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Introduction

This study aims to investigate what could be called, as a first approximation, the what the hell construction, within the more general topic of lexical intensity. The following definitions, taken from two dictionaries, clearly suggest that the construction is used with intensification purposes (the underscoring is mine):

(1) **The hell**: [mid-19C+] (orig. US). Used to intensify a variety of questions, such as how the hell...? (Green’s Dictionary of Slang [2010: 741]).
(2) **The fuck**: [offensive]. Used with the as a way to make an angry [...] question more forceful. What the fuck do they want from me? (Merriam-Webster’s Advanced Learner’s English Dictionary [2008: 667]).

It seems that no more than spotty attention has been paid to this construction in the existing literature. There have been very brief references to it here and there (e.g. Collins [2006: 180]; Lapaire & Rotgé 2002 [1991]: 672; Quirk et al. [1985: 451, 585, 817, 1418]), and when a more thorough description is provided, it concentrates largely on its syntactic behavior (e.g. Fillmore [1985]; Haïk [2012]; Huddleston & Pullum [2002]). The use of extensive data from the Corpus of Contemporary American English reveals, however, a host of lexical variants (heck, Samuel Hill, pus-rotted hell, etc.), and perhaps more surprisingly, intriguing syntactic configurations (what the hell..., what in the hell..., what in hell..., what’s the hell..., etc.). This network of related sub-constructions, which are all subsumed by a more general construction, which will be hereafter referred to as the WHX construction, raises questions about their productivity and about the subtle semantic and / or pragmatic differences among them.
The main inspiration for this paper being the expression of intensity, I argue, within the theoretical framework of Construction Grammar, for a more nuanced and complex interpretation of the notion of intensity, which is traditionally associated with the WHX construction. I will first try to show that intensity is more or less directly related to the expression of an emotion. Following Bolinger [1968: 127]’s rule that “a difference in syntactic form always spells a difference in meaning”, and relying on works on euphemisms and dysphemisms, I will also hypothesize that the various lexical and syntactic variants that the construction exhibits correlate with a variation in their intensity. Before tackling these two research questions, I will devote the next section to providing a definition of the subject-matter, that is “intensity”, and will explain why the WHX construction can be considered a construction, within the framework of Construction Grammar.

1. Framing the issue

1.1. Toward a definition of intensity

The expression of intensity has received considerable scholarly attention from a synchronic semantics perspective (Athanasiadou [2007]; Bolinger [1972]; Bordet [2014]; Paradis [2008]; Romero [2007], to name a few landmark studies).

Intensifiers are most commonly defined as “words or expressions which strengthen or weaken the degree of a property” (Cruse [2006: 89]). By its very nature, intensity also has to do with the stance of the speaker who wishes to emphasize what he or she says. An intensifying expression thus conveys strong emotional overtones and is expressive (Adler & Asnes [2013: 10]):

Une intervention du locuteur qui consiste à amplifier ou à amoindrir le degré d’une certaine propriété. L’intensification présuppose donc un jugement subjectif vis-à-vis d’une propriété […].

Romero [2007] further refines the concept by stressing that intensity emerges through the subjective perception of a contrast between two states; state 1 being perceived as “non-intense” or “unmarked” and state 2 being perceived as “intense” or “marked”. The tension between these two states of reality is what triggers intensity:

Au plan le plus abstrait, l’intensité est d’abord une tension (remarquons le même radical tens– sur lequel ces mots sont formés). Autrement dit, l’intensité d’un phénomène X consiste dans l’écart (ou la différence) entre deux états x1 et x2 relatifs à ce phénomène. De fait, cette définition n’entre pas en contradiction avec le sens que ce mot a ordinairement. L’expression de l’intensité résulte de l’appréhension de cet écart.

Romero also distinguishes between “quantitative intensity” and “qualitative intensity”, although the line between these two sub-groups is not always easy to discern:

i) Quantitative intensity presupposes the assignment of some value on an underlying scale and the expression of degree, which can be any kind of degree (not necessarily a high degree or the highest degree). It also presupposes quantification, which can be broadly defined as the assignment of a numerical value to a measurable and countable phenomenon.
ii) Qualitative intensity concerns various phenomena such as the intonation adopted when performing a face-threatening speech act, the use of slang and objectionable words, rhetorical devices like irony, as they all involve a contrast between two states.

The notion of intensity is in fact difficult to define in absolute terms and mainly draws its explanatory power from its interrelationship with neighboring categories such as scalarity, quantification and affectivity. However, even though these categories interact with intensity, they do not collapse into one another, as evidenced by the following examples:

(3) Mary is smarter than John (+scalarity), (–intensity): Mary has some property (“intelligence”) to a higher degree than John. In the present case, scalar comparison involves grading, but not intensity.

(4) A hundred people came to the party (+quantification), (–intensity).

(5) Zillions of people came to the party (+quantification), (+intensity): the primary function of a hyperbole is to intensify the utterance by creating a contrast between an unmarked state of affairs and another situation which is contrary to perceived facts and whose extent is deliberately overplayed.

(6) The little cararooney’s got windows that roll down by themselves (+affectivity), (–intensity): -aerooney is a suffix added to a noun to express endearment, but there is nothing intensive about it.

(7) She was all shaken up after the accident (+affectivity), (+intensity): all functions as an intensifier, also conveying attitudinal stance.

The WHX construction expresses intensity. Using Romero’s definition, one could say that a clear contrast can be recognized between an unmarked state, a reference value (i.e. an ordinary question such as what are you talking about?) and a marked state (i.e. what the hell are you talking about?). This marked choice carries implications. From a quantitative perspective, one can assume that what the hell are you talking about? gives rise to the inference that the question is more pressing (or more emotionally loaded, as will be seen later) than what is normally expected of a regular question (i.e. it expresses a degree that is markedly higher than what the question alone, without the hell, would convey). From a qualitative perspective, the question seems to be construed as more intense because of the offensive character of hell, which deviates from a certain norm of politeness.

As is the case with other intensifying multi-word units (to cry your ass off, to be horny as hell, to cook up a storm, etc.), the appendage the hell does not contribute to the propositional content of the utterance; it does not change its truth value. Therefore, the meaning of the question would not change if the NP the hell were omitted:

(8) What the hell are you talking about? ≈ What are you talking about?

The reason for this is that the meaning of WHX is expressive and valid only for the speaker for the moment of speaking. When using the construction, we shall see, speakers express, rather than describe, their attitudes and feelings.

1.2. A constructional analysis

My analysis of the WHX construction is conducted within the framework of Construction Grammar, broadly construed. In what follows, some of the major assumptions and guiding principles of this theory will be outlined (see Croft & Cruse [2004]; Goldberg [(1995), 2006]; Hilpert [2014]).
Construction Grammar considers “constructions” to be the basic units of linguistic knowledge. Constructions are symbolic entities which conventionally associate form (i.e. a specific morpho-syntactic and phonological structure) and meaning (which is understood in a broad sense and which includes lexical semantics and pragmatics). In Construction Grammar, constructions are viewed as holistic, that is their constituent elements are bound up together and virtually impossible to disentangle from one another. It follows that constructions have their own semantic content which goes beyond the lexical items which make them up.

Any linguistic pattern, as long as it occurs with sufficient frequency, can be recognized as a construction. Of course, constructions vary in their degree of generality and in their degree of complexity: they range from substantive atomic constructions to idioms, to more abstract (that is “schematic”) complex constructions, which respectively correspond to the lexicon and syntactic rules in other theories. There is no clear dividing line between lexicon and syntax in Construction Grammar.

Construction Grammar does not derive one construction from another, as is usually done in the mainstream generative approach. Rather, a construction involves other constructions, which can combine freely as long as there are no conflicts. In this model of grammar, constructions are assumed to form a structured inventory in the speaker’s mind and are related via inheritance links. By and large, higher-level constructions in the taxonomic network capture broad generalizations, which are inherited by lower-level constructions. However, inheritance can be partial: if two constructions X and Y inherit from construction Z, then X and Y share the properties of Z, but X and Y also possess properties that they do not share with each other and / or with Z.

In the sense of Construction Grammar, the WHX construction is a construction in its own right, with its set of formal properties and with its own constructional meaning. It is partially lexically-filled, as it involves fixed parts (e.g. wh- words) and free variables (e.g. hell). The letter “W” designates a wh- word (what, where, when, who, etc.), or a word which has a similar syntax to wh- words, such as how. The letter “H” refers to a noun phrase such as the hell, and the letter “X” stands for the rest of the interrogative clause, i.e. the proposition.

The construction is not strictly predictable and cannot be accounted for by general principles (see Haïk 2012, however, for a generative account): the syntactic slot occupied by the NP the hell in the WHX construction is severely restricted and can only be instantiataed by the adverbs else (what else did he say?) or ever, which also signals intensity (what ever do you mean?). Interestingly, a cross-linguistic comparison reveals that words like diable (or its euphemistic evasion diantre), Teufel, duivel (for devil) or Hölle (for hell) are attested in the exact same syntactic structures in French (que diable fais-tu?), in German (was zum Teufel / was zu Hölle machst du?), as well as in Dutch (wat voor de duivel doe je?). These constructions are nonetheless synchronically non-productive and speakers tend to view them as stilted or dated in everyday conversation.

