Deriving Special Questions in Mandarin Chinese: 
A Comparative Study

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1. Introduction

It is observed in many languages that the wh-word, equivalent of what in English, can be used, not only as an argument, but also as an adjunct, in which case it has a meaning close to why (cf. (1)) (Collins 1991, Ochi 2004, Garzonio & Obenauer 2010, Pan 2010, Tsai 2011). Adjunct what is often called ‘why-like’ what (WLW).

(1) a. Cosa ridi?! (Northern Italian)
   what laugh
   ‘Why are you laughing? (you should not laugh!)’

   b. Icché tu corri?! (Florentine)
   what you run
   ‘Why are you running? (you should not run!)’

   c. Was lachst du (denn)⁈ (German)
   what laugh you Prt
   ‘Why are you laughing? (you should not laugh!)’

However, there is a crucial difference between why-like what and why: the interpretation of why-like what obligatorily includes a Surprise-Disapproval (SD henceforth) component, expressed in (1) by ‘you should not’. In Italian dialects, why-like what moves to a different position from standard why (or argumental what in standard questions). The movement is driven by the need of checking some SD feature in the SD projection that exists in the (Romance) split CP domain from the cartographical point of view (Cinque & Rizzi 2008). In this paper, I will discuss the so-called why-like what in Chinese, which shares many properties with its equivalents in other languages, but also shows its particularities concerning its syntactic structure.

2. Why-like shenme ‘what’ questions in Mandarin

2.1 Main proposal
It is well known that Chinese is a wh-in-situ language: the relevant wh-element stays systematically in-situ instead of moving to the Spec, CP position. Why-like what appears only in post-verbal position. Pre-verbal positions are excluded for it. We should note that the positions occupied by shenme in (2b,c) are regular adverb position for weishenme ‘why’.

(2) a. Ni zou shenme ?! Liu-xialai yiqi chifan ba! you leave what stay-Dir. together eat-rice SFP
‘Why are you leaving ?! Stay and let’s have dinner together!’
b. * Ni shenme zou ?! (Post-subject/pre-verbal position)
you what leave
(‘Why are you leaving ?!’)
c. * Shenme ni zou ?! (Pre-subject position)
what you leave
(‘Why are you leaving ?!’)

We take the core semantics of the Surprise-Disapproval interpretation as a cross-linguistic phenomenon and it stays invariant. At the same time, the observed apparent particularities of Chinese why-like what questions are treated only as syntactic variants. The idea is that since SD interpretation expresses an illocutionary force and the speaker’s attitude, it is reasonable to assume that the SD reading should be linked to the left-periphery. As G & O (2010) show, Surprise-Disapproval Question P (SDQP) is an independent projection in Italian dialects and the wh-word what undergoes overt movement to join the SDQP in order to get the SD (why-like) reading. Along this line, I also assume that SDQP is an independent projection that is responsible for the SD reading in Chinese. However, Chinese why-like what shows many important syntactic properties that are not observed in other languages, which suggests that SDQP has its own syntactic particularities in Chinese. My proposal has two basic assumptions. First, in Chinese, the wh-word shenme ‘what’ is generated as the head of SDQP. Second, the main verb moves from the inside of VP to join the SD° head to form a complex head. The nature of this movement is head-to-head adjunction. In this case, shenme ‘what’ does not get an interrogative reading; instead, it behaves as a functional head and gets a SD reading.

2.2 Evidence

The way of treating a wh-phrase shenme ‘what’ as a head is ad hoc at first sight since it is a phrase rather than a head in most of the contexts. An evidence that supports the “suffix” and head status of shenme ‘what’ in why-like what constructions is that we can never stress shenme ‘what’ in why-
like *what* questions when it is attached to verbs (cf. 3a), just like all the verbal suffixes in Chinese (cf. 3b); however, in other contexts, a phrase *shenme* ‘what’ can actually be stressed in case of need.

**(3)**

a. *Ni chi SHENME chi*
   you eat what eat
   (‘Why do you eat?! = You should not eat!’)

b. *Wo yijing chi-LE fan.*
   I already eat-Perf rice
   (I have already eaten.)

Furthermore, in why-like *what* cases, *shenme* ‘what’ is not interpreted as nominal *wh*-element ‘for what x, x a thing’ but something which is interpreted roughly as ‘I don’t think one should do such a thing…’

Here is an example to illustrate the syntactic derivation of my proposal.

