Frozen Expressions and Semantic Representation*

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1. The Argument Structures of Lexically Filled Expressions

There are two different types of idiomatic expressions: one is lexically filled idioms such as (1) grammatical: *kick the bucket, spill the beans, blow one's nose, blow one's own trumpet* and (2) extragrammatical: *all of a sudden, by and large, so far so good, long time no see, first off, sight unseen* (Fillmore et al. 1988). The other is lexically open or constructional idioms to be discussed later. Our concern here is how to represent the meanings of one type, lexically filled grammatical idioms.

The semantic processes or changes involved in the transition from the given expressions to their idiomatic meanings are metonymic, metaphorical, or symbolic (figurative in general), and are frequently euphemistic or pejorative at the same time. In trying to give the semantic representations of those lexically filled grammatical idioms, we find it insufficient to represent the idiomatic meanings only; we also feel the flavor or reflexes of the literal meaning of an idiom. Thus, the question arises regrading how to relate the reflexes of the literal meaning to the new idiomatic meaning so that a satisfactory semantic representation may be possible. Let us consider the following example:

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(1) Expression: *kick the bucket*
Process: Metonymic (but the origin is not clear to native speakers)
Literal: Thematic Frame (Grid): [Agent___Theme]
Idiomatic: Thematic Frame: [Theme___] (1 Arg less)
Meaning: DIE
Selection Restriction: [+Human*]
[−Honorific]___
Degree [+Animate*]
[+Kickable]___

The exprssion 'kick the bucket' is ambiguous between the compositional meaning and the idiomatic meaning, and when we consider the idiomatic version we can guess that the semantic process was originally metonymic: someone must have died after kicking the bucket. But even native speakers do not seem to be sure about the original episode or motivation. So, people can say 'John kicked the bucket without kicking the bucket' (Sadock 1972). The literal argument structure was lost and the new single argument predicate emerged. The subject is not an Agent but a Theme and the whole VP functions as a weakened intransitive predicate. Because of the change in argument structure and meaning, the following restrictions follow:

(2) a. Passive blocked: *The bucket was kicked by John.
b. Aspect restricted: ??Mary is kicking the bucket.
cf. ??Mary is dying. (in progressive)

However, the expression is applied mainly to a non-honorific subject, in contrast to such an expression as 'pass away', and is selectionally restricted to 'Human' subject, typically. But the original selection restriction of the literal 'kick the bucket' is somewhat reflected as observed in the following:

(3) a. John kicked the bucket.
b. ?The horse kicked the bucket.
c. ??The snail kicked the bucket.
d. ?The infant kicked the bucket.
e. ?*The rock kicked the bucket.

Therefore, some degree possibility together with subject selectional feaures such as [Kickable] must be posited. The selectional feature such as

[Kickable] must be an essential, not an accidental, property feature, since 'The soldier who lost both legs kicked the bucket' should be acceptable. Similarly, the following expression in French is applicable only to adults (M. Gross, p.c.):

(4) Juan a cassé sa pipe. (John broke his pipe.)

In other words, the subject selection restriction of 'able to smoke a pipe (*fumer la pipe*) (age-wise)' must be assigned, because of the presupposition of the predicate. Even though the conceptual meaning of both 'kick the bucket' and 'casser sa pipe' is 'DIE', their selection restrictions are different from those of the specific lexical items 'die' and 'mourir' and therefore, the idiomatic expressions and their semantically corresponding lexical items in the two languages are different in meaning in the strict sense of the term. The semantic process involved in the French expression is metonymic again, and the original argument stucture was changed to a structure one argument less as in English. One might object to such a possible connection in selection restriction, etc. between the idioms and their new senses because of the strong degree of frozenness in those cases, but even the degree of connection seems to reflect the degree of frozenness, weak or strong.

Now, let me turn to Korean data to see what kinds of expressions are empolyed to mean 'die' and to see if analogous constraints hold in Korean also. Observe the following:

(5) seysang-ul ttu -ta/ hacikha -ta
world Acc leave Dec farewell Dec [leave the world] ⇒ DIE (metonymic, euphemistic)

(6) nwun-ul kam ta (amb. bet. literal and idiomatic)
eye Acc close Dec [close one's eyes]⇒ DIE IN A PEACEFUL MANNER WITH RELIEF (still a bit metonymic)

(7) pap-swutkarak-ul noh -ta
rice spoon Acc put down Dec [put down one's spoon] ⇒ DIE

All the above predicate expressions need a Theme object argument as well as an Agent in their original or literal meaning, but need a Theme subject only in their idiomatic meaning, a 2-argument predicate becoming a 1-argument predicate, even though they retain their surface syntactic Acc-marked NPs or objects. All the Theme subjects in the new meaning are

originally associated with the Agent subjects of the expressions; for instance, in (7), the verb cannot be replaced by 'tteretturi-ta' (drop), without an agentive meaning, to mean 'die'. Selectionally, those idiomatic expressions cannot be applied to non-adults. Coventionally, the euphemism in '…ttu-ta' and the formality in '…hacik-ha-' in (5) can be applied only to adults. Another euphemism of late development 'hanul nara-ro ka-ta' (go to heaven) can be applied to anyone. (6) is usually applied only to those who have children, men, or someone/something to take care of, and (7) is limited to those who can use the spoon to eat and then is further limited to those who can earn living (cf. 'pap-swul/swutkarak-ul pel-ta' (earn the spoonful of rice). The following can hardly be interpreted in the idiomatic sense:

(8) Yenghi-nun ilpwure nwun-ul kam-ass-ta
'Younghi closed her eyes on purpose.'