The meaning of the WHX construction is motivated by the meaning of its parts, but is not computable from them. For instance, the noun hell in the construction seems to have lost its descriptive meaning: it does not seem to denote a physical entity, namely a place. A syntactic proof of this is that the noun hell in the construction does not behave exactly like the locative noun hell (as opposed to heaven): it is preceded by the determiner the, while the locative noun does not usually accept it, except when it is postmodified, as in “
Erebus is the hell of Greek mythology; it does not normally allow a plural form (what the hells...?), while locative hell does, under certain conditions (e.g. urban hells).

The WHX construction partakes of other constructions it inherits from: the subject-auxiliary inversion construction, the question construction, the VP construction, wh-questions, as well as individual substantive constructions like what, where, when, etc. It also shares some of its properties (at the prosodic, lexical, syntactic, pragmatic, etc. levels) with other constructions, such as the noun hell (a construction itself), idiomatic phrases like there will be hell to pay or to raise hell, interjections like bloody hell!, hell no!, or other the-hell constructions, such as beat the hell out of someone or shut the hell up. Note that although all these constructions motivate each other they remain distinct from each other. For instance, other the-hell constructions do not have the same syntagmatic flexibility as the WHX construction: *shut in (the) hell up, *leave me in (the) hell alone, *beat in (the) hell out of someone. However, internal modification is possible with these constructions, beat the living / holy hell out of someone, as with the WHX construction, what the living / holy hell...? (see 3.1.1. and 3.1.2, for more detail). Note that beat hell out of someone (without the determiner the) can also be found in English (Oxford Advanced Learner’s Dictionary [2000: 605]), while *what hell are you doing? strikes informants as decidedly odd or impossible.

The question now is to determine how intensity emerges in the WHX construction. What part does each construction it instantiates play in the emergence of its pragmatic force?

2. Intensity and the WHX construction

2.1. Constructional motivation

The WHX construction is motivated by the meaning of its parts and the way in which they are combined is inherently meaningful. The following is an examination of the contribution of the different constructions it inherits from: from the most schematic construction, the subject-auxiliary inversion construction, to more substantive constructions such as wh- questions, to individual fully substantive constructions (i.e. lexically filled) like what, where, when, etc., and, of course the NP the hell.

A wh- question typically presents an incomplete proposition. For instance, when will you arrive? expresses ignorance on some point, you will arrive at X, and aims at eliciting a response which will fill in the gap for X to form a complete proposition. Huddleston & Pullum [2002: 35] adopt a slightly different take by stating that a wh- question is an “open proposition”: in asking when will you arrive? the speaker shows that there is a whole range of possibilities and seeks to narrow a time-frame within which the state of affairs you will arrive may logically apply. Another way of looking at a wh- question would be to say that
it expresses an informational need and therefore an unsatisfied emotion from someone, namely a doubt, or any notion, as distinguished from fact.

24 The lexeme *hell* seems to be (or rather, seems to have been) a likely candidate for the expression of intensity in the construction. First of all, expressions such as *the nether world, the underworld, the lower world, the bottomless pit* aptly suggest that the home of devils and evil spirits is situated very low on an evaluative scale. One also *descends into hell*, never *ascends to hell*. This may have been and may still be intuitively felt by speakers of English in the use of *the hell* in the construction. What is more, the fact that the place called “hell” denotes a vast area, with unknown spatial boundaries may also give license to the expression of intensity. For the sake of comparison, consider the following phrases, which all express intensity: *a world of difference, I’ve traveled all over creation, to think the world of someone, or to cost the earth*. The third reason is that the realm of the devil, with all its trappings (the everlasting fire, the abode of the dead), may conjure up, albeit remotely, a sense of fear and unease, because of the taboo of fear which is commonly associated with it. Hell is a place of torment. Is it not what can also be found in the more general paradigm of emotionally-laden words and phrases containing *hell*? Consider – and the list is by no means exhaustive – exclamations (expletives *hell!* or exclamations of denial *hell no!), derivatives (*a hellion, hellish*), compounds (*a hell-raiser, hell-bent*), phrasal verbs (*to hell around*), or set phrases (*a hell of a, all hell is breaking loose*). They all bring into play the negative connotations of pain or excess, and all denote intensity. Now, as we know, pain can be graded as it is, from zero – no pain at all – to ten – excruciating pain, and fire can be associated with intensity, as is proven by the conceptual metaphor “*FIRE IS INTENSITY*” [Kövecses 2006] (as in *burning with anger, smoke is coming out of your ears*).

25 In sum, the features associated with the descriptive meaning of *hell* (that of a vast underground area) and its extended figurative meaning (that of fear and suffering) may not be completely lost. I will refine this account later (3.2.) by showing that the descriptive meaning of *hell* in the construction may be given greater prominence depending on the sub-construction chosen by the speaker.

26 The next section sets out to determine how intensity emerges. I argue that intensity in the WHX construction is rather a derived and secondary than a primary and immediate notion. It is a natural and direct result of the emotion conveyed by the construction. The term “emotion” is used here in a broad sense to refer to a wide variety of mental states.

### 2.2. Intensity and emotion

27 The NP *the hell* is called an “emotive modifier” by Huddleston & Pullum [2002: 916]. As was seen in example (8) earlier, the propositional content of the interrogative clause does not change when using the WHX construction: in fact, the presence of *the hell* merely enhances the strength of the illocutionary force of the speech act. Differently put, the construction indicates that speakers overtly express their stance toward a certain state of affairs: the unsatisfied emotion, which characterizes wh- questions in general, is now “out in the open” and glaringly obvious. The construction therefore materializes more forcefully the emotional involvement of the speaker.

28 Note, and this does not contradict what has been said in the foregoing, that Collins [2006: 180] regards an utterance like *who the hell are you?* as “an exclamatory question representing the interrogative clause type”. In other words, according to Collins, the WHX construction is structurally similar to an interrogative clause, but it conveys a
similar illocutionary force to an exclamatory clause. Exclamations are used with a predominantly emotive function to express different feelings such as anger, surprise or dismay; they have a strong subjective quality, in that they communicate the speaker’s emotional reaction to a situation.

Relying on Conceptual Metaphor Theory (see Lakoff & Johnson [2003; (1980)]; Lakoff [1987] may also help to understand how the effect of intensity emerges, intensity and emotions being two different realities. In this framework, the body is perceived as a closed container within which emotions occur and from which emotions can escape (“EMOTION IS A SUBSTANCE IN A CONTAINER”). Now when there is a strong emotion – and affects are inherently intense (see [Tutin 2012]) – what was inside the body can only take so much pressure and it finally bursts out. This shows up in a number of expressions such as to flush with anger, an outburst of emotion, steam was coming out of his ears, to turn beet-red, to wear an expression of surprise, etc., which are all motivated by embodied physiological reactions to emotions. To venture an analogy, one could then say that the WHX construction also iconically reflects, in its own way, the externalization of an emotion, its going out of the container, by adding the NP the hell and making it, therefore, linguistically salient. An intensive implicature may also arise: the very fact of getting one’s emotions out in the open, and especially the abruptness of it all (which can be compared, as it were, to the blast of an explosion), may entail a rise in intensity.

Speakers choose to use the WHX construction because there is a stimulus in the outside world (or in their minds) that elicits a reaction in the form of a strong emotion. Which emotion it is exactly that they may want to express (shock, anger, surprise, etc.) is not, however, part of the meaning of the construction. These slight variations on the more general emotion associated with normal wh- questions, namely doubt and uncertainty as to missing information, are, of course, heavily dependent on context for interpretation.

These observations must however come with the caveat that there is no way for the analyst to know for certain the nature of the emotions expressed in the construction because of its versatility, among other reasons: the very same instance may express different emotions on different occasions; what the hell are you talking about? can be used to convey anger, shock, frustration, surprise or incredulity, for example. Note that taboo expletives behave in the same way (fuck! as an expression of surprise, dismay or anger, depending on context). These difficulties notwithstanding, it is still worthwhile to try to pinpoint the role of contextual information, as in the following examples.

In (9) the construction conveys a rather high degree of perplexity on the part of the speaker:

(9_COCA_4) So, why... might I ask, why the hell are you all so desperate to get on board?

There is a break in syntax iconic to a break in thought. The two questions have the same semantic content, however, but they differ in their emotional force, and therefore in their intensity. Note that the questions asked (why... , why the hell) may remind one of utterances like it wasn’t just large, it was huge or he didn’t just beat her, he clobbered her, where huge / clobber are construed as more intense than large / beat.

The same can be said of (10): although the first part already reveals the speaker’s puzzlement, the name of the place called “Brakeston” is reinitiated in the affectively loaded WHX construction. There is a repetition, but with a difference in intensity:
When I saw my tour itinerary I was like, Brakeston? Where the hell is Brakeston?

