture, both as abstract underlying networks, and as semiotic productions in general. They do this by giving language a central but not exclusive role. I tend to think that their most crucial feature is the way linguistic and mere conceptual elements are interpenetrated. What we would have at the end of every interpretation process, of every symbolic fact, is the conceptual linking of signifiers.

In this framework, concepts are not the labels of reality but are the reality we live by, given that what counts is less the categorization of the objects of the world than the conceptual imbrication of signifiers that constitutes social activity. In fact, there is something fallacious in saying that what I am presenting in this paper is an approach to ‘concepts’. The ideas presented here are contradictory with what is usually stated about concepts. I do not speak about concepts as mental representations,
whereas most current theories about concepts take for granted that a concept is a mental entity. We know that every theoretical framework creates its own objects, and this one is not an exemption. I recognize that given that there is a current dominant vision on concepts from which I am moving away, namely RTM, I would have had to account for the differences between RTM’s and SBT’s vision on concepts, underlining the advantages of the latter. I would indeed have had to develop the implications of the non-intentional, non-truth-conditionality of SBTian concepts, given that intentionality and truth conditionality are core properties of RTMian concepts. But that could not precede the explanation of what a concept is in a SBTian approach, and I trust that the differences and implications will emerge quite naturally.

Lots of work must be done to further clarify this approach to concepts. I will give an obvious example. I have characterized conceptual blocks as the imbrication of two signifiers, so that the block [to be in a traffic jam & to be late] should be paraphrased by something like the signifier ‘to be in a traffic jam’ is directly imbricated to the signifier ‘to be late’. Mediating some generosity of the reader, the ‘to be’ parts could be read as the ‘verb to be’ entire paradigm, but that (complicated) problem is not the one I want to underline. The problem I want to stress is that the blocks [to be in a traffic jam & to be late] and [to be in a traffic jam ! to arrive on time] are intuitively ‘equivalent’, yet saying that terms are ‘linguistic forms’ would prevent describing them that way. Maybe the solution to this problem is to accept that actually they are not synonyms one of the other but that they are simply independent (though close) concepts with subtle differences.

References