The volitional adverb 'ilpwure' (on purpose) co-occurs with an Agent, not a Theme, subject.

We can find further examples such as 'chew the rag/the fat' (chat), in which a 2-argument predicate becomes a 1-argument one. But this time, the subject thematic role remains the same as that of an Agent. The semantic process is metonymic; a chat might have taken place over chewing the rag. The Korean idiom '*cuk-ul sswu-ta*' (make porridge ⇒ goof), a 2-argument predicate, becomes a 1-argument one but the original Agent is contrasted with the new Theme or Agent. In the case of '*son-tul-ta*' (raise hands ⇒ give in, surrender, give up), the original 2-argument verb becomes a 1-argument one in its idiomatic sense, via a metonymic process (you hold up your hands when you surrender), and the Agent remains as Agent, but agency weakens in its idiomatic sense.

On the other hand, the expression 'rub someone the wrong way' retains the same number of arguments in its idiomatic sense but the original Theme (the physical Patient) in the expression becomes an Experiencer in its idiomatic meaning. And the subject can be some causal event, not neccessarily an Agent. Observe:

(9) John's bragging rubbed the other boys the wrong way.

Here, the NP 'the other boys' can freely be replaced by any other NP and

in that sense this expression is not 'lexically fully filled'. To handle such an example, Katz (1973) assigns [-idiom] to the object NP and the whole VP differently from 'rub' and 'wrong way', to which he assigns [+idiom]. But, then, the treatment cannot block but allows the passive of the expression. The process is metonymic; if someone rubs you the wrong way (?), you will get a little angry.

Korean has the expression *'kariewun te-rul kulk-ta'* (scratch someone's itching spot, meet/satisfy someone's exact need). The semantic process involved here, though, is rather metaphorical. The expression *'hon-na-ta'* (soul comes out ⇒ be shocked, be scolded) has the argument structure of [Theme/Source(person) Part N(Nom) Verb] in its literal sense but that of [Experiencer idiom phrase] in its idiomatic sense. In another sense of the same idiom, 'be scolded', the subject person becomes a Patient just like a passive subject and it can take an Agent, forming [Patient(Top) Agent (*-eke*) idiom phrase]. This is contrasted with its agentive causative (transitive) verb *'hon-na-i(⇒ ay)-ta'* (scold). This kind of development from a little abstract sense to a more concrete sense is rare. An enormous number of idioms come into being via metonymy. Examples are: *phari(-rul) nal-li-ta* (one drives the flies away ⇒ one's business is slow/slack), *i-rul kal-ta* (*grind one's teeth* ⇒ *feel deeply chagrined (at)*), *saekki-sonkarak(-ul) kel-ta* (cross each other's baby-fingers ⇒ promise (among children)), *sicip(-ul)* ka-ta (go to parent-in-law's ⇒ (woman) get married), etc. If the last expression takes the locative case (*sicip-ey*), it gets only the literal meaning. When the Goal takes the accusative marker, the aspect of the predicated tends to become permanent/habitual (C. Lee 1989). The subject position is open for all the lexically filled predicates but there are also some subject idioms like 'The cat is out of the bag', for which *'The cat* seems to *be out of the bag'* is possible but *'The cat* is anxious to *be out of the bag'* is not; the meaning of the subject in the idiomatic sense is not of an Agent or Animate any more but of a Theme. The subject role but not the thematic role is invariant. The process seems metaphorical in this case.

There are a great number of idioms metaphorically developed, as shown below:

(10) a. The temperature rises/goes up// drops/falls.
b. close the door (prevent any more action about a subject)

c. hit the nail on the head (get something exactly right)

(11) a. ···(*sai-e*) tari-rul noh-ta (lay a bridge (between) ⟹ act as a go-between, (inter)mediate)

b. *tephe-twu-ta* (overlook, let go)

c. *cengkok-ul cciru-ta* (pierce the traget point ⇒ speak or act in the most fitting way)

(12) [Light Verb Type] (some English examples from Jayaseelan 1988)

a. harbor feelings of hatred toward *sb*

b. give *sb* a headache/a kiss, give permission to *sb* to, give birth to

c. put the blame for *the accident* on *sb*

d. pay heed to

e. make light of

f. make an offer of *money* to *sb*

g. do a dance

h. *towum-ul cwu-ta* (give help), *tow-a cwu-ta* (='help'+beneficiary auxiliary verb 'give' ⇒ help *sb* for his/her benefit) *cf. top-ta* (help)

There are similarities between the concrete meanings literally represented by the expressions and the more abstract meanings idiomatically represented in (10) and (11), and similarly in (12). This type is different from the type of metonymy, which is based on contiguity in meanings. The light verb type constructions in (12) are basically similar to their corresponding strong verb constructions in argument structure.

In conclusion, from the metaphorical type of idioms, we can see the compositionality of constituent meanings in their abstract idiomatic senses parallel with the compositionality of constituent meanings in their literal senses. In general, the number of arguments associated with the verb remains the same ((10a), (11b)), even though we can still see the tendency of 2-argument verbs becoming 1-argument ones. Even from the metonymic type of idioms, we see the compositional nature of constituent meanings at the level of idiomatic senses. For instance, the idiomatic meaning of (1), DIE requires a Theme, not an Agent, as its subject. So, its passive is blocked and (1) cannot be modified by an agentive manner adverbial like 'furiously'. Furthermore, the semantic aspects of the original expression such as its selection restriction and presuppositions are reflectd in the idiomatic meaning of the expression, and the metaphorical and methoymic im-

ages and flavor remain to a certain degree. In the case of selection restriction for (1), not only the original one is reflected in the idiomatic sense but also the restriction to Human has been strengthened because it has been conventionally used non-honorifically for human in contrast with 'die', which is used for Animate in general. Another point to note is that the subject thematic role of any idiomatic expression in its literal sense is equal to or lower than that of the expression in its idiomatic sense on the thematic hierarchy of Agent > Experiencer > Location > Goal > Source > Theme > Instrument > ···. The only apparent counter-example is the process between Theme/Source and Experiencer but both of them might be one and the same Location at a deeper level (as in the subject thematic role of *hon-na-ta* 'be shocked') in the particular exception-like cases. The same process also occurs in the object thematic role (as in *rub x the wrong way*). Another point to consider is how to represent different degrees of frozenness.