Example (11) is of particular interest as the data reveal that the why or how the hell constructions co-occur most frequently with the modal auxiliary would (a constructional preference, so it seems). The emotion conveyed lies not only in the WHX construction per se, but also in the use of the modal would:

JELLY (reluctantly): A lot of people think you set him up.
VITTI: Why the fuck would I want to kill Dominic? He was like a father to me.

The why the fuck question is a reaction to the prior utterance. The speaker’s message is that there is no plausible or logical reason he can think of – try as he might – for him to validate the state of affairs designated by the proposition you set him up. As Furmaniak (2014) puts it, the modal auxiliary would shows the speaker’s epistemic stance toward the proposition, namely whether he or she regards the proposition as true or not. In this very specific case, the utterer distances himself or herself from what his or her co-utterer has just said. Differently put, the modal would expresses “truth neutrality”: although Jelly assigns a truth value to the proposition (you set him up), Vitti uses would to signify that this proposition is momentarily “suspended” as nothing can prove it (or disprove it), confirm it (or infirm it). The proposition you set him up is not amenable to rational explanation; it just does not make any sense. The emotion conveyed is one of shock or surprise.

In extreme cases, the emotional coloring can be expressed at several different points in the sentence structure and in the immediate context:

ROCCO: What did you do?! Fuckin’... what the fuckin’ fuck! Who the fuck, fucked this fuckin’? fuck. How did you two fuckin’, fucks?........ FUCK!!!
CONNOR: Certainly illustrates the diversity of the word...
ROCCO: What the fuck are you doing here? What, huh!? WHAT? WHAT? WHAT? ANSWERS! I WANT FUCKIN’ ANSWERS!

Here, the repetition of the F-word leads to strengthening, rather than redundancy.

The discussion in the next section can be regarded as a refinement and an extension of the analysis I have presented to this point. It builds on previous accounts (especially Fillmore [1985] and Huddleston & Pullum [2002]), and attempts to determine the most noticeable constraints at work in the WHX construction. Note that due to the sheer volume of utterances which were collected, it became a practical necessity to set limits on the number of units to be considered. Each of the occurrences was coded for the following: clause type, types of questions and types of wh-markers.

### 2.3. Constructional constraints

#### 2.3.1. Clause types

The data clearly indicate that the construction is robustly attested in direct wh-questions, as they create the ideal conditions for an intensifying effect to emerge. Indirect questions can also be found, but to a lesser extent. A possible explanation could be that although they express a question like direct interrogatives, there is no illocutionary force associated with them because they are embedded. The following
examples, which have been arranged according to their degrees of integration between
the main clause and the subordinating clause, reflect the slight discomfort there might be
in using the WHX construction in that type of question. As can be seen, there is some
gradience in what is meant to be an indirect question:

(13) I didn’t know what the hell I was talking about (prototypical
embedded question).
(14) So maybe he also knows where the hell am I going to get the parts I
need (embedded question, but inverted subject-verb word order).
(15) She’s half Puerto Rican and charges in there in her Target uniform
and wants to know why the hell isn’t anybody helping me? (embedded
question, but inverted subject-verb word order and question mark at the
end).
(16) Where the hell, I wondered, was Harry? (inverted subject-verb word
order and a wonder-type verb in medial position).
(17) I just want to know one thing; How the hell do you lose a 500 pound
fish?! (direct question introduced by a verb of the ask-type class).

In view of the above constructional constraint – that the WHX constraint be “an open
proposition” –, we are also now in a position to understand why the construction does not
occur felicitously in nominal relative clauses. In a wh- cleft construction, for example, the
clefted constituent expresses a focus and the cleft clause a presupposition, which is to say
that the state of affairs expressed in the relative clause is assumed to be already given or
taken for granted in the speaker’s / hearer’s mind. There is therefore no room for
emotions, let alone intensity, and the presence of the hell is flat-out unacceptable:

(18) What (*the hell) I like is chocolate.

However, nominal relative clauses introduced by a wh-ever compound co-occur with the
construction:

(19) I won’t sit still for extortion or manipulation or... whatever the hell
she has in mind.

This does not come as a surprise as these compounds are more indefinite in their
meaning than their counterparts what, who, when and where. Within the framework of The
Theory of Enunciative Operations, wh-ever compounds are said to mark a scanning operation
(“opération de parcours”) over the notional domains of /person/ (whoever), /time/ (whenever), /place/ (wherever), and so forth. This is due to the presence of -ever, which is
originally a temporal marker akin to every, and which denotes iteration (see Lapaire &
Rotgé [2002; (1991)]: 165-192]. In (19) above, whatever the hell she has in mind scans the class
of elements which might fill in the gap signaled by the wh- word, without actually filling
it. All the necessary conditions are therefore satisfied for the WHX construction to
function.

The incompatibility of the construction with exclamatory clauses can also be accounted
for as the speaker’s purpose in exclaiming is to already express an extreme emotion to
some presupposed fact, as in the following example:

(20) What (*the hell) a stupid man!

In (20) the property of “stupidity” is located at the extreme point on a scale of
“stupidity”.

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2.3.2. Types of questions

Traditional classifications of questions from a semantic-pragmatic perspective (see Bolinger [1989]; Ginzburg & Sag [2006]; Lyons [1977]; Thompson et al. [2015]) distinguish between information-seeking questions, which logically elicit answers or responses, and non-information-seeking questions put forth in the grammatical form of a question, but which are not requests for information. The former group can be divided into “Specifying questions” and “Telling questions” (Thompson et al. [2015]). Telling questions “seek extended responses – reports, stories, accounts, explanations, and so on” (Thompson [2015: 20]), while Specifying questions “seek single, specific pieces of information” (Thompson [2015: 20]). The latter group may have multiple discursive functions: “rhetorical questions”, “didactic questions” (where is France on the map?), “deliberative questions” (what am I to do?), “reprise questions”, among which “reclamatory questions” (Bolinger [1989: 133, 138]), which call for a complete or partial repetition (what did you just say?, who did?), or questions using uninverted order (they did what?).

“Information-seeking questions”, which are meant to gain some information, in response to uncertainty, naturally involve a certain amount of emotion. However, “Specifying questions”, a sub-class of information-seeking questions, seem to be less liable to be used with the WHX construction precisely because too specific an item of information is missing, which leaves less room for doubt. On the other hand, Telling questions, by their very nature, more readily exhibit the powerlessness the speaker may experience when seeking information. They are, thus, more apt to function with the construction. By way of illustration, compare the two examples below. The first (21) is in the context of an interview and aims at encouraging Charles Cashmore to provide the speaker with an apposite answer (exactly), which he does. The question, in the second example (22), has a wider scope and more significance, for it also suggests curiosity and astonishment on the part of the speaker:

(21) COCA FOX NEWS HOST: Where (*the hell) exactly did you meet O.J. that night?
CASHMORE: I met O.J. at the Palms.
(22) ‘Where the hell did you meet Virgil’s wife at? Hell, I’ve lived next door and I’ve only caught a few glimpses of her myself.’ ‘Down at the Town Market’ (Todd Wittenmyer, The Vulnerable Gods).

Non-information-seeking questions also combine with the WHX construction, but not with equal probability. Rhetorical questions, for instance, are likely to occur with the construction. A common feature of that type of question is the inverted polarity of its implied answer: a positive question like (how the hell would I know?) implies a negative assertion (I do not know). No answer is expected, since the answer is obvious and suggested in the question itself. Rather, a rhetorical question testifies to the attitudinal stance of the speaker; it is characterized by a strong argumentative function and can even come to be understood as an indirect speech act: the speaker may want to persuade the addressee, or challenge him or her (see comment pourrais-je le savoir, je te le demande ?). The presence of the WHX construction enhances therefore the illocutionary force of that type of question.

Now let us compare the following pair of examples:

(23) JOHN (in the kitchen with his mother): Mom, what (?the hell) are you doing?
JOHN’S MOTHER: the housework / lunch / the dishes / laundry, etc.

(24_{Coca}) Jazz snapped accusingly. ‘What the hell are you doing clowning around with that ridiculous hair on your face?’ ‘You mean you really didn’t recognize me? (...)’.

Interestingly, no instances similar to (23) have been found in the corpus, probably because the question is too constraining; it is understood by the mother as an information-seeking question, and more precisely as a Specifying question (i.e. mom, what is it exactly that you are doing right now?). A question is asked about the object NP, hence the set of different possible answers (the housework, lunch, etc.). In (24), on the other hand, the question is about the notional content of the verb do: it is non-information-seeking (clowning around already provides part of the answer), and sounds like a “disapproval question”, whose meaning is close to “why”. Emotions have ample room to emerge.

Reprise questions are dislocations of interrogative wh- clauses and do not readily combine with the WHX construction:

(25) MARY: Tracy likes John.
PETER: Tracy likes who (*the hell)?