**(4)**

a. *Ni pao-shenme ?!
   you run-what
   ‘Why do you run?!’

b. [Diagram]

In (4b), in order to get the SD reading, *shenme* ‘what’ is generated under the SDQP as a grammaticalized item and the main verb moves to join the SD°. In other words, we can consider *shenme* ‘what’ as a functional head that enables verb to get the SD reading. From this perspective, *shenme* is not interpreted as a question word and there is no movement of *shenme* ‘what’.

One piece of evidence in favor of my analysis is that when the main verb doesn’t take any object, the trace of V can be realized phonetically, as shown in (5).

**(5)**

a. *Ni pao SHENME pao ?!
   you run what run
   ‘Why do you run?! = You have no reason to run!’
On the Syntax and the Semantics of 'Why-like' What in Mandarin

b. Ni chi, shenme chi,?! you eat what eat ‘Why do you eat?! = You should not eat!’

Second, in the cases where the main verb can be used either transitively or intransitively, shenme ‘what’ will be used either as an argument or as an adjunct. In this case, we expect an ambiguity of the relevant sentence. For example, the verb xiao can be used as an intransitive verb meaning ‘to laugh’ or as a transitive verb meaning ‘laugh at’.

(6) Ni xiao shenme you laugh what (i) ‘What are you laughing at?’ (Standard question reading) (ii) ‘Why are you laughing?! = You should not laugh!’ (SD reading)

Sentence (6) is ambiguous between (i) a genuine interrogative reading and (ii) a Surprise-Disapproval reading related to why-like what. In the first case, shenme ‘what’ is a real internal argument of the verb xiao ‘laugh at’ and this is the argumental reading of what; in the second case, shenme ‘what’ gets a why-like what (=SD) reading. I will use a test to show that the semantic contrast is correlated with a syntactic one.

In Chinese, when a transitive verb is followed by a true direct object and a verbal complement introduced by the structural particle del, such as durational phrases, adverbial phrases, frequency phrases, degree phrases, etc., either the direct object of this verb moves to a preverbal position, such as in (7a), or a copy of the verb is inserted, such as in (7b). The order [S + V + O + Verbal Complement] is excluded as shown in (7c).

(7) a. Ta pangxie chi [del hen kuai]. (S + O + V + C) he crab eat DE very quickly (Lit.) ‘As for crabs, he eats very quickly.’
   b. Ta chi pangxie chi [del hen kuai]. (S + V-O+V + C) he eat crab eat DE very quickly ‘He eats crabs very quickly.’
   c. *Ta chi pangxie [del hen kuai]. (*S + V + O + C) he eat crab DE very quickly (‘He eats crabs very quickly.’)

Recall that in both strategies, (7a) and (7b), the object should be a true direct object. Since why-like what is an adjunct, there is no theta role relationship between why-like what and the verb. Thus, we expect that why-like what is
incompatible with either of the two strategies. Such a prediction is borne out as shown in (8).

(8) a. Ta zou shenme ?!
    he walk what
    ‘Why does he walk? != He should not walk!’

b. * Ta zou shenme zou [de1 zheme kuai] ?!
    he walk what walk DE so quickly
    (‘Why does he walk so quickly?!’)

c. * Ta shenme zou [de1 zheme kuai] ?!
    he what walk DE so quickly
    (‘Why does he walk so quickly?!’)

In (8a) when the intransitive verb zou ‘walk’ is followed by why-like shenme ‘what’ the sentence gets a Surprise-Disapproval reading. When we add a verbal complement ‘very quickly’ to the sentence, neither inserting a copy of the verb as in (8b) nor fronting the object in (8c) can make the sentence grammatical. This test shows that why-like shenme ‘what’ cannot be the internal argument of the verb.

We observed that when the verb xiao ‘laugh at/ laugh’ is followed by shenme ‘what’, the sentence is ambiguous between an argumental reading ‘laugh at’ and an adjunct (why-like what) reading. Our prediction is that when we apply the same test (on the basis of post verbal complement) to the verb xiao ‘laugh at/ laugh’ only the argumental reading survives but not the SD reading since in the former reading, the wh-word is the true direct object of the verb. This prediction is borne out, as shown in (9).