2. Semantics of Lexically Open Idioms

Lexically open (constructional) idioms are those 'syntactic patterns' associated with semantic and pragmatic representations not directly obtained from their form alone as follows:

(13) a. [Function Type] *the -er ···the -er*
b. [Negative Polarity Item Type] *let alone*
c. [Speech Act Type] *why not*, etc.

2.1. Function Type Idioms

Let us observe the following example, examining the relation between the antecedent clause and the consequent clause.

(14) *The more* carefully you do it, *the easier* it will get.
'The degree to which you do your work carefully will determine the degree to which your work gets easy.' (Fillmore et al. 1989)

There is a proportionate, functional relation between the increasing degree of the antecedent clause and the increasing degree in proportion to it of the consequent clause. The antecedent clause constitutes a sort of conditional

clause, showing a correlation between its independent variable and the dependent variable of the following clause. The notion of this function is rather definite even though the degrees involved are variable and that seems to be why the definite articles are employed. Particularly, the second definite article means 'easier to that degree'. This construction includes rather dramatic 'paired parallel' comparative phrases and the first definite article seems to show the topicality or givenness of the antecent clause. So the real semantic representation of (14) must be as follows:

(15) If you do it more and more carefully, no matter to what degree, then it will get easier exactly to that degree.

The first degree becomes definite because it is correlated with the second dependent and definite degree in a function. This kind of semantic representation is rather clearly shown in the Korean counterpart.

(16) [the Korean counterpart]
(te)—ha *-myen* —ha *-l-swurok* (*ku-mankhum*) *te* —ha -ta
more do/be if do(be) more that much more do/be Dec
'The more···do(es)···the more···do(es)/be···'

(17) manh-*umyon* manhu-*l-surok* (*kumankhum*) *te* coh-ta
much if much the degree more good
'The more the better.' (If you have much (more), to the degree you have more, it is better.)

The Korean version has the conditional expression in the antecedent clause and the optional definite demonstrative-marked degree expression ('to that degree') in the consequent clause. Definite-marking in Korean is normally null and here it is optional.

Other cases of functional (intensional) definiteness can be illustrated as follows:

(18) a. The temperature is rising (increasing).
b. Miss Korea is getting taller every year.

'The temperature' in (18a) is physical and 'Miss Korea' in (18b) is institutional. Both of them, however, involve the functional use of definite descriptions; the temperature *function* and Miss Korea (and other periodically selected/elected figure like the President of Korea) *function* show change.

The propositional content of (18a), call this utterance u, is situation-theoretically (Devlin 1991).

(19) $s = \langle\langle positive, change\,(f_u{}^a, t_{now}), 1\rangle\rangle$
(s: described situation, a: definite description THE TEMPERATURE, for any function f that maps time to real numbers, change (f, t) denotes the instataneous rate of change of f at the time t.)

The rate of change of $f_u{}^a$ over a stretch of time, evaluated at an instant of time, is an aspect of this function, not of some value of the function. On the other hand, observe the following utterance.

(20) The temperature is ninety.

The content of utterance (20) denotes the value of the temperature function in the same described situation as 90. So, 'Ninety is rising' (Partee puzzle) is impossible. The intensional reading of (18b) is analogous in the functional nature.

In Korean, both 'kion' (temperature) and 'Miss Korea' have a zero definite determiner. In the case of temperature, the situation of 'here' and 'now' must be normally assumed and I would call it a 'background Topic', which does not appear on the surface. Here, the time expression 'now' indicates not a time point but some relevant interval of time that goes with change. Because of the null background Topic, 'kion' (temperature) does not function as a Topic but as a neutral subject and takes a Nominative case marker ('kion-i' in contrast with the Topic marker-taking 'Miss Korea-nun'). This also applies to an extensional situation like (20), where the predicate is stative but stage-level.

2.2. Speech Act Type Idioms

Different sentence types in their literal meaning normally show different speech act types. But a sentence type can be associated not only with its literal speech act type but also with some other speech act type. Thus the interrogative sentence type 'Why don't you/we VP?' can be ambiguous between a question and a suggestion. If, however, the sentence type develops into the frozen construction 'Why not VP?', its speech act type is limited to a suggestion, as follows:

(21) a. *Why not* stop here?
'I suggest you/we stop here, if you/we don't have a good reason not to.'
b. ?*Why not hear the music?
c. ?*Why not be tall? (cf. Chungmin Lee 1972, Gazbar 1976) [?*I SUGGEST to YOU to BE TALL]

Asking (the reason for not doing something) can be followed by or associated with making a suggestion (for doing it), and the change in speech act type can be predicated to a certain degree. The former type is rationally and interactionally related to the latter type. The Korean propositive expression '$\cdots V_{stem}$ *-upsi-ta*' can be applied to a situation where the speaker makes a request related to this own action. Take a look at the following example:

(22) naeri *-psi -ta*
get down let's (In a crowded bus, for instance)
'Let's get down' ⇒ 'Please make a way so that I can get down.'