These constraints have been discussed by Huddleston & Pullum [2002: 916] who state that the WHX construction must be in initial position, and not in clause-final position. However, no semantic account has been offered. In fact, reprise questions occur when the previous utterance was misheard or when the speaker wants to express astonishment, but these questions have already been introduced or at least been accommodated into the previous context. Such questions are then heavily subject to presuppositional factors, which is not compatible with the WHX construction. In the same vein, Ginzburg & Sag [2006: 256] argue that they are “metalinguistic [...] in that the content that they give rise to contains as a constituent the illocutionary force of the previous utterance that [they] reprise”. Notice that emotions, for they are present, are conveyed through other means, namely a non-canonical word order and a specific intonational pattern in conversation (see Bolinger [1989], for more detail). For the same reasons, I assume that the idiomatic phrases say what? or says which?, used as a request for more information and to express surprise at what someone has just said, cannot be followed by the NP the hell: “say what the hell?"

2.3.3. Wh- markers. A few examples

What / Who

Among the paradigm of wh- terms, what and who are the most frequently co-occurring markers with the construction. Who is, however, somewhat less frequent. Lyons [1977: 763] states that there are presuppositional differences between “what” questions and “who” questions:

Whereas what did you see? makes no presuppositions with respect to specificity or definiteness of reference and may be answered with John’s new car or A car (and this may be construed as having either specific or non-specific reference), Whom did you see? cannot be answered appropriately otherwise than by means of an expression with definite reference [...] the man.

A question introduced by who is then more specific in its presuppositions than one introduced by what. This could account for the uneven distributions of who and what
markers in the corpus (see 3.1.1, Table 1 for more detail). Evidence supporting this comes from the fact that the WHX construction with what has a marked preference for the following verb types, namely do, go on, talk. The semantic content of do, for instance, is very light. The set of possible answers (i.e. its “openness”) is for all intents and purposes unlimited. For still more evidence on the prevalence of what-questions with the construction, consider the elliptical form what the (hell)?!. The presence of what allows easy retrieval of the missing verb (do, go on, talk). That is why elided questions like (?)who the (hell)?!, (?)why the (hell)?!, ?when the (hell)?!, where the (hell)?! are hardly if at all acceptable. In the same way only the marker what can be elided in the hell you’re doing?; other wh- words cannot: ?the hell are you? (= who? where?), ?the hell are you coming? (= when ).

When / Where

These markers instantiate the WHX construction less commonly. They are mostly found with Specifying questions which, as has been pointed out earlier, exert constraints on the number of possible answers:

(26_{COCA}) A closer inspection of the police hat on the wall informed him that they were in Points North, Indiana. He told Whit. ‘Where the hell is Points North?’ ‘Not far from Valparaiso (…)’.

Which (not combinable with the WHX construction)

Huddleston & Pullum [2002: 430] point out that which presupposes a limited set of pre-determined objects. Openness is here considerably limited, which hardly leaves any room for uncertainty (and therefore for emotions and intensity) to be expressed.

As stated in the introduction, another question motivating the present study is that “if two constructions are syntactically distinct, they must be semantically or pragmatically distinct” (Goldberg [1995: 67]). I hypothesize that there might be a correlation between varying degrees of intensity and the many sub-types of the WHX construction, be they lexical (what the hell / fuck / heck / holy hell…) or grammatical in nature (what in the hell / in hell / the hell…). The first section (3.1.) of part 3 offers, therefore, an overview of the diversity of patterns that the construction exhibits. Note that limitations of space preclude a detailed discussion of all its possible variants and that I mainly focus on the lexemes hell and fuck.

3. Constructional variation and intensity

3.1. Constructional diversity

3.1.1. Syntactic diversity

The number of syntactic variants of the WHX construction is somewhat puzzling. Syntactic variation should be taken here to refer to varying syntactic forms, at a micro-level:

(27_{COCA}) Wh- the H…?: who the hell is this guy?
(28_{COCA}) Wh- in the H…?: where in the hell have you been?
The following occurrence is particularly noteworthy in that it combines the what-in-H sub-construction, with the what's-the-H sub-construction, and the what-the-H-Noun construction:

(36) What in hell's difference will one speech make? (Howard Fast, The American: A Middle Western Legend)

The question is to determine whether all the syntactic patterns are particular sub-types of the WHX construction or whether we need to consider the resemblances to be merely fortuitous. The most problematic examples will now be discussed.

**Wh- the H?**

(31): this example is a case of aposiopesis, a figure of speech in which the speaker decides to break off a sentence and leave it unfinished. But there are also cases where the fixed phrase what the hell is an expression of dismissal (I wasn't supposed to tell you yet, but what the hell!). The latter case is related to the WHX construction, but has acquired sufficient autonomy to be a stand-alone construction (i.e. the original ellipsis, probably what the hell do I care, is no longer felt). The problem is that these two constructions are often situated along a continuum and are not easy to tease apart.

**Wh- the H-Noun...?**

(32): Huddleston & Pullum [2002: 430, 916] explain that the item hell can only be attached to a wh- word as a post-head modifier, like the adverb else. But it cannot occur after an interrogative word which is in dependent function: *What on earth reason could they have for rejecting it? (Huddleston & Pullum [2002: 916]).

What is surprising is that the Corpus of Contemporary American English seems to yield several examples of what is otherwise deemed unacceptable by these authors. A closer observation of the data reveals however that, in this specific case, routinized phrases are mainly targeted by the construction: what (the hell) difference does it make? What (the hell) good does that do me now? What (the hell) business is it of theirs to say that? These instances may in fact bear a closer resemblance to other the hell constructions, as exemplified in shut the hell up, than they do to the WHX construction. Indeed, in the former set of constructions, the NP the hell has a wide combinatorial range, as it can be placed after an NP and before an adjective (leave my kids the hell alone), after a verb (beat the hell out of sb), after an adverb (how far the hell away is Minneapolis?), or between a verb and its particle (shut the hell up).
What’s the H...? How’d the H...?

(34 and 35): this pattern, which involves a cliticized s after what, as in (34), is non-canonical and one would be hard pressed to account for its usage in terms of traditional grammar or ordinary logic. As a possible explanation, it can be assumed that this sub-construction instantiates at least two different constructions: the WHX construction, from which it inherits, but also, the how’s about construction, which is sometimes used to make a request or suggestion (how’s about a drink? / how’s about we have a drink?), and after which it also seems to be patterned. The five occurrences found in the corpus clearly indicate, however, that these instances are not mere accidents which could be chalked up to speakers’ negligence. Rather, there might be an ongoing change which has not been noticed by observers so far.

Although speculations are possible, no firm conclusions can be reached regarding these peculiar patterns whose status is anything but obvious. That is why the subsequent analyses will be limited to the patterns displaying the highest token frequencies in the corpus (27, 28 and 29): wh-the-hell / wh-in-the-hell / wh-in-hell. For the remainder of this section, I will look more closely at their distribution.

Table 1: Distribution of wh-the-hell/fuck, wh-in-the-hell/fuck and wh-in-hell/fuck (COCA)

<table>
<thead>
<tr>
<th>WH-WORDS</th>
<th>THE HELL / THE FUCK</th>
<th>IN THE HELL / IN THE FUCK</th>
<th>IN HELL / IN FUCK</th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td>4577 / 1005</td>
<td>177 / 7</td>
<td>133 / 0</td>
</tr>
<tr>
<td>Who</td>
<td>868 / 219</td>
<td>50 / 4</td>
<td>20 / 0</td>
</tr>
<tr>
<td>Where</td>
<td>671 / 151</td>
<td>39 / 3</td>
<td>23 / 0</td>
</tr>
<tr>
<td>How</td>
<td>600 / 99</td>
<td>61 / 3</td>
<td>32 / 0</td>
</tr>
<tr>
<td>Why</td>
<td>505 / 88</td>
<td>53 / 0</td>
<td>45 / 1</td>
</tr>
<tr>
<td>When</td>
<td>27 / 9</td>
<td>1 / 0</td>
<td>1 / 0</td>
</tr>
<tr>
<td>Which</td>
<td>0 / 0</td>
<td>0 / 0</td>
<td>0 / 0</td>
</tr>
<tr>
<td>Whatever</td>
<td>228 / 34</td>
<td>4 / 0</td>
<td>3 / 0</td>
</tr>
<tr>
<td>Whoever</td>
<td>29 / 1</td>
<td>0 / 0</td>
<td>0 / 0</td>
</tr>
<tr>
<td>Wherever</td>
<td>22 / 5</td>
<td>0 / 0</td>
<td>1 / 0</td>
</tr>
<tr>
<td>However</td>
<td>3 / 1</td>
<td>0 / 0</td>
<td>0 / 0</td>
</tr>
<tr>
<td>Whenever</td>
<td>1 / 0</td>
<td>0 / 0</td>
<td>0 / 0</td>
</tr>
<tr>
<td>Whichever</td>
<td>0 / 0</td>
<td>0 / 0</td>
<td>0 / 0</td>
</tr>
</tbody>
</table>

Table 1 indicates that not all syntactic variants are equally frequent. For instance, the wh-the-hell sub-construction ranks atop the list. The wh-in-the-hell and the wh-in-hell sub-
constructions are used to a much lesser extent. In addition, hell is consistently more commonly used than fuck across all three variants, but written genres (novels, magazines, newspapers) in the Corpus of Contemporary American English, and the need to use more appropriate language in certain social situations may account for these results. As for wh words (see 2.3.3. above), they also appear roughly in the same proportions across these three patterns, whether hell or fuck are used. Notice that -ever compounds have also been added for comparison’s sake.