(9) Ni xiao shenme xiao [de1 zheme dasheng]?
    you laugh what laugh DE so loudly
    (i) ‘What are you laughing at so loudly?’ (argumental reading)
    (ii) *‘Why are you laughing so loudly?!’ (*WLW reading)

It is shown in G & O (2010) that in Italian dialects, SD questions can contain any element of the wh- paradigm, such as who, what, when, where, etc. This, however, is not the case in Chinese. Here it seems that why-like what is the only way to provide the sentence with a SD reading: the above examples show that an argumental what is consistently incompatible with a SD reading; furthermore, the same applies to shei ‘who’, shenme shihou ‘when’ and other wh-words. In this case, the sentence can only be interpreted as a standard question, as shown in (10a). Recall that the Bellunese version of (10a) can get a SD reading.
On the Syntax and the Semantics of ‘Why-like’ What in Mandarin

(10) a. Ni qing shei?
     you invite who
     (i) ‘Who do you invite?’ (StQ)
     (ii) * ‘Who do you invite?! = You should not invite him!’ (SD)

b. [w3:SDQP Chij [w3:CP ∅ [à-tu invidâ ò]]]? SDQ
     who have-scl invited
     ‘Who have you invited?! (You should not have invited him !)

This is a strong argument to support the idea that why-like shenme ‘what’ is a fixed grammaticalized item in the SD head position that gives a SD reading to any verb which is attached to it.

Under the present analysis, another possible sequence in a Surprise-Disapproval question, [V + why-like shenme ‘what’ + O], can be derived.

(11) Ni chi shenme yu
     you eat what fish
     (i) ‘Why do you eat fish?!’ (SD reading)
     (ii) ‘What kind of fish do you eat?’ (determiner what)

In (11a’), shenme ‘what’ is generated under the SDQP and the verb chi ‘eat’ moves to join the head SD°. The object yu ‘fish’ remains inside the VP. (11b’) illustrates the normal determiner reading of shenme ‘what’ that is on the specifier of DP and it is bound by an null operator Op generated under CP (for standard questions). We should note that there is no derivational relationship between (11a’) and (11b’), each of which represents an independent case.
One difference between these two sentences is that in (11a’), the SDQP takes only the vP instead of the TP/AspP as its complement; in (11b’) a TP/AspP still exists between CP and vP. This difference is also very important in my analysis, which is due to the fact that Chinese why-like what is not compatible with verbal auxiliaries nor with aspectual markers. I will show this in a detailed way in the next part.

Let us turn to the movement of the subject in this derivation. To derive the right surface order, we need to raise the subject to the [Spec, SDQP]. The raising could be driven by the EPP feature which requires the specifier position to be filled. Chinese is a pro drop language, in the case of the absence of the subject, the [Spec, SDQP] is filled by a referential pro whose referent exists in the context. For example,

(12) \[ \text{SDQP} \text{pro} \ [\text{vP} \text{t} [\text{vP} \text{t}]]]! \\
laugh what \\
‘(You/he/she/they) should not laugh!’

Third, why-like shenme ‘what’ cannot follow the sequence [V + O].

(13) * Ni chi yu shenme?! \\
you eat fish what \\
(‘Why do you eat fish?!’)

Under our approach, the impossible sequence, *[V + O + why-like shenme ‘what’] in a SD question, can be accounted for. Such a sequence would require the raising of vP to adjoin to the SD° shenme ‘what’, which is an illicit movement.

Fourth, as we said on the above, the main verb cannot be followed by any aspectual marker in a SD question (cf.14).

(14) a. Ni chi-le shenme yu a \\
you eat-Perf what fish SFP \\
(i) ‘What kind of fish did you eat?’ (StQ reading) \\
(ii) * ‘Why have you eaten fish ?!’ (SD reading) \\
b. * Ni zuotian zou-le shenme ?! \\
you yesterday leave-Perf what \\
(‘You shouldn’t have left yesterday!’) (SD reading)

Sentence (14a) shows that when the main verb is marked by the perfective aspectual suffix le, only the standard question reading survives, and the SD reading becomes unavailable. (14b) contains an intransitive verb and when
it is marked by the perfective marker *le*, the sentence becomes ungrammatical. In addition to the perfective aspectual marker, the durative or progressive aspect marker cannot mark the main verb in a SD question either in Chinese (cf. 15).