In other words, a sentence type for suggestion is used for the speech act of making a request for cooperating with the speaker or removing obstacles so that the speaker can do the act mentioned in the suggestion. It is making use of the preparatory condition for the illocutionary act of propositive/suggestion. So, it is predictable but not so obvious, and that is why the latter use is frozen in Korean but not in other languages. The following sentence type is used for some particular speech act in English:

(23) *You bet* (**that*) it's cold. ('bet' is stessed) [Sadock 1972]
⇒ I agree with your statement that it is cold.

The speech act type of requestion has a rising intonation both in English and Korean as follows:

(24) What was that child's name?_/
(25) ku ai irum-i mwe-ra -ku -yo?_/
the child name Now what is-Dec Comp Pol
'What is that child's name?'
(24') What did you say that child's name was?

(25') ku ai irum-i mwe -ra -ku mal-hae-ss-e-yo?
the child name Now what is-Dec Comp say
'What did you say that child's name was?'

Even if the requestion type has a *wh*-Q word both in (24) and (25), its intonation rises at the end, although the intonation normally falls in (24') and (25'), where the question is embedded in the main clause.

Similarly, fairly predictable speech act form idioms such as rhetorical questions that convey negative messages are universally productive as follows:

(26) nwun-ey po-i-nun ke -y eps -e?
eye to visible thing Nom be+not non-Pol
'Is there nothing visible to you?'

(27) Am I invisible?

(28) a. enci -yey? (Kyengsang dialect)
when Pol
'When did I say that?' ⇒ 'No.'

b. eti kuren mal -i iss -e?
where such speech Nom exist non-Pol
'Where is that kind of speech?' ⇒ 'Impossible.'

c. eti -ta (tae-ko) pan-mal -i -ya/ku ttawi mal-perut -i -ya?
where to directed half-speech be Q such speech habit be Q
'Where is your incomplete speech/such speech habit addressed to?'

(29) When did I say you could do that?

In Korean, *o-ta* (come) is used figuratively to mean changing to an expected/positive state as in all other languages and *ka-ta* (go) to mean the opposite. One interesting fact about the former is that its past form + Dec S Ending '*w-ass-ta*' is frozen and may be used as a predicative adjective/nominal, but the past of the latter + Dec S Ending cannot be used in the same way, as follows:

(30) ce yeca -nun w-ass-ta -i -ta/ w-ass-ta -i -n-tey
that woman Top came be Dec came be Ending
'That woman is terrific.'

(31) ku saram -un han -mwul k-ass -ta
the man Top one (fresh) water go Past Dec
'The man passed his prime.'

The metaphorical use of 'hanmul ka-ta' (pass prime time freshness) in (31) used to be applied to vegetable and fish but now it is also applied to human beings and other beings that have vicissitudes. When the verb is used with a different modifier like 'wancenhi/acwu' (completely, utterly) as in 'wancenhi k-ass-ta' (gone completely) or with a gesture of moving a finger around beside one's head, then it comes to mean 'became insane'. Therefore, except those predictable from general speech act rules, information on particular speech act constructions with particular meanings must be included in the lexicon.

2.3. Idiomatic Negative Polarity Items

We can consider two types of NPI constructions: one is the 'let alone' type in English and Korean and the other is the type of '*amu-to/amu-ra-to*' (any) in Korean and 'any' in English. Let us consider the former type first:

(32) Cases: *let alone, much less, never mind, not to mention* (Fillmore et al. 1989)

(33) a. He doesn't get up for lunch, *let alone* breakfast.
b. You've got enough material there for a whole semester, *let alone* a week.

(34) [In Korean] (typical NPIs) *-nun kosaha-ko ···to* Neg (Neg···, let alone), *-nun-khenyeng -to/-cocha* Neg (Neg···, let alone), *hamulmye* ···Neg (much less); (Negative/Positive) *-nun malhal kes/nawi-to eps-ko/mullon-i-ryeniwa···to/cocha* (not to mention, not only but also)
[In German] *geschweige denn* (a typical NPI)

(35) a. cemsim-*un kosahako/khenyeng* achim -*to* *an* mek-ess-ta
lunch Contr let alone breakfast even Neg ate
'I didn't eat breakfast, let alone lunch.'
b. ???han tal-*un kosaha-ko* il-nyen-*to* mek-ko sal-kess-ta
'You could live on it for a year, let alone a month.'

The sentences in (33) and (35) above are contrastively paired focus con-

structions with the negative polarity items 'let alone' and '*-nun kosahako*'. This kind of construction involves a (pragmatic) scale (Fauconnier 1975) on which a pair of points is represented. The intent of (33a) is: He doesn't get up until very late, and there is a scale of lateness on which two points are contrasted in focus···(time for) breakfast and (time for) lunch, and the former point is echoically (cf. Sperber & Wilson 1986 on 'irony')/emphatically denied by denying even the latter, which is a far end of the scale. So, on that scale, if someone does not get up for lunch, he does not get up for breakfast either. The former entails the latter. The same process arises for (35a) in Korean. The intent is: I haven't eaten until very late, and there is a scale of lateness on which two points are contrasted···breakfast and lunch, and the former is echoically/emphatically denied by denying the latter, and on that scale if I didn't eat lunch, I didn't eat breakfast either. The former entails the latter on the scale. Emphatic focus fronting (not 'topicalization' as Fillmore et al. call it) is possible in English but not in Korean; in the head-final language, Korean, Neg is located toward the sentential head and the NPI-associated NP (or other phrase) must come first in the basically coordinate conjunction-like construction, but (after-thought-like) post-sentential attachment of the NPI-associated phrase is possible in colloquial Korean, the Topic usually being deleted. Observe the following:

(36) Breakfast I didn't eat, *let alone* lunch.