It is also worth noting that when hell or fuck are replaced with other lexical variants, some restrictions apply. Here are three examples:

<table>
<thead>
<tr>
<th>H = World:</th>
<th>H = Earth:</th>
<th>H = Devil:</th>
</tr>
</thead>
<tbody>
<tr>
<td>*wh- the world</td>
<td>*wh- the earth</td>
<td>wh- the devil</td>
</tr>
<tr>
<td>wh- in the world</td>
<td>*wh- on the earth</td>
<td>wh- in the devil</td>
</tr>
<tr>
<td>*wh- in world</td>
<td>*wh- in earth &gt; wh- on earth</td>
<td>*wh- in devil</td>
</tr>
</tbody>
</table>

In spite of these restrictions, Table 2 reveals more or less the same regularity in the distribution of wh-words with the three variants above:

<table>
<thead>
<tr>
<th>Wh-words</th>
<th>*The world/*The earth/</th>
<th>In the world/*In the earth/</th>
<th>*In world/*On earth/</th>
<th>*In devil</th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td>Ø / Ø / 146</td>
<td>591 / Ø / 7</td>
<td>Ø / 685 / Ø</td>
<td></td>
</tr>
<tr>
<td>Who</td>
<td>Ø / Ø / 28</td>
<td>113 / Ø / 0</td>
<td>Ø / 65 / Ø</td>
<td></td>
</tr>
<tr>
<td>Where</td>
<td>Ø / Ø / 44</td>
<td>204 / Ø / 2</td>
<td>Ø / 127 / Ø</td>
<td></td>
</tr>
<tr>
<td>How</td>
<td>Ø / Ø / 32</td>
<td>401 / Ø / 3</td>
<td>Ø / 301 / Ø</td>
<td></td>
</tr>
<tr>
<td>Why</td>
<td>Ø / Ø / 28</td>
<td>349 / Ø / 1</td>
<td>Ø / 375 / Ø</td>
<td></td>
</tr>
<tr>
<td>When</td>
<td>Ø / Ø / 31</td>
<td>2 / Ø / 1</td>
<td>Ø / 6 / Ø</td>
<td></td>
</tr>
<tr>
<td>Which</td>
<td>Ø / Ø / 0</td>
<td>0 / Ø / 0</td>
<td>Ø / 0 / Ø</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Distribution of the three variants wh-the devil, wh-in the world, wh-on earth (C0CA)

Clearly, many of these observations give pause. They will be expanded upon in 3.2. The WHX construction also exhibits great lexical diversity, ranging from high-frequency variants to on-the-spur-of-the-moment creations which, for the most part, die aborning.

3.1.2. Lexical diversity

Table 3 below provides the overall distribution in COCA of the different types of lexical candidates in the construction and is measured using token frequency. The lexemes hell
and fuck have been taken as a basis, but the list could be supplemented with more material: wh- the shit (19 tokens), and one-shot creations such as what in the shista-shire (1 token), why in the sweet world of wonder (1 token), what the piss (1 token), etc.7

Table 3: Overview of WHX types with examples (COCA)

<table>
<thead>
<tr>
<th>Type of H (based on hell)</th>
<th>Type of H (based on fuck)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokens</td>
<td>Tokens</td>
</tr>
<tr>
<td>Hell</td>
<td>8905</td>
</tr>
<tr>
<td>Heck</td>
<td>1150</td>
</tr>
<tr>
<td>Bloody hell</td>
<td>33</td>
</tr>
<tr>
<td>Goddamn(ed) hell</td>
<td>14</td>
</tr>
<tr>
<td>Fucking hell</td>
<td>3</td>
</tr>
<tr>
<td>Holy hell</td>
<td>3</td>
</tr>
<tr>
<td>Poxy hell</td>
<td>2</td>
</tr>
<tr>
<td>Damn hell</td>
<td>1</td>
</tr>
<tr>
<td>Freakin’ hell</td>
<td>1</td>
</tr>
<tr>
<td>Friggin’ hell</td>
<td>1</td>
</tr>
<tr>
<td>Bleeding hell</td>
<td>1</td>
</tr>
<tr>
<td>Bloody heck</td>
<td>1</td>
</tr>
</tbody>
</table>

7 It has been demonstrated roughly (Bybee [2010]) that type frequency correlates with productivity. In other words, the more different items occur in the free slots of a construction, the more likely it is to be entrenched (stored individually) and conventionalized (tacitly agreed upon by the speakers of a linguistic community), and the more likely it is to be productive. In my data (Table 3), the number of different items which occur in the construction, namely its rather high type frequency, clearly indicates that the construction is very productive. The substantial ratio of very low-frequency instantiations, some of them being hapax legomena (i.e. types only instantiated by one token), is also another indicator of its productivity. Baayen [1993] labels this the “hapax-conditioned degree of productivity”, which means that the number of hapax legomena of a given construction in a corpus reflects productive innovation. Note that these ad hoc formations can mainly be found in the written section of the corpus (especially in novels), but more rarely in naturally occurring American English conversational data.
The possible motivations behind lexical diversity are manifold and intricate, and it can only be conjectured that speakers manipulate the language with varying levels of consciousness: the point may be to soften a harsh reality lest it cause offense, in the case of euphemisms, to renew expressivity and break up stylistic monotony, or to produce an effect on the hearer, simply out of playful amusement.

Two non-exclusive strategies are at the speaker’s disposal: the NP the hell / fuck or the Prep. P in (the) hell / fuck can be internally modified by adjectives. The nouns hell / fuck can also undergo some more or less profound remodeling. To this end, several word formation processes can be used: non-morphemic word-formation patterns (clipping, acronymy, abbreviation), as well as morphemic word-formation patterns (compounding especially). Also found are formations which involve “non-rule-bound” mechanisms such as phonological and / or graphemic modifications. Note that these different processes can occur simultaneously, which makes them difficult to classify (see Bordet & Jamet [2014], for similar conclusions). A few examples are provided here:

(37 COCA) What the fudge (the onset of the objectionable form, fuck, corresponds to that of the euphemism).
(38 COCA) What the Samuel Hill (a euphemism is achieved through a close-sounding process; hell / hill are perceived to be semantically and phonetically related: they denote locations, with the same onset and the same ending).
(39 COCA) What the poxy hell (hell is premodified by a standard adjective).
(40 COCA) What the pus-rotted hell (hell is premodified by an ad hoc adjectival compound).
(41 COCA) What the kr’deekin’ hell (hell is premodified by an element which does not have word status or any semantic content).
(42 COCA) What the... (fuck is shortened to an initial).
(43 COCA) What the... (graphophonological deletion).

As one can easily imagine, a Google search would yield many more creative examples, such as the following:

(44) What the %!!* do you want? (ideograms).
(45) WTF do you want? (a fully lexicalized initialism is used).
(46) What the fuuuck are you talking about? (stretching of the vowel).

However, productivity is relative and the word-formation processes involved in creating lexical units are never entirely without constraints. Morphophonological tendencies can be observed: for instance, hell and fuck are monosyllabic and their euphemistic counterparts (heck, freak, fudge, and the like) do tend to share their structure. In addition, learned words, of Latin origin, do not seem to be likely to appear in the construction. This restriction is not construction-specific; it applies to taboo words in general (Allan & Burridge [1991: 145-146]): ?copulate you!, ?you anus!, and probably for the same reasons: what the inferno?. The construction also seems to favor words and phrases belonging to the semantic fields of religion and cosmogony (hell, devil, God’s name, the world, the earth). The lexeme fuck is, of course, a notable exception, but as one of the most emotionally charged words in English, it has become an all-purpose intensifier (see Hughes [1991: 30-31]): it can be a member of more than one different grammatical category and can be found in an idiom even when it has no affinity whatsoever with its syntax or meaning (verbal usage: to fuck up, destinational: fuck off, cursing: fuck you, expletive: fuck!, expletive infixation: in-fucking-credible, adverbial usage: like fuck, etc.). This holds true for the WHX construction:
although the use of fuck is clearly coarse and offensive, it has lost all connection with its original sexual meaning, which is substantiated by the incompatibility of the construction with other terms connected to bodily effluvia or sexual acts: ?what the screw, ?what the sod, ?what the bugger, ?what the fart, ?what the puke.

