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# THE REFERENTIAL MEANINGS OF KEMA 'LIVER' IN MAUWAKE<sup>1</sup>

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<sup>1</sup> This paper was written during the Semantics Workshop, 1983, at Ukarumpa, PNG. Data for the paper has been collected in a 4-year period when the writer and lived and worked among the Mauwake people of the Madang Province. Speakers of the language, Masul Saakawa (Susure village) and Saror Aduna (Moro village) gave invaluable assistance in providing additional data and analysis of them. Dr. K. Franklin, lecturer at the Workshop, gave useful direction and good suggestions, for which the writer is most grateful. Helpful comments from other S.I.L. colleagues participating in the same Workshop were also very much appreciated.

*We work with our liver for everything. - Masul Saakawa*

## 0. Introduction

Papua New Guinean languages are rich in body image concepts expressing qualities of personality and other traits of character (McElhanon 1977:8), or emotion and thoughts. Each language, however, has its own set of body image concepts which are culture specific. In the Mauwake<sup>2</sup> language, speakers use body parts to express psychological realities and certain abstract concepts. By choosing a certain body part for focus and adding to it verbal or adjectival forms, a person's feelings, state of mind, etc. are expressed.

*Kema* 'liver' is by far the most productive body part for generating terms which express emotion, physical condition, mental activity, opinion and will. There are at least 60 such expressions in Mauwake, more than all the other body parts, which generate from one to 12 expressions.

This paper discusses expressions with the body part *kema* 'liver'. Section one describes the semantic scope of expressions which contain this word. Section two outlines the semantic and grammatical features which add distinct meanings to expressions involving *kema*. This paper is followed by an appendix giving the list of expressions using *kema* 'liver'.

## 1. The semantic scope of *kema*

The physical organs referred to as *kema* include the inside of the chest above the diaphragm, as well as the various internal organs within the chest:

- (1) *kema mumua*  
liver seed  
'heart'
- (2) *kema fofola*<sup>3</sup>  
liver foam  
'lung'

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<sup>2</sup> The Mauwake language of Papua New Guinea is a non-Austronesian language belonging to the Kumilan family, Pihom Stock, Adelbert Range Super-stock and Madang-Adelberg Range sub-phylum. It is spoken by approximately 2,000 people, in 15 villages and hamlets in the Bogia Sub-Province of Madang Province, in an area about 120 km north-west of Madang on the North Coast Road and reaching about 18 km inland.

<sup>3</sup> Some speakers say *kema kofora* instead of the regular form *kema fofola*.

Heart pain or any discomfort in the chest is referred to as:

- (3) *Kema efa tütin- iya.*  
 liver me pain 3s:PR  
 'My chest is aching.'

### 1.1 Distinguishing animate from inanimate

*Kema* serves to separate animate from inanimate objects. Those with a *kema* are able to feel, think and express themselves.

- (4) *Mua, waaya, siowa kema wiar ik -omak -emik.*  
 man pig dog liver their to.be -many -3p:pr  
 'Men, pigs, and dogs have livers.'

The term is also used to refer to activities of the self, so that one may say:

- (5) *Kema in -inen.*  
 liver sleep 1s:f  
 'I will rest.'

A Mauwake person can refer to a personal activity by using *kema*:

- (6) *Ni kema welaw -iman yoo?*  
 you liver complete 2p:PR excl  
 'Have you completed your work?'

### 1.2 Physical condition

There are various expressions involving *kema* which refer to the physical condition of a person, or to his body functions:

- (7) *Kema gaan-iyem.*  
 liver snap-1s:pr  
 'I burp.'
- (8) *Kema wafur -am ika -iya.*  
 liver throw -V.M to.be 3s:PR  
 'He is gasping for breath.'

- (9) *Kema enekar -iyem.*  
 liver light.a.fire 1s:pr  
 'I am thirsty.'

### 1.3 Mental activities

Mental activities, which include forgetting, remembering, recalling, thinking or reminding, are also expressed by phrases with *kema*:

- (10) *Kema irinar -iyem.*  
 liver fill.up 1s:pr  
 'I forgot.'
- (11) *Kema -iw ik -em.*  
 liver with to.be 1s.P  
 'I remember (I am keeping it in mind).'

A conscious effort to recall or to think, which are active processes, require transitive verbs:

- (12) *Kema weep -iyem.*  
 liver fold 1s:pr  
 'I make the effort to recall.'
- (13) *Kema suuw- iyem.*  
 liver push 1s:pr  
 'I am thinking.'

The following sentence shows how such phrases may be used serially to denote the various stages of mental process:

- (14) *Kema irinar -ep, kema weep -ap, kema*  
 liver fill.up S:R liver fold S:R liver  
*ep -ap kema suuw -ap nefa maak -inen.*  
 come back S:R liver push S:R. you.tell 1s:f  
 'I have forgotten, (but) I will begin to recall, and when I  
 remember, I will think and then tell you.'

Processes involving understanding which is acquired through one's own observation or deduction are expressed by *kema*, plus the intransitive verb 'split.'

- (15) *Kema puk -ep ma -ek.*  
 liver split S:R speak 3s:p  
 'He understood and spoke.'