(15) a. * Ni pao-zhe shenme ?!
    you run-Dur what
    (‘Why are you running?! = You should not run!’)
b. * Ni zai pao shenme ?!
    you Prog. run what
    (‘Why are you running?! = You should not run!’)

One could argue that this can be explained by semantics in that the aspect is not compatible with Surprise-Disapproval questions for some special semantic reason. However, this conclusion seems to overgeneralize the case since the Surprise-Disapproval questions are compatible with aspect in several observed languages, such as Italian (17) and Japanese (18).

(17) Icché tu ridevi?!
    what you laugh-Imperf.
    ‘Why were you laughing?!’
(18) Ano hito-wa nani-o yuka-de korogat-tei-ru no?
    That person-Top what-Acc floor-on roll-Prog-Pres Q
    ‘Why is that person rolling on the floor?’  (Nakao & Obata 2009)

Chinese data seem to suggest that there is actually a selectional relationship between the head SD° and the categorical feature of its complement. We can assume that a SD° selects a vP instead of a TP/AspP as its complement. Under this assumption, TP/AspP is not present in the current structure. The point is that if we believe that SD reading is a cross-linguistic case, and that the interpretation of a SD question remains the same in different languages, we do not want to contradict ourselves by saying that SD reading shows different semantic properties in different languages (for example, the SD reading is compatible with tense and aspect in certain languages but not in other ones). Along this line, I choose to explain this contrast in terms of syntax. Contrary to aspectual suffixes, a time adverbial can precede the sequence [V + why-like shenme ‘what’] in a SD question.

(19) Ni zuotian pao shenme (pao) ?!
    you yesterday run what run
    ‘Why did you run yesterday?! = You shouldn’t run yesterday!’
The contrast between (15) and (19) seems to exclude the possibility to account for the incompatibility between why-like what and aspecual suffixes by semantics.

Fifth, the sequence [V + why-like shenme ‘what’] in a Surprise-Disapproval question cannot be preceded by any modal auxiliary, as shown in (20a, b).

(20) a. * Ni xiang chi-shenme yu a ?! SDQ
you want eat-what fish SFP
(‘Why do you want to eat fish?!’)

b. * Ni yao zou shenme a ?! SDQ
you will leave-what SFP
(‘Why will you/do you want to leave?!’)

A possible explanation is that when the subject moves to the Spec of SDQP, there is no available position for verbal auxiliaries between the Spec of SDQP and the head SD°. One can possibly argue that the subject can continue to raise to a higher Topic position. However, even if this is possible, there is still no such an available position for auxiliaries in the left periphery.

Sixth, negation cannot appear in a why-like what question (cf. (21b, c)).

(21) a. * Ni bu zou / xiao shenme ?! SDQ
you Neg leave laugh what
(‘Why don’t you leave/laugh?! = You should leave/laugh!’)

b. * Ni mei zou / xiao shenme ?! SDQ
you Neg leave laugh what
(‘Why haven’t you left/laughed?!’)

This is a very important property of Chinese why-like what and I take it as a syntactic rather than a semantic property. It is observed that a why-like what question is more natural without any negative element in many languages; however, it is still hasty to claim that why-like what is generally incompatible with negation in the sense of semantics. For example, in French, the negative element ne is obligatory in a why-like what question illustrated in (22a) which is a very literal written style sentence. On the contrary, in a very colloquium way, (22b) is acceptable with the complex form, qu’est-ce que ‘what is it that’, of que ‘what’. These two sentences show that why-like que/qu’est-ce que tolerates negation.
On the Syntax and the Semantics of 'Why-like' What in Mandarin

(22) a. Que *(ne) ris-tu (au lieu de pleurer)!! (French)
    what Neg laugh-you instead-of cry
    ‘Why aren’t you laughing?!’ (G&O 2010)

b. ? Qu’est-ce qu’il ne l’a pas dit plus tôt !?
    what he Neg it has Neg said more early
    ‘He should have said it earlier !’

Though not systematically, the co-occurrence of why-like what and negative elements is still observed in languages like French. That is why we cannot account for the fact that such a co-occurrence does not exist in Chinese by saying that semantically why-like what is incompatible with negation. Instead, the observation in Chinese can be accounted for syntactically on the basis of the location of the SD projection in the left periphery. In Chinese, as a negative adverb, bu is generated in a post-subject and preverbal position. Again, if we assume that the subject is in the Spec of SDQP position, there is no available position for any negative element between the Specifier and the head of SDQP. Even if we assume that the subject can raise further to a higher topic position, there is still no position for bu in the left periphery.