(37) achim -to an mek -ess -e. cemsim -un kosaha-ko
lunch even not eat Past Familiar breakfast Contr let alone
'Lunch (I) didn't eat, let alone breakfast.'

A striking difference between English and Korean in the above type is that English is more tolerant in that it permits such positive utterances as (33b) under certain conditions. In sentence (33b), 'enough' can be reanalyzed as 'not not enough' in double negation. Then, we have enough negative affect that serves as a negative polarity trigger. The negative affect can be an echo from the previous context sentence (or just the speaker's reflection). However, we must be very cautious about the directionality of the scale this time. The outcome of double negation is positive, and if the sentence is positively represented, then the scale is reversed and the stronger unit must come with the positively expressed element and the weaker one with 'let alone'. Thus, 'enough for a semester' entails 'enough for a week',

and the *let alone*··· part is entailed all the same. A positive expression is monotone increasing (Barwise & Cooper 1981), and the more informative part, the former, entails the less informative part, the latter. If negatively expressed, the weaker unit (lower point) is associated with negation. A negative expression is monotone decreasing. So, [Neg + lower point] (more informative) ⇒ [Neg + higher point] (less informative). Look at the following:

(38) #You've got enough material for a week, *let alone* a whole semester.

(39) You've got not enough material for a week, *let alone* a whole semester. (cf. 33b)

Even in a multiple-focus *let alone* sentence like the following, the lower points (determined in the linguistic or non-linguistic context) must be associated with negation regularly so that they can contribute to a single conceptual scale (of difficulty), and the higher ones with *let alone*:

(40) You couldn't get a poor man to wash your car for $2, let alone a rich man to wax your truck for $1. (Fillmore et al. 1988)

It is less difficult to 'get a poor man to wash your car for $2' than to 'get a rich man to wax your truck for $1'; there is relative strength between two scalar propositions, depending on the four possible variables. [1] So, permutation between any pair of the four focus contrasts will lead to anomaly on normal pragmatic assumptions.

From the above observation, we can state that English allows a scale-reversed positive utterance for the basically negative polarity *let alone* type but not Korean or German. However, the Korean counterpart occurs in the following semantically but not syntactically negative environment:

(41) a. kyelhon-un *kosahako/khenyeng* colep-to ha-ki cen-ey cwuk-ess-ta
marriage Contr let alone graduation do Cmp before die Past Dec
'(He/She) died even before graduation, let alone marriage,'

b. han hakki -nun *kosahako*, ilcwuil-tongan ssuki-e-to pucokha-ta
one semester Contr let alone 1 wk for use for even insufficient

[1] 'scalar model' is involved here. It is a set of propositions with a structure as a generalization to *n* dimensions of a Guttman scale (Fillmore et al. 1988).

'(It) is insufficient to use for a week, let alone a semester.'

b'. ?han hakki -nun *khenyeng* ilcwuil-tongan ssuki-e-to pucokha -ta
Same as a.

c. cemsim-un *kosahako/?khenyeng* achim-ul mek-ki-e-to nemu iru-ta
lunch Cntr let alone brkfst Acc eat to too early
'It is too early to eat breakfast, let alone lunch.'

d. man won-un *khosahako/?khenyeng* chen won-ul pel-ki-to him-tul-ta
10,000 Cntr let alone 1,000 Acc earn to difficult
'It is difficult to earn 1,000 won, let alone 10,000 won.'

As an NPI, *kosahako* ('let alone') is more tolerant than *khenyeng* in fully permitting the above kind of semantically negative predicates.[2] *Let alone* is also permitted in the corresponding environments in English. The contrafactual *-ki cen-ey* 'before' behaves just like a normal clausemate negation in licensing both *kosahako* and *khenyeng*. The adjective *pucokha-ta* contains negation morphologically in it and the construction *V-e-to nemu Adj* ('too···to V') is negation-implicating. The adjective *him-tul-ta* ('difficult') is also negation-implicating. All these are negative affects and there does not occur scale-reversing, different from the positive type of (33b). On the other hand, the same NPI can occur in interrogative and uncertainty modality predicate sentences (like an adversative predicate) if with a different delimiter after the focused element, as follows:

(42) cemsim-un *kosahako* achim -i-ra-to/*-to mek -ess -ni?
lunch Cntr let alone breakfast even though/even eat Past Q
'Have you eaten even(at least) breakfast, let alone lunch?'

(43) cemsim-un *kosahako* achim-i-ra-to/*-to mek -ess -nun-ci
eat Past whether

[2] However, *khenyeng* but not *kosahako* permits the following positive idiomatic construction consisting of two items in polar opposition:

a. chingchan-un *khenyeng/?*kosahako* pel-man pat -ass -ta
praise Cntr let alone punishment only receive Past Dec
'I got only punishment, let alone praise.'(literally)

b. Pel-un *khenyeng/?*kosahako* chingchan-man pat -ass -ta
punishment Cntr let alone praise only receive Past Dec
'I got only praise, let alone punishment.'(literally)

c. chingchan-ul pat-ki-nun khenyeng may -man mac-ass -ta
praise Acc get to Cntr let alone beaten only get Past Dec
'I got only beaten, let alone gaining praise.'

pulhwaksilha-ta/uysimsurep-ta
uncertain doubtful
'It is uncertain/doubtful whether (he) ate breakfast, let alone lunch.'