76 Of note also is the fact that the lexicalized variants wh- the devil, wh- the dickens, wh- the deuce, which are well represented in the corpus, display little or no variation (dickens is already a euphemistic form for devill). Their dated character may leave little need for creativity in present-day English. As is often underlined in the literature, intensifiers (or “degree words”, as Bolinger [1972: 18] called them) are subject to wear and tear and drop out of usage quickly:

Degree words afford a picture of fevered invention and competition that would be hard to come by elsewhere, for in their nature they are unsettled. They are the chief means of emphasis for speakers for whom all means of emphasis quickly grow stale and need to be replaced.

77 The figures in Table 3 above indicate, however, that hell has never really fallen out of favor and still seems to be the unit of choice amongst many speakers today. In fact, the following predictions never really materialized:

Hell fills so large a part of the American vocabulary, that it will probably be worn out in a few years more (American Speech, August 1931, quoted in Hughes [1991: 169]).

78 This may be related to the fact that (the) hell, as is also the case with (the) fuck, is often regarded, as a “general intensifier” (Green [2010: 741]), which can combine with just about anything (see comments on fuck above, for instance). Its promiscuity could be the reason for its success over the years.

79 Such constructional diversity – whether at the lexical or syntactic level – and the lack of marked differences in the distribution of wh-words operating with the different sub-constructions, as is shown in Table 1, leads one to believe that complementarity between these different sub-types could manifest itself somewhere else, perhaps in the degree of their intensity.

3.2. Varying degrees of intensity

3.2.1. Syntactic variation and intensity

80 Forty informants, between the ages of 20 and 35 (twenty are British or Irish and twenty are American), were asked to evaluate on a three-point scale the degree of intensity associated with three sub-types of the WHX construction, namely wh-the-hell, wh-in-the-hell and wh-in-hell. Some sort of context, albeit in an imperfect form, was re-created in order to assess the different sub-constructions (“you walk into your office and are shocked to discover an intruder searching through your things. You exclaim: ‘what… are you doing?’”). The three sub-constructions also had to be compared among themselves (e.g. x is more intense than y, but less intense than z) in order to keep the forty respondents from measuring them against outside norms which would have remained inaccessible to the analyst.

81 Nevertheless, while analyzing the results, one must remain aware that the participants’ responses must have been influenced by exogenous factors such as their education, their culture, their age and their internal states of mind; the outcome is then necessarily
slightly biased. In order to get a better grasp of how this interplay of factors may have worked, our forty informants were also encouraged to explain their evaluation. The results, in percentages, are shown in Table 4.

Table 4: Results of the first questionnaire administered to 40 informants (in percentages)

<table>
<thead>
<tr>
<th>Level of intensity</th>
<th>Wh-the-hell</th>
<th>Wh-in-the-hell</th>
<th>Wh-in-hell</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: low level</td>
<td>10</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>2: middle level</td>
<td>10</td>
<td>70</td>
<td>50</td>
</tr>
<tr>
<td>3: high level</td>
<td>80</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

While these results are far from conclusive, for the reasons stated above, they do suggest tendencies in a certain direction.

**Frequency effects**

It can be safely assumed that frequency effects are expected to affect speakers’ reasons behind their choices. Bybee’s notion of “lexical strength” [2010: 75] proves to be useful for the present purpose:

> Each use of a word or construction increases the strength of its exemplar cluster, making that word or phrase more accessible lexically.

The three sub-constructions under study have various degrees of lexical strength. The highest lexical strength is no doubt associated with the *wh-the-hell* sub-construction (see Table 1). A plausible explanation is that it has come to function as a single-processing unit, through multiple uses, and is now automatically recalled and recognized as the construction of choice, the best example of the category. Type-familiarity may be therefore a primary contributor to the degree of intensity associated with it. An objection to this analysis would be to argue that the repetition of a phrase may, in fact, eventually weaken it and deplete it of its force. This was the case with some informants (10 %) who were of the opinion that the *wh-the-hell* sub-construction was the lowest in terms of intensity, precisely because of its over-use. However, this is not what the majority of respondents felt.

More evidence to support this hypothesis is provided by the *wh-in-hell* construction which ranks the lowest in intensity. Most informants admit to never having heard or used this sub-construction, or when they have, they make it abundantly clear that it is far less common than the first two and is not part of their dialect. Some American subjects even consider it to be southern American English. It can then be concluded, on the basis of the data available, that the low frequency of use of a sub-construction (either because it is diatopically marked or because it is not known to the subject) may have a direct impact on its intensity level, which tends to be perceived as weaker than its high frequency counterparts.

**Evidence of reliteralisation**

It has been seen earlier (2.1.) that the lexeme *hell* in the construction has come to be used in contexts where its original meaning must have been subject to a process of bleaching, so that the construction has eventually adopted pragmatic rather than semantic
functions. However, as was also argued, the built-in intensifying potential of the lexeme *hell*, due to its original locative meaning and its negative connotations, may not lie far behind in the construction. I claim that in the syntactic variants *wh-in-the-hell* and *wh-in-hell*, the locative reading of the lexeme *hell* may be brought back to the fore even more patently. In other words, hearing or uttering *wh-in-(the)-hell* may activate a more direct reference to the nether world and to its implications of pain and suffering than it does with the *wh-the-hell* counterpart. Two factors can be adduced in favor of this account.

87 First, the noun *hell* in the prepositional phrases *in the hell* and *in hell* allows premodification by adjectives denoting a stretch of area (47) or reminding one of the blazing flames of *hell* (48). Note that these modifiers normally possess a descriptive meaning. In the case at hand, they are coerced into also having an expressive meaning in the syntactic environment of the construction, that is they also function as intensifiers which have a heightening effect on the noun they modify:

(47) `COCA` Where in the worldwide fuck...? / Who in all hell...?
(48) `COCA` Who in the hot hell...?

88 Additional evidence is provided by the infelicitous combination of the same premodifiers with the *wh-the-hell* sub-Construction:

(49) ?Where the worldwide fuck...? / *Who the all (whole) hell...? / ?Who the hot hell...?

89 Descriptive and expressive meanings also interact in other constructions, which contain the lexeme *hell* usually in the form of a locative prepositional phrase:

(50) There’s no way in hell I’m going to do it (compare with French: je ne le ferai jamais, même en enfer).
(51) Without a snowball’s chance in hell (the idea is that hell is a place where there is no opportunity of any kind, because of its extreme heat).
(52) Go to hell! (as an angry command to tell someone to go away; it may still carry some of its descriptive meaning, that of a command to ‘go burn in hell’).

90 The process of (partial) reliteralization of an intensifying expression may then contribute to the (partial) loss of its expressiveness and therefore of its intensity. This may also explain why the intensity attached to the *wh-in-(the)-hell* variants is perceived as less severe.

3.2.2. Lexical variation and intensity

91 The WHX construction exhibits great lexical variation (see Table 3) and speakers make abundant use of euphemisms for otherwise objectionable words. It is, at first glance, intuitively plausible to believe that there is a strong correlation between the objectionability of a term and the intensity which is thereby produced. As regards the WHX construction, one can assume that the more offensive the lexical item is (the one filling the ‘H’ slot), the stronger the emotion associated with the *wh-* question is, and the higher the intensity. This section discusses this commonly held belief.

92 Before we do so, a few remarks on euphemisms and taboos are in order. It is often noted in research on these topics (e.g. Adams [2016]; Allan & Burridge [1991]; Janet & Jobert [2010]; Tournier [1985]), that euphemisms may be created to satisfy the need to observe
what is considered to be “acceptable”, which is usually enforced by social or religious conventions in a given culture. Taboos, on the other hand, are defined as fields that cause discomfort when they are discussed directly. They flout conventions because they are crude or frightening and force the addressee’s mind to go in a direction it might prevent itself from going in. Their very existence is the main motivation for the creation of euphemisms. Taboos are “not to be mentioned”.

Taboo language associated with religion is also referred to as “profanity” or “blasphemy”:

Blasphemy vilifies or ridicules the deity, the deity’s family, or divine mouthpieces like prophets or the priesthood, and divine scriptures. Profanity uses religious terms – such as the name of the deity – without blasphemous intent, but with careless irreverence (Allan & Burridge [1991: 37]).

The WHX construction clearly draws on objectionable language (fuck) and profanity (hell), not blasphemy. By using disguised swearing, speakers may be able to use religious or offensive words, without quite doing so.

Now what is at issue here is to test the validity of the correlation whereby the more objectionable an item is, the more intense the effect is likely to be. It is tempting prima facie to assume that this correlation makes sense and that it is the default. If I stub my toe, for example, the pain is so intense that I am more likely to utter “fuck” or any other crude expletive than a mere “drat” or “dang”, or any other innocuous variant. According to Anscombe [2009], Wierzbicka [1992], or Bergen [2016], the blurtling out of a curseword is cathartic. It is used to release tension or pent-up emotions. So, the use of the right expletive is logically in accordance with the experienced emotions. It indicates an affective stance toward a certain state of affairs. Along the same lines, Anscombe [2009: 18] aptly calls expletives “psychological interjections” as they are close to affects such as surprise, fear, or anger. Swearing is emotive. Ljung [2011] talks about “reactive expletives”; they signal a reaction to an outside stimulus. Euphemisms, on the other hand, may lack something in certain situations because the emotional force of the speaker’s reaction is not being conveyed in the same way.