Seventh, we examine the interaction between adverbs and why-like shenme ‘what’. Adverbials precede verbs in Chinese and we will concentrate on manner verbs in this part, as shown in the (a) cases in the following examples. It is striking to notice that those manner adverbs cannot precede the sequence [V + why-like shenme ‘what’] in a Surprise-Disapproval question, as shown in the (b) cases in these examples.

(23) a. Ta dasheng-de3 han.
    he loudly shout
    ‘She is shouting loudly.’

b. Ni dasheng-de3 han-shenme ?!
    you loudly shout-what
    (i) *‘Why are you shouting so loudly?!’
    (ii) ‘What are you shouting ?’

(24) a. Ta manman-de3 pao.
    he slowly run
    ‘He is running slowly.’

b. * Ni manman-de3 pao-shenme ?!
    you slowly run-what
    (‘Why are you running so slowly?!’)

(25) a. Ta shangxin-de3 ku.
    he sadly cry
    ‘She is crying so sadly.’

b. * Ni shangxin-de3 ku-shenme ?!
    you sadly cry-what
    (‘Why are you crying so sadly?!’
There is no available position for any manner adverbs between the specifier and the head of the SDQP. Similar to the negative adverb *bu*, manner adverbs cannot be generated in a pre-subject position and scope over the whole sentence in Chinese; therefore, they cannot be generated under TopP, contrary to the sentential adverbs.

Under the current analysis, many other surface derivations are possible. The basic assumption is that the subject on [Spec, SDQP] can further raise to TopP and is marked by the so-called ‘topic markers’ (cf. 26). Like subjects, objects can be topicalized too (cf. 27).

(26) \[\text{TopP Ni}_{\text{TM}} \text{ [TopP a ] , [SDP t] 1', [SDP zou-shenme] [\text{\_p t} [\text{\_t}] \text{]}]?!} \]

‘As for you, why are you leaving?! = You should stay!’

(27) \[\text{TopP [Sanshi nian qian de2 shiqing], [SDQP ni}_{\text{ji}} \text{ [SDP shuo-shenme]} \text{ thirty year ago DE thing you say-what [\text{\_p t} [\text{\_t} (shuo)_{\text{i}} t]);} \text{]}??!} \]

‘As for what happened thirty years ago, you should not mention (it again)’

2.3 A pseudo-problem

One potential problem of this SDQP analysis is that, after the raising of the verb, V’ level adverbs can still stay inside the VP, thus, a natural prediction is that an adverb can be stranded inside VP in a why-like what question in Chinese as shown in (29). Unfortunately, this is an undesirable case. All the sentences with why-like what followed by an adverb are ungrammatical, as shown in (30).

(29)
On the Syntax and the Semantics of 'Why-like' What in Mandarin

(30) a. * Ni han-shenme dasheng-de3?!
you shout-what loudly
(‘Why are you shouting so loudly?!’)
b. * Ni pao-shenme manman-de3?!
you run-what slowly
(‘Why are you running so slowly?!’)

The question is then how to filter such cases under the current analysis. As a matter of fact, that the manner adverbs are excluded from post-verbal positions in why-like what sentences is not surprising at all, since all of the adverbs cannot stay inside the VP after the verb raising to higher functional projections, such as vP or AspP. The problem observed in why-like what cases is, in fact, an independent case concerning only the syntactic behavior of adverbs in Chinese. For example,

(31) a. *[AspP Ta [AspP chi-le] [vP [v' t’ [VP [v’ t’ manman-de fan]]]]].
he eat-Perf slowly rice
(‘He ate slowly.’)
b. *[AspP Ta [AspP manman-de [AspP chi-le] [vP [v’ t’ [VP [v’ t’ fan]]]]].
he slowly eat-Perf rice
(‘He ate slowly.’)