Even here, the more strict NPI *khenyeng*, more focus-involving, cannot replace the more tolerant NPI *kosahako*. The distinction between the delimiters *-i-ra-to* and *-to* is that the former is originally clausal ('-be-Dec-Concessive'), whereas the latter is not. This fact reminds us of Provovac's (1993) proposal that non-negative NPI licensing proceeds via an empty (?) Operator situated in the Spec of CP of non-Upward Entailment clauses. But clauses of yes/no question, conditional, adversative predicate, comparative and *too* construction are proposed to have this Operator, and I would prefer to claim that the concessive delimiter of clausal origin is correlated with most of those and further affective elements that must take the Negation-implicating Operator position in Korean (this way, we can give a semantic as well as a syntactic account···all of these involve epistemic modality of uncertainty, irrealis, negative possibility or negation-implicating). The distinction between the two concessive delimiters of clausal and non-clausal origin holds in all kinds of NPI phenomena in Korean (any combination of indefinite pro-element + the concessive delimiter: *amu-i-ra-to/amu-to* 'anyone', *amu kes-i-ra-to/amu kes-to* 'anything'). The non-clausal NPs *amu -to* and *amu kes-to* are used with clausemate negation as in (45c) below and some semantically negative constructions such as *-ki cen-ey* 'before' and *-ki silh-ta* 'not want to', though less acceptably, as follows:

(44) a. ?Joe-nun [amu-to o -ki cen-ey] ttena -ass-ta
Top come Cmp before leave Past Dec
'Joe left before anyone came.'
b. (?)amu-to po -ki silh-e
see Cmp hate
'I don't wanna see anyone.'

As I argued elsewhere (C. Lee 1980), a concessive clause entails a conditional clause. Another delimiter *-i-na* behaves just like *-i-ra-to* in respect of polarity, though *-i-na* (coming from 'be'+disjunctive marker) emphasizes 'casual choice' and trivialized the NP involved, whereas *-i-ra-to* emphasizes 'concession' in meaning. Since conjunction (and disjunction) can be

clausal underlyingly, this delimiter also can be analyzed as forming a clause underlyingly. Then, the following various complementary distributions can be explained:

(45) a. amu -i -ra -to /*amu-to coh-ta
anyone be Dec though all right
'Anyone would be all right.' 'Even if it may be anyone (whoever it may be), it would be all right.'

a'. amu -ka w -a-to coh-ta
anyone come even though all right
'Even if anyone comes (whoever may come), it would be all right.'

b. ?*amu-i-ra-to/*amu-to w -ass -ta
anyone come Past Dec
'Anyone came.'

c. amu-to/?*amu-i-ra-to an w -ass -ta
anyone not come Past Dec
'No one came.'

d. amu-to/?*amu-i-ra-to o -ci ma
anyone come Cmpl NegImp
'Don't anyone come.'

(46) a. Anyone would be all right. 'Anyone whosover/Even if it were anyone, it – would be all right.'

b. ?*Anyone arrived.

The (permissive) deontic modality in (45a) but not the positive factual certainty in (45b) allows for the concessive delimiter of clausal origin *amu-i-ra-to*. Obligatory deontic modality (*-ya ha n-ta* 'must', *-(a)ra* imperative), ability and possibility modality (*-l swu iss-ta* 'can'), presumption and futurity modality (*-kess-ta* 'will, be presumed to', *-ul kes-i-ta* 'will') and genericity (habitual aspect) in addition to questions (cf. (42)) and conditionals also permit the same free choice concessive delimiter of clausal origin. There is gradation in NPI-licensing force among different Negation-implicating Operators. The strongest is explicit negation and the next is the contrafactual *-ki cen-ey* 'before' and then the rest in varing degrees. In Korean, NPIs are not licensed long distance with full acceptability differently from English.

The modal (as listed above) is an operator with a restrictive term and a nuclear scope, the former consisting of the 'even if'-like *-amu-i-ra-to* clause and the latter of the rest of the apodosis. The modal operator binds the indefinite pronominal *amu*. The concessive meaning based on a scalar context gives the impression of universal quantification; it involves any freely chosen (or virtually every) element on the scale.

In negative affect conditional or model environments, both forms of *amu* can occur with negation as follows:

(47) a. amu kes -to (*com) mek -ci anh -umyen cwuk -e
any thing even a bit eat Cmp Neg if die
'If you don't eat anything, you will die.'
b. amu kes -i -ra -to (com) mek -ci anh -umyen cwuk -e
'If you don't eat anything whatsoever a bit, you will die.'(literally)

In (47a), the conditional clause contains a total negation, whereas in (47b), the clausal concessive tends towards being positive. Consequently, (a) can function as a warning but (b) only as a suggestion (or request if the null subject is 'I'). The nominal NPI only is strongly negatively focused, whereas the clausal concessive implies arbitrary choice of at least the lowest kind of element (ex. 'soup' in (b)) on the scale. So, the part 'if you don't eat' in (b) implies 'you should eat, otherwise' (*mek-eya-ci, kure-ci anh-umyen*), the negation being outside of the free choice meaning. The negation does not interact with the clausal concessive. That is why *com* 'a bit', 'please' can cooccur. In the case of the nominal NPI plus negation, the meaning of 'not even a single element on the scale' is implied.

The same principle of complementary distribution seems to apply to English. If we say 'Joe can solve *any* problem', the modal operator binds the 'any' indefinite, and the expression 'any problem' must mean 'any problem whatsoever···even if it may be the most difficult problem'. On the other hand, in 'Joe didn't solve any problem', the expression 'any problem' tends to mean 'even a single problem'. Concession is limited to the NP in the latter case, whereas it seems to apply to the clausal unit that is implied by the expression in the former case.