In a way, the WHX construction functions like expletives, and perhaps not so coincidentally. Take the example of French, which often resorts to expletives in clause-initial or clause-final position to express what English more naturally expresses through the WHX construction:

(53) (Putain) mais qu’est-ce que tu fais (putain) ? (more or less literally: (fuck), but what are you doing (fuck)?, for what the hell are you doing?)

Of course, other options are possible in French such as the use of extrinsic intensity (expletives like putain) along with words which convey intrinsic intensity (foutre, con):

(54) (Putain mais) qu’est-ce que tu fous ? (what the fuck are you doing?).
(55) Quel est le con qui a laissé la porte ouverte ? (more or less literally: who is the jerk who left the door open?, for who the fuck left the door open?).

Having prepared the ground with these assumptions, let us now turn to the data.

The role of pre- / post-modifications and phonological modifications

We have seen in 3.1.2. that recurring patterns can be detected in the data under study. The head nouns hell or fuck show a degree of variation either by adding modifiers, which
can be the same as the head noun (e.g. *what the fuckin*’ *f*uck), or different (e.g. *what the holy hell*), or by using close-sounding words (e.g. *what the freak*). Some of these modifiers or substitutes may be actually attested words (e.g. *holy, freak, fuckin*’), or non-attested words, some of them being nonetheless well-formed (e.g. *pus-rotted*), others being close to *ex-nihilo* creations (e.g. *kr’deekin*’). We could go on to note that adjectives – whether they are intrinsically axiological (goddamn) or not (hot, widespread) – and whether they are compatible with the noun they modify (hot hell) or not (sweet hell) – also perform an intensifying function, which may result in “super-intensified” instances of the construction.

The question which arises here is to know whether the intensity of the construction increases or decreases depending on the presence of i) modifiers, ii) their transparency and motivation, iii) their length and iv) other rhythmical constraints. Informal judgments were solicited from the same forty informants using the same three-point scale as with the first questionnaire, and follow-up individual email interviews. The same type of context was re-created in the minds of my informants (“you walk into your office and are shocked to discover…”), and lexical material from the corpus (see Table 3) filled the H-slot of the WHX construction.

Table 5: Results of the second questionnaire administered to 40 informants (in percentages)

<table>
<thead>
<tr>
<th>Level of intensity</th>
<th>1 freak</th>
<th>2 holy</th>
<th>3 fuckin’</th>
<th>4 kr’deekin’</th>
<th>5 flying</th>
<th>6 Sam</th>
<th>7 Sam</th>
<th>8 worldwide</th>
<th>9 blankety</th>
<th>10 pus-rotted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: low level</td>
<td>60</td>
<td>10</td>
<td>0</td>
<td>80</td>
<td>0</td>
<td>50</td>
<td>60</td>
<td>50</td>
<td>90</td>
<td>20</td>
</tr>
<tr>
<td>2: middle level</td>
<td>40</td>
<td>60</td>
<td>10</td>
<td>20</td>
<td>40</td>
<td>50</td>
<td>40</td>
<td>50</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>3: high level</td>
<td>0</td>
<td>30</td>
<td>90</td>
<td>0</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>30</td>
</tr>
</tbody>
</table>

Some results speak for themselves. Lexical material containing explicitly objectionable words, namely *fuck*, or to a lesser extent, *hell* tends to rank higher on the intensity scale (examples 3, 5 for *fuck* and examples 2, 10 for *hell*). These facts seem to be constant across our informants. The other examples rank lower, some almost systematically very low such as the anodyne *blankety blank* (9) or *kr’deekin*’ (4), whose usage is associated with someone who would have a moral objection to cursing in any way. Overall, most informants pointed out the ironic distance created by such lexical choices as (9) and (4), that is the contrast between a harmless corny reading and the supposedly strong impact they may want to convey. Now what is it that makes these lexical variants sound innocuously silly or quaint? Several aspects can be taken into account.

Speakers are sensitive to certain morphophonological constraints. The most common lexical items, *fuck* and *hell*, and their lexicalized variants, such as *freak, frick* and *heck* tend to sound as quick and harsh, as they all contain short vowels and stop sounds as in the case of *fuck*. Bergen [2016: 30-34] also notes that many cursewords in English have four or five letters, and that speakers tend to rate them as more profane when they end in a
closed syllable (Bergen [2016: 38-43]). This could explain why the kr’déékin’ hell variant (4) rates very low. Although kr- is attested as an onset in English, and although -in’, as a coda, reminds one of fuckin’, the unit kr’déékin’ is too far removed from the prototype (fucking, or so it seems) and distracts from the intended intensity of the message. Thus, the lack of phonological similarity between a replacive form and hell or between the modifier in the case of kr’déékin’ and other prototypical modifiers does not permit easy recognition of the underlying word, and makes it therefore a less likely candidate to express intensity, however mild. Note that the phonological and semantic transparency of a word is a more general constraint – not WHX-specific – on euphemisms, as formulated by Miller [2014: 124]:

[A euphemism is] an alteration of a negatively valued word to remove the shock value while simultaneously suggesting it in a way that does not inhibit communication of the concept or the word itself.

The length of a phrase provides another answer and is in line with the “closeness is strength of effect” iconic principle (Lakoff & Johnson ([1980] 2003), which means that the tight syntactic bond between the different constituent items of the WHX construction reflects the fact that these entities are also close conceptually. By using a longer variant (e.g. worldwide hell, flying blue fuck), the speaker, or rather the hearer is invited to reconceptualize his or her experience, that is view everything from a different perspective. But the longer the item, the more diluted the intensity, which supports the claim made in the preceding section about the what in the hell variant and the idea that the longer variants of a phrase tend to deplete the construction of its force. In another study (Hugou [2011]), I suggested that insults in the imperative, which are used antagonistically and which involve a verbal attack on the interlocutor, tend to be short and to the point. Binary or ternary rhythms are strongly favored: drop dead, fuck you, screw you, sod you, etc.; on the other hand, elaborate, colorful and / or lengthy insults are felt to be less potent or more childish, even though they are used with intent to be rude and understood as such (e.g. go shit in your hat!, go boil your head!). Ljung [2011: 102-103] makes a comment in the same spirit by stating that today’s oaths, or at least what is left of them, seem to be much shorter and less inventive than in the past (examples of older oaths: by God’s glorious wounds!, by all that is holy! (Ljung [2011: 101-102]). Longer versions have an archaic or humorous flavor.

In order to test these assumptions, a few distractors, which do not appear in Table 5, were added to the questionnaire. These are made-up variants, such as what on the nice little planet we live on are you talking about? (premodification, as well as postmodification by a finite restrictive relative clause), or what in the place of eternal torment are you talking about? (postmodification by a prepositional phrase). These long sequences of items were rated very low indeed in terms of intensity as their length and explicitness become a major violation of the amount of information presented, which renders them impractical. As explained by Crystal [2004: 229], postmodifiers tend to be most frequently encountered in writing (the style of learned discourse, for example), in which the thought is of some complexity; this should not be the case with the WHX construction, or any other intensifying multi-word units for that matter, as these structures are meant to be direct and striking. These long variants require processing effort and distract the addressee from the message.

Constraints, however, may compete with each other: pus-rotted hell (10), in spite of its relative length, which may suggest less immediacy, was considered mildly offensive, not
only because of the explicit use of *hell*, but also because of the vivid imagery conveyed by *pus* and *rotted*, even though one may be hard-pressed to articulate the conceptual import of the resulting *ad hoc* adjectival compound, *pus-rotted*.

**The role of contextual factors**

Not surprisingly, taking contextual factors into account challenges somewhat the views which have been held up to now. The intense nature of such words as *hell* or *fuck*, whether or not they are premodified or phonologically altered, is not only a property of the word itself, but also of the way in which it is used. Note that the term “context” can be broken down roughly into the linguistic context, the socio-cultural context and the situational context (the speaker’s purpose and the relationship between speaker and addressee).

Under some particular circumstances, for instance, the corniness or datedness issue is no longer as relevant. A person who performs a religious ceremony in a place of worship may ask in utter dismay *what the blankety blank has our world come to?*, using a bowdlerized alternative as a response to profanity (*hell*, for instance), which would run afoul of how we expect a preacher to express himself in this context. In Politeness Theory (Brown & Levinson [1987]), it can be said that the speaker uses this alternative to avoid loss of face: his own face and that of the audience, *i.e.* his or her congregation. Yet, however “corny” *blankety blank* may be, it still allows some emotions to be expressed intensely in the context at hand, and other paralinguistic (attitudinal intonation) and extralinguistic means (co-verbal gestures) may also contribute to the overall effect. Cruse [2011: 201] speaks of “prosodic gradability”, where a greater emotion is expressed by both greater volume and greater pitch range.