Let us imagine that the manner adverb manman-de ‘slowly’ is merged inside the VP in (31). The verb chi ‘eat’ raises firstly to the v° and then to join the perfective aspect marker –le in the head position of AspP. Thus, the adverb manman-de ‘slowly’ and the object fan ‘rice’ are left inside the VP. The ungrammaticality of (31a) shows that this is not the correct derivation. One of the possible solutions to this problem is to raise the adverb slowly to join the Asp’. However, syntactically, we need a reason for such an adverb raising. Another possible solution is to make the adverb slowly merge directly to the Asp’ after the raising of the verb eat. In this case, we need to explain what excludes the possibility to leave slowly inside the VP. If we pursue the second possibility, we will wonder whether slowly can appear inside the VP at all? The answer is positive, as shown in (32).

(32) [VP Zhangsan [t- meiyou t- dasuan-guo [vP toutou-de qu faguo]]].
Zhangsan Neg plan-Exp secretly go France
(‘Zhangsan has never planned to go to France secretly.’)

1 More detailed discussion on adjuncts, adverbs and the configuration of VP in Mandarin can be found in Ernst (1994) and Sybesma (1999).
The manner adverb toutou-de ‘secretly’ modifies directly the VP verb qu ‘go’ but not the matrix verb dasuan ‘plan’. A tentative suggestion is that manner adverbs in Chinese adjoin to the highest maximal verbal projection to which the verb raises. If the verb moves to the vP, then the manner adverb adjoins to the vP; similarly, when the verb continues to raise to AspP, then the manner adverb adjoins to AspP. As for (32), the verb qu ‘go’ remains inside the VP, thus the manner adverb toutou-de ‘secretly’ adjoins to VP. With this in mind, let us come back to the why-like what case. The reason why an adverb cannot be stranded inside VP in a why-like what question in Chinese is that post-verbal manner adverbs are systematically excluded by the adverb syntax in Chinese. Manner adverbs only adjoin to the highest functional projection that the verb moves to, such as vP and TP and only after the movement of the verb. Therefore, an adverb cannot be stranded inside the VP in a why-like what question in Chinese. We have also seen that a pre-verbal manner adverb is also excluded in why-like what constructions as well. The reason is that after the raising of the verb in SDQP, there is no available position for manner adverbs between the specifier and the head of SDQP. Put all of these together, both the preverbal and the post-verbal manner adverbs are excluded in why-like what constructions. In fact, all the post-subject, preverbal adverbs (not only manner adverbs) in why-like what constructions make the sentences odd, as shown in (33).

(33) a. Ni (?you) qu-shenme qu!!
    you again go-what go
    ‘Why are you going there (*again)’!

b. Zhangsan (*? hai yao zai) pao-shenme pao?
    Zhangsan still want again run-what run
    ‘Why does Zhangsan want to run (*again)’!

c. Ni (?hai-zai) chi-shenme chi?!
    you still-Prog eat-what eat
    ‘Why are you (*still) eating?’!

d. Ni (*ye) xiao-shenme xiao?!
    you also laugh-what laugh
    ‘Why are you laughing (*too)’!

e. Nimen (*dou) xiao-shenme xiao?!
    you.pl all laugh-what laugh
    ‘Why are you (*both) laughing?’

f. Zhangsan (*yizhi) pao-shenme pao?!
    Zhangsan all-along run-what run
‘Why is Zhangsan running (*all along)?’
g. Nimen (*yiqi) chi-shenme chi?!
you.pl together eat-what eat
‘Why are you eating (*together)?’!

A possible explanation would be that between the Specifier of SDQP and SD°, there is no available position for any V’ level adverbs (manner or negative ones).

As I showed earlier, contrary to the V’ adverbs, Chinese why-like what permits the presence of sentential adverbs.

(34) a. Ni wuyuanwugu-de xiao-shenme (xiao) ?!
you without-reason laugh-what laugh
‘Why are you laughing without any reason?!’
b. Wuyuanwugu-de, ni xiao-shenme (xiao) ?!
without-reason you laugh-what laugh
‘Why are you laughing without any reason?!’

This fact can be easily explained under our approach. The sentential adverb can be generated under a TopP and the subject can first move to Spec, SDQP and then to a higher TopP, as shown in (35a) or even higher than the topic subject, as shown in (35b).