(48) a. Every/Any man who owns any guns/a single gun will be punished.

b. amu chong-i -ra -to/chong-ul han carwu-i-ra-to kaci-n
any gun be Dec though gun Acc one Cl be Dec though own Rel
saram-un pel -ul pat -ul kes -i -ta
man Top punishment Acc receive will
'Every man who owns any kind of gun/a single gun will get punished.'

c. amu-i-ra-to/*amu-to sarang-hay po-n saram-un
any one love experienced personTop
ipyel-uy kothong -ul a-n -ta (cf. Y. Lee 1993)
split of pain Acc know Dec
'Every man who once loved anyone knows the pain of breaking up.'

The relative head in (48a, b, c) above must be nonspecific to be able to have a non-free choice, existential, variable-binding reading of 'any'/'amu' in its relative clause. The Specificity Condition applies. To get a free choice reading, one must assign an extraordinarily emphatic stress to 'any'/'amu', so that it cannot get variable-binding from the Topic operator.

In Korean, question word forms such as *nwukwu* 'who', *mues* 'what', *encey* 'when', and *ettekhey* 'how' are used as indefinites such as 'someone', something', 'some time' and 'somehow', respectively. When these forms are used with the clausal concessive *-i-ra-to* in negative affect contexts, they function as non-negative NPIs just like *amu (N)(-uro)-i-ra-to*. They give the impression of pointing to a more specific (though indefinite and only rhetorical) object and the first two indefinite pronouns can be preceded by the demonstrative *ku* (*ku nwukwu-i-ra-to*, *ku mues-i-ra-to* 'whoever it may be', 'whatever it may be', respectively; *ku* here is what I call a rhetorical definite). On the other hand, (*ku*) *nwukwu-to* and *ku mues-to* function as negative NPIs and occur with clausemate negation just like the non-clausal concessive NPI *amu (N)-to*. The manner NPI *amu-ri V-e-to* 'however you may V' occurs with main clause and semantic negation. Its question word form counterpart with the clausal concessive *ettekhey haese-ra-to* 'by all means' occurs with obligatory denotic modality and volitional modality. And a similar form *ettekhey/encey V-te-ra-to* 'which way/whenever you may V' functions as a regular non-negative NPI. Consider:

(49) a. amu-ri mek-e-to cili-ci ahn -nun -ta/pae-ka
however eat though tired not Pres Dec
kophu-ta/pucokha-ta
hungry insufficient
'However much I may eat, I am not tired/I am hungry/not enough.'
b. ettekhey haese-ra-to iki-eya ha-n-ta/iki-era/iki-kess-ta
'By all means, you must win/win!/I will win.'
c. ettekhey ssawu-te-ra-ta iki -l swu iss-ta
which way fight even if win can
'You can win which way you may fight.'
d. ney -ka encey o -te -ra -to hwanyengha -kess -ta
you Nom when come even if welcome will Dec
'Whenever you may come, I will welcome you.'

The concessive of nonclausal vs. clausal origin regularly occurs in all the possible negative vs. non-negative NPI constructions in parallel, invoking the scale principle all the time.

3. Definite Expressions, Existential and Unaccusative Constructions

3.1. Definite Expressions

Articles are a syntactic phenomenon and we need a more semantically and pragmatically oriented notion of definitess for no article languages. For instance, generic NPs are semantically definite in the sense that the kind/collection indicated is familiar to anyone.

(50) a. Water is H_2O.
b. L'eau est transparente.
c. mul -un H_2O-i -ta.
water Top be Dec
'Water is H_2O.'

(51) a. The lion/Lions/A lion is/are brave.
b. L'oiseaux ont des ailes.
b'. Les chats c'est gentil. (Colloquial French) (J. Auger's data)
c. sae-nun nalkae-ka is'-ta
'Birds have wings.'

(52) a. You have the wrong number.
b. Sie haben falsche Nummer. (via Fillmore, p.c.)
c. penho-ka thuli-ess-sumni-ta
'The number is wrong.'
or conhwa calmos ke-si-es'-sumni-ta
'You dialed (lit. hung) in a wrong way.'

A mass term is marked indefinite in English, but definite in French, and has no article in Korean. The singular indefinite is rather marked in the sense that it cannot be used with a kind-predicate like 'extinct' and cannot occur as an object in the generic sense. In French, the definite article is purely semantic, and particularly in Colloquial French the plural changes to the singular pronominal *ça*, showing singular agreement. In Korean, even a count noun generic has no determiner (see C. Lee 1993).

In the same situation, the speaker can have different assumptions regarding the given noun in different languages, as shown in (52). In English, the wrong number is definite, but, in German, it is indefinite. In Korean, no article again, and it must be interpreted as definite.

The syntactically same definite article can have different semantic functions in different languages, as follows:

(53) a. Les enfants ont levé la main.
b. The children raised the hand.

(53a) in French is ambiguous between inalienable (each of the children raised his or her hand) and alienable (one and the same hand) possession meanings (Vergnaud and Zubizarreta 1992). But (53b) in English is nonambiguous and only has the alienable possession meaning. In Korean, on the other hand, the singular no article NP can be used ambiguously. Observe:

(54) ai tul -un son -ul tul -ess -ta
children Top hand Acc raised
'Children raised their hands/the hand/a hand.'

In Korean, the interpretation depends on contexts and the inalienable possession reading is predominant pragmatically. In Korean, whole-part relation reflects inalienability. Whether the hand is right or left, singular or plural is vague. Observe:

(55) Yenghi –nun son –i phi–thwusengi–ka toe–ess –ta
Top hand Nom blood full Nom become
'Younghi got her hand(s) full–blooded.'

Person and body–part relation gives rise to a great number of idioms in Korean. Observe some examples.