Take also the case of *how the hell are you?*. The question *how are you?* implies that the addressee’s present state is to be located at some point on a scale of “physical or mental condition” (*not too good, could be better, good, very good, feeling like a million bucks*, etc.). However, its original meaning is sometimes lost, to the point where the question is asked as a matter of routine, without expecting an answer. The phrase *how the hell are you?* does not seem to suggest a gap in knowledge (a missing piece of information which needs to be supplied) any more than its counterpart *how are you?*. We do not necessarily expect an informative response after this question. Rather, it seems to have developed a new force and reinvigorates the more bland *how are you?*. It helps establish interpersonal rapport and maintain conversational dynamics. If I am speaking to a dear friend I have not seen in a long time and ask *how the fuck are you?*, this will be construed as affectionate, no matter how objectionable the word *fuck* is.

All of this goes to show that, in the final analysis, the use of objectionable language, including its euphemisms, is culture- and context-sensitive: it changes over time and is affected by social, political, economic or cultural factors (see Battistella [2005: 83]).

**Conclusion**

By discussing the WHX construction at a synchronic level and within Construction Grammar, this paper has attempted to make a contribution to the expression of intensity. This has been achieved through the use of the *Corpus of Contemporary American English*, which provided insights which could not have been gained otherwise (for example, the
“discovery” of the what’s the hell... variant). I also tapped into native speakers’ intuitions along the way.

Following one of the basic tenets of Construction Grammar, namely that each part of a construction (the other constructions it inherits from) makes its own contribution to the overall meaning of a construction, I have set out to determine how the effect of intensity comes about in the WHX construction. Also relying on the idea that a difference in form implies a difference in semantics and / or pragmatics, which amounts to saying that no two sub-constructions are entirely synonymous, I have also attempted to check whether lexical and syntactic variation in the construction could result in a difference in its intensity.

Several conclusions have been reached as a result of this research:

- The data from the corpus have revealed that the construction is highly productive; there is a great deal of variation in usage in English, as well as regional and diachronic variation. It was shown that the what the hell / fuck sub-construction reigns supreme, while the other variants seem to be far less common. In addition, some sub-constructions were excluded from the analysis as they did not exactly meet the requirements for membership in the WHX construction category (what's the hell is going on?, what the hell difference does it make?). They would merit further exploration.

- The construction resists full productivity: it favors, for example, the semantic areas associated with religion, and monosyllabic words are usually preferred. Constraints, however, tend to be relative rather than absolute, and pragmatic factors, like the ludic character of a nonce formation, may loosen some restrictions.

- It has also been argued that the WHX construction is first and foremost an “emotive construction”; the effect of intensity which is traditionally associated with it does not come first: rather, it is a mere corollary, something that naturally follows or results from the expression of a strong emotion. “Emotional intensity” stems, therefore, from the contrast between a normal wh- question and a wh- question co-occurring with the hell, which causes the emotion to emerge into the foreground of attention.

- The emotional intensity of the construction can run the gamut from shock to surprise, from anger to frustration or helplessness. It results from a complex interplay of factors. i) At the constructional level, the different individual members of the construction have a contribution to make: I focused on wh- questions and the lexeme hell, whose meaning in the construction is also a function of encyclopedic knowledge and knowledge of the way the word has been used in other related constructions. ii) Contextual factors i.e. what has been said prior to the utterance, prosodic cues, etc. also constitute a powerful source of constraints.

- Is there a strong correlation between lexical and syntactic variation in the construction and its intensity? The answer is anything but obvious. By and large, it seems that a taboo expression has the force of an intensifier and that euphemisms tend to lessen the severity of the construction. The study revealed, however, that the intensity level associated with the different sub-constructions depends on other intricately related factors, which may in turn co-vary with contextual factors: for instance, partial knowledge of a variant or lack of knowledge (either because it is regionally marked or perceived as dated or corny) may lessen the level of its intensity. Structural variation, and especially parasitic elaboration of the head noun, also seems to contribute to diminishing the illocutionary force of the construction. I have also argued that in some specific cases (the wh-in-the-hell and what-in-hell sub-constructions), the sub-construction’s expressive meaning may still...
include holdovers from its original literal meaning, which could account for its lesser intensity as compared to the wh-the-hell sub-construction.

These correlations, while imperfect, point to directions for future research: since the WHX construction is predominantly a feature of spoken rather than written language, it would be interesting to use recorded spoken data (as well as participant observation); a multimodal analysis, which incorporates gesture and mimicry as well as prosodic features, would definitely shed some additional light on the conclusions reached in this paper.

On a more general note, many resemblances have been pointed out between the WHX construction and expletives as well as other intensifiers:

First of all, it has been shown that taboo terms, namely hell and fuck, occupy nearly every grammatical category, and occur in a great many constructions such as the WHX construction, but also other intensifiers (leave me the hell / the fuck alone, mad as hell / fuck, it hurts like hell / like fuck, hell-all / fuck-all, etc.) and, of course, expletives like hell! and fuck!. Other objectionable words, such as the expletive shit!, have already started to extend their distribution to these various syntactic structures, although this phenomenon may not have reached completion at the time of writing (and may never do so): ?leave me the shit alone, ?it hurts like shit, mad as shit, and what the shit…? (19 tokens in my corpus, see 3.1.2.). Both the WHX construction and the categories of expletives allow emotions to be released, which is at the root of the expression of intensity. “Pure” intensifiers, such as the hell in leave me the hell alone, or as hell in mad as hell do not seem to include the same emotive component.

Another shared feature with swearing can be found in the difficulty in identifying the emotion in question. The versatility of the WHX construction and of swearwords may be the reason for their success. Note that other exclamatory phrases follow the same path: for instance, gimme a break, get out of here or no way can be interpreted as expressions of dismissal, surprise or disbelief, depending on context.

These constructions (the WHX construction, expletives and other intensifiers) form a unified network, in which each item reinforces the other. A larger-scale study, such as the one conducted by Ljung [2011], would be needed to investigate all of these inter-connections, on a synchronic and diachronic level and by adopting a cross-linguistic perspective.

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NOTES

1. There are points of divergence within constructionist approaches as to what should count as a “construction” (see Hilpert [2014: 8-14]).

2. Although it is not within the scope of this paper to discuss the history of the construction, it may be of interest to hypothesize that the wh-else construction may very well have paved the way for the opening of a heretofore closed paradigm. Note that the Dictionary of Historical Slang [1972: 252] suggests that what the devil could have been modeled after the French exclamation que diable !.

3. According to Hoeksema & Napoli [2008], these constructions are only superficially similar: to beat the hell out of someone is, at least originally, an instance of the caused-motion construction, patterned after they forced the mayor out of office, i.e. someone is acting on someone else using force in order to cause something to move in a certain direction. The authors assume that the phrase beat the devil out of someone started as a literal exorcism (the devil was literally beaten out of someone). Constructions such as shut the hell up, on the other hand, are syntactically and semantically different. They must have developed later, by analogy.

4. All the examples cited from the Corpus of Contemporary American English are identified with the acronym “COCA” in parentheses.

5. Incidentally, the sequence what the hell are you doing + V-ing? appears to be a rather productive sub-construction of the WHX construction. I know of no study thus far that has looked into it.

6. And many more can be found elsewhere. For instance: what’s the hell is wrong with these people? (Nashville, Pilot episode).

7. For more fanciful coinages, see for example Jespersen [1905: 243]: where the something are you coming to?, and Allan & Burridge [1991]: what in Hades?, etc.

8. The dividing line between predictable, regular word-formation processes and creative word-formation processes was or still is a matter of debate among morphologists [see Bauer 1983]. These issues will not be addressed here.

9. Taylor [2002: 266] distinguishes “promiscuous” units, which are able to combine with a great number of elements, and “choosy” units, which can combine only with units of a certain kind.

10. That would be a case of “dropping the H bomb”, or worse still, “the F bomb”, a jocular phrase to refer to someone who unintentionally utters a profanity that catches everyone by surprise.
ABSTRACTS

This paper is a study of the intensity attached to the WHX construction (most prototypically exemplified in *what the hell...?*), using the theoretical framework of Construction Grammar. It is shown that intensity is not entirely inherent in the construction; it results, rather, from the expression of an emotion. The analysis of extensive data from the *Corpus of Contemporary American English* also reveals that there exist cases of syntactic (*what in the hell, what in hell, what's the hell...*) and lexical variation (*what the freak, what the pus-rotted hell...*). Although these sub-types are all grouped together in a family-resemblance fashion, I argue that strict constructional synonymy is not a plausible option and that these different sub-constructions may correlate with varying degrees of intensity.

INDEX

**Mots-clés:** intensité, construction, variation, euphémismes, langage offensant, émotion

**Keywords:** intensity, construction, variation, euphemisms, objectionable language, emotion