(35) a. \[
\begin{array}{l}
[\text{Top1P}] \ni \\
[\text{Top2P}] wuyuanwugu-de \\
[\text{SDQP}] t_j [\text{SD}] xiao-shenme \\
[\text{vP}] t_i [\text{v}']
\end{array} \]

you without-reason laugh-what

‘Why are you laughing without any reason?!’
b. \[
\begin{array}{l}
[\text{Top1P}] Wuyuanwugu-de, \\
[\text{Top2P}] ni \\
[\text{SDQP}] t_j [\text{SD}] xiao-shenme \\
[\text{vP}] t_i [\text{v}']
\end{array} \]

without-reason you laugh-what

‘Why are you laughing without any reason?!’

Let us examine another pair of examples. The adverb congman-de ‘hurriedly’ is a V-level only adverb that cannot appear in the sentence initial position (cf. 36b). While, its reduplicated form congcongman-de ‘hurriedly’ can be used as a sentential adverb, as shown in (37b).

(36) a. Ta congman-de likai-le xue-xiao.
he hurriedly leave-Perf school
‘He left school hurriedly.’
b. * Congmang-de, ta likai-le xuexiao.
   hurriedly he leave-Perf school
   ‘Hurriedly, he left school.’

(37) a. Ta congcongmangmang-de likai-le xuexiao.
   he hurriedly leave-Perf school
   ‘He left school hurriedly.’

b. Congcongmangmang-de, ta likai-le xuexiao.
   hurriedly he leave-Perf school
   ‘Hurriedly, he left school.’

Our analysis predicts that a why-like what construction prefers the
copied form than the non-copied form. This prediction is born
out as shown in (38).

(38) a. Ta congcongmangmang-de pao-shenme pao?!
   he hurriedly run-what run
   ‘Why is he running so hurriedly?!’

b. * Ta congman-de pao-shenme pao?!
   he hurriedly run-what run
   (‘Why is he running so hurriedly?!’)

Manner adverbs, negative adverbs, and verbal auxiliaries are excluded in
why-like what constructions because there is no available position for these
elements between the Spec of SDQP and the SD°. That is why any element
situated below the subject and above the verb cannot appear in Chinese
why-like what constructions. The only possible occurrence is the sentential
adverbs, and in this case, they are generated as topics under the one of the
TopPs and the subject of the sentence moves further to a higher TopP.

2.5 The position of SDQP in the left periphery in Chinese

In this section, we will examine how why-like what constructions
interact with the so-called ‘sentence final particles’ in Chinese. Note that
sentence final particles are normally treated as heads of different functional
projections which are head-finals (Paul 2002, 2005, Pan 2011a, b, c). In the
left periphery, the functional projections that are linked to the speaker’s
attitude are placed in the highest position and those which are linked to the
illocutionary forces are placed on the second highest position. The positions
of the sentence final particles are very important since their
(in)compatibility with why-like what questions can help us to locate the
position of the SDQP in the left periphery. Our assumption is that Surprise-
Disapproval reading is a kind of combination of the illocutionary force with the speaker’s attitude. We know that different illocutionary forces cannot co-exist in the same sentence. Our prediction is that, why-like what questions are not compatible with any sentence final particle that expresses illocutionary force, for instance, the yes-no question particle ma and the imperative marker ba (polite suggestive particle), because ma and ba indicate other types of illocutionary forces than Surprise-Disapproval reading. This prediction is borne out, as shown in (39). The two sentences in (39) are simply uninterpretable.

you run-what Qyes/no you run-what Imp.

Another prediction is that Surprise-Disapproval reading should be compatible with the particles that indicate the speaker’s attitude (Pan 2011 a). (40) shows that the interjective particle ne, a and ya are compatible with the ‘surprise’ reading.

(40) a. Ni pao-shenme ne?
you run-what SFP
‘What (the hell) are you running for?! = You should not run!’

b. Ni pao-shenme ya/a?
you run-what SFP/SFP
‘What are you running for?! = You should not run!’

The compatibility between why-like what questions and the particles indicating the speaker’s attitude can be explained not only by semantics/discourse but also by syntax. It could suggest that the SDQP is lower than the Attitude projections. This is illustrated in (41):

(41) a. [AttitudeP [SDQP Ni i] [sd-pao-shenme [VP t j [V° t i]]]] [Attitude° ne ]?
you run-what SFP
‘What (the hell) are you running for?! = You should not run!’
(41) shows that the discourse elements, such as *ne*, which express the speaker’s attitude can scope over a Surprising-Disapproval question. *Ne* is generated at the head position of AttitudeP which takes the whole SDQP as its complement. It can help us to establish the relevant order between SDQP and AttitudeP: AttitudeP > SDQP >...