(56) Yenghi –nun pal –i nelp –ta
Top foot Nom broad
Lit.: 'Y has broad feet.'
Idiom: 'Y has a wide range of social contact.'

(56) is ambiguous between its literal meaning and idiomatic meaning. If we use the possessive marker between the possessor NP and the body–part NP, its literal meaning becomes prodominent and its idiomatic meaning is hard to find (*Y–uy pal–i nelp–ta* 'Y's feet are broad'). Such compounds as *matang –pal* 'ground–foot' and *wang matang–pal* 'king ground–foot' are also used idiomatically, (to refer to persons metonymically). If the foot is specified as to which side like *oen–ccok–i* 'on the left' after 'pal–i,' then it can only have the literal meaning. 'Blue movies' are pornographic but not 'blue French movie'. So, the following construction of [possessor〉 part〉 part〉 part] (in the order of the larger first) cannot have any idiomatic meaning. Take a look:

(57) Yenghi–nun kho –ka nal –i oen–ccok–i yeppu–ta
Top nose Nom blade Nom left side Nom pretty
'Younghi has a pretty left–hand side nose blade.' (C. Lee 1992)

Some other body–part idioms are as follows:

(58) a. son –i khu –ta
hna Nom big Dec
'has a big hand' ⇒ 'be lavish'
b. pae –ka aphu –ta
stomach Nom have a pain Dec
'have a pain in the stomach' ⇒ 'be jealous'
c. kho–t–tae–ka noph –ta
nose stick Nom high Dec
'has a high nose stick' ⇒ 'be snooty'

d. i –rul kal –ta
tooth Acc grind Dec
'grind one's teeth' ⇒ 'harbors feelings of extreme hatred toward'

e. ip –ul ssis –ta
mouth Acc wash Dec
'wash one's mouth' ⇒ 'pretend to be ignorant after taking interest by oneself'

The body-parts can be modified by the predicate adjective in (58a, b, c) without losing the idiomatic senses but if the Acc-marked NPs in (53d, e) become relative heads, then the relative constructions lose their idiomatic senses, as follows:

(59) a. khu-n son 'lavish hand'
b. 'aphu -n pae 'jealousy'
c. noph -un kho -t -tae 'snootiness'
d. (x-ka) kal-n i 'the teeth x ground'
e. (x-ka) ssis -un ip 'the mouth x washed'

Sometimes, body-part idioms form good NPIs at the same time. Observe:

(60) a. We all worked hard except Joe. He would*n't lift a finger*.
b. Joe-nun *son hana kkattak ha* -ci *anh* -ass -ta
Top hand one move do Cmp Neg Pst Dec
'Joe didn't move even a hand at all.'
c. *Joe-nun son hana kkattak hae -ss -ta
Top hand one move do
d. Joe-ka son hana kkattak hae -ss -ni?
Nom hand one move do Pst Q
'Did Joe move even a hand at all?' (rhetorical; negative implication)

3.2. Existential and Unaccusative Constructions

Existential and unaccusative constructions are also frozen constructions. Let us consider existential constructions first. The following is an numarked existential construction in Korean:

(61) cha –sok –ey ai –ka twu myeng iss –ta.
car inside at children Nom two Cl exist Dec
'There are two children in the car.'

A spatio–temporal (background) expression lies at the head of the sentence above and the following sentence with 'two children' in the subject position is different in meaning from the existential sentence shown above.

(62) ai twu myeng –i cha –sok –ey iss –ta
children two Cl Nom car inside at exist Dec
'Two children are in the car.'

The subject Np in (62) is [+Specific] and the predicate shows the location of the subject referents, whereas 'the existence of two children' is introduced and is in the limelight in the existential construction (61). Because the speaker is introducing something unknown to the hearer, it must be indefinite. In other languages, the same frozenness of the existential construction is shown, as follows:

(63) a. Il y a deux enfants dans l'auto.
b. *Deux enfants y a dans l'auto. *Dans l'auto…,
*Y a deux enfants…, *Y en a deux….
c. The are two children in the car.

Now, let us turn to unaccusative constructions. (64a, b) below are unaccusative constructions.

(64) a. chaeksang –ey menci –ka anc –ass –ta
desk on dust Nom sit Pst Dec
'Dust sits on the desk.'
b. chaeksang –ey phari –wa menci –ka ttereci–ess –ta
desk on fly and dust Nom fall Pst Dec
'A fly and dust fell on the desk.'
c. ?*chaeksang –ey phari –wa menci –ka anc –ass –ta
desk on fly and dust Nom sit Pst Dec
'A fly and dust sat on the desk.'

An animate being's sitting is an action and (64c) is unacceptable because an agentive construction and an unaccusative construction are combined in conjunction.

4. Concluding Remarks

By now we have seen how pervasive frozenness is in grammatical constructions. However, their semantic representations are in principle compositional. And the way expressions are frozen follows semantic and pragmatic priniciples both crosslinguistically and universally, as we have noticed in the NPI type idioms and others. Thus, we need further investigation to strengthen the basic principles governing frozen expressions and to elucidate crosslinguistic parameters.

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ABSTRACT

Forzen Expressions and Semantic Representation

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This paper is concerned with how to represent the meanings of frozen expressions. It considers the argument structures of lexically filled idiomatic expressions such as *kich the bucket* first and then the semantic representations of lexically open idiomatic expressions (Fillmore et al. 1988) such as *the -er ... the -er* [function type], *let alone ...* [NPI type] and *why not ...* [speech act type] and other grammatically frozen constructions. The argument structures of the lexically filled (metonymic or metaphorical) idioms are shifted from those of their literal counterparts, retaining the minimal aspects of compositionality.

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