On the other hand, the incompatibility between *why*-like *what* and other (*illocutionary*) ForcePs (cf. (40)) could suggest that the former is at least as high as the latter. And this is a reason to class SDQP in the cluster of ‘*i*ForcePs’. The intuition is that since the SDQP expresses a ‘bit more’ than pure illocutionary force, it could be higher than standard question projection, as which is already demonstrated in Italian dialects. For example, *wh*-elements in special questions move generally to a higher position than the *wh*-clitic projection (Poletto & Pollock 2004) for standard information seeking *wh*-questions. In Chinese, in order to express speaker’s subjective feeling or other pragmatic functions, a normal information seeking question must be followed by the particles like *a, ne* and *ya*.

(42) Ni weishenme yao dang yisheng a/ ne/ ya ?
   you why want work-as doctor SFP
   ‘Oh, (could you please tell me) why did you want to become a doctor
   (which is a little bit surprise to me…)?’

From this respect, a SD question does not only express a pure illocutionary force, but also a kind of speaker’s subjective interjection or judgment. That is why a SD question is often paraphrased as ‘I think that you should
On the Syntax and the Semantics of 'Why-like' What in Mandarin

not/you'd better not do something.' or 'I don't see any reason for which you
do something.' Therefore, I tentatively suggest that SDQP is located
between iForcePs and AttitudeP in Chinese.

Thus, the hierarchy of the different functional projections in the left
periphery in Chinese that I establish is the following: AttitudePs (ne/ (y)a …) > Special Question Ps (SDQP and other types of SQs…) > iForcePs
(StQP/ImpP…etc) > TP…

3. Conclusion

*Why-like what* expresses a Surprise-Disproval meaning, which is a
cross-linguistic phenomenon. An independent functional projection
responsible for the SD reading exists in the left periphery. In Italian dialects,
wh-words move overtly to join this SDQP and get the SD reading. In this
paper, I demonstrated many particular properties of the *why-like what*
constructions in Mandarin Chinese which are not shared by other languages.
Logically, there are two possible ways to account for those properties. One
of them is to say that some semantic constraints apply on the Surprise-
Disapproval interpretation in Chinese and the other one is to argue that
those properties are strictly syntactic and specific to Chinese. The existence
of the functional projection responsible for the SD-reading is observed in
many languages, which means that the core semantic properties linked to
the *why-like what* constructions must be essentially the same in different
languages. That’s why, the first option relied on semantic distinction is not a
good solution. For example, Chinese *why-like what* does not tolerate the
presence of the aspectual markers contrary to its Florentine counterpart.
Logically, we have two options to explain such a difference: the
incompatibility between *why-like what* and the aspectual markers can be
explained either by semantics or by syntax. If we try to account for such a
difference by semantics, we will be forced to explain why SD interpretation
shows different semantic behaviors in different languages. Clearly, this is
not a desirable choice. In other words, if we believe that SDQP is a general
phenomenon, we believe that its semantic interpretation and discourse
function are invariable. Based on this assumption, I chose to explain the
particular properties of Chinese *why-like what* by syntax. It is possible that
different languages have their own syntactic constraints on SDQP. It is thus
logical to assume that the head SD° has different syntactic configuration in
different languages. In Chinese, I assume that *why-like what* is a
grammaticalized item and that it is generated as the SD head in the left
periphery and it attracts the verb to join it. The advantage of such an
analysis is that most of the observed properties of *why-like what* can be
explained only by syntax. The possible and impossible sequences can be
accounted for by the syntactic constraints on derivation without resorting to semantics.

Configurationally, what prevents Chinese why-like what from moving to the specifier of SDQP? A crucial fact observed in Italian dialects is that the whole paradigm of the wh-words can get systematically a SD reading and the why-like what is merely one of the available forms expressing such a reading. Syntactically, the only possible landing site for the movement of the relevant wh-word (including why-like what) is the specifier of SDQP. Nevertheless, in Chinese, why-like what is the only way to get a SD reading, and it appears only after the verb. The word order makes it impossible for why-like what to move to the specifier of SDQP in Chinese.

References


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