Understanding here is different from the information or knowledge which one has been told or which is generally known:

- (16) *Mua nain paayar -em.*  
 man that know 1s.P  
 'I know that man.'
- (17) *Sia aw -owa me paayar-em.*  
 bilim weave nom not know 1s.P  
 'I do not know how to weave a bilim.'

If a person is confused by having too many things to do and does not know how to handle the situation, his liver is 'stuck':

- (18) *Kema korin -ep fan ik -em, maa -ko*  
 liver stuck S:R here to.be 1s.P thing irr.foc  
*me uuw -am.*  
 not work 1s.P  
 'I'm confused and stayed here doing nothing.'

#### 1.4 Opinion, intention, will

*Kema* is also the place of opinion, intention and will:

- (19) *Kema -ko me wiar paayar-em, nena*  
 liver foc not.his know 1s.P yourself  
*nokar -e.*  
 ask 2s:imp  
 'I do not know his opinion, ask him yourself.'
- (20) *Yo kema ere-erup-ar -iyem, ikiw- inen- i*  
 I liver twotwo become 1s:pr go 1s:f-  
 weetak?  
 ques.no  
 'I'm undecided, shall I go or not?'

- (21) *Kema enim- iwikin kema gariar -ep wi -ok*  
 liver eat D:R liver shake S:R they follow  
 -ak.  
 3s:p  
 'When they tempted him, he wavered and followed them.'

## 1.5 Emotion

The category of emotion is represented in a number of ways through the use of *kema*.

- (22) *Kema samorar -iyem.*  
 liver become.bad 1s:pr  
 'I am unhappy.'
- (23) *Kema ten -em.*  
 liver break 1s:P  
 'I am relieved.'
- (24) *Kema peelal -iyem.*  
 liver rot.become 1s:pr  
 'I am grieved.'
- (25) *Kema tukun -iyem.*  
 liver throb.with.pain 1s:pr  
 'I am worried.'

## 2. Additional semantic and grammatical features

Semantic features added by verbs or adjectives are important for finer distinctions in meanings of other expressions involving *kema*. In addition grammatical features, such as whether the verb is stative/intransitive or transitive help to determine if the expression implies is an inner state of mind or emotion, or if it is an active process.

### 2.1 Quantity

The greater the value of the numerical adjective which occurs after the body part the greater the uneasiness of the emotion or the will. 'One' indicates a mind which has made a decision, 'two' shows indecisiveness, and 'many'

indicates worry or uneasiness. 'Two' and 'many' are also at times re-duplicated forms to convey the sense of greater activity of the mind.

- (26) *Yo kema kuisow wu -ap maa fain aaw-em.*  
 I liver one put S:R thing this buy 1s.P  
 'I made up my mind and bought this one.'
- (27) *Ikiw -owa kema ere-erup-ar -ep fan ik em.*  
 go nom liver two two become S:R.here to.be 1s.P  
 'I was undecided about going so I stayed here.'
- (28) *Muuka me efar kerer -era kema unu -unowa ep*  
 son not my appear D:R liver many many come  
 - *am ika -iyem.*  
 S:R to.be 1s:pr  
 'My son has not returned so I'm very worried (thinking of all the possible things that could have happened to him).'

## 2.2 Stative and transitive verbs

The use of a stative or a transitive verb with *kema* conveys the difference between an involuntary or voluntary action.

- (29) *Kema puk -ok.*  
 liver split 3s:p  
 'He understands.'
- (30) *Kema fook -ak.*  
 liver split 3s:p  
 'He told him (of something that he was ignorant of).'

Both *puk* and *fook* are glossed as 'split' in English. *Puk* is a stative verb and is used when no Agency is implied, e.g., when a bottle falls and breaks, or when a log splits on its own from dryness. On the other hand *fook* refers to the act of splitting a log or any spherical object with an instrument. Correspondingly, the former indicates a gradual process of understanding by observation, while the latter indicates an act of telling someone of something.

In the same way, transitive or intransitive verbs are used with *kema*: both *kema epiyem* and *kema weepiyem* may be glossed as 'I remember/recall'. They, however, form a chain in mental activity:

- (31) *Kema irinar -ep, kema weep -ap kema ep -ap*  
 liver fill.up S:R liver fold S:R liver come S:R  
*ma -inen.*  
 say 1s:f  
 'I have forgotten, (but) I will begin to recall, and when I  
 remember, I will say it.'

*Weepiyem* 'I fold (something)' is a transitive verb of doing something to an object, whereas *epiyem* 'I come' is an intransitive verb. Therefore, the former is action requiring definite effort, and the latter is a natural process which comes after the former.

Syntactic process of affixing a causative morpheme in the verb transforms certain phrases to transitive ones:

- (32) *Kema bagiaw ir -ak.*  
 liver anger go.up 3s:p  
 'He was angry.'
- (33) *Kema bagiaw ir -ow -aw -ak.*  
 liver anger go.up nom caus 3s:p  
 'He made him angry.'
- (34) *Kema ten -ek.*  
 liver break 3s:p  
 'He is relieved.'
- (35) *Kema tee -k -ak.*  
 liver break caus 3s:p  
 'He made him happy/relieved.'

## 2.3 Intensity

The concept of 'up' conveys an intensity of emotion. *Ir-* 'go up' (a tree) and *urup-* 'go up' (slope or house) are two words<sup>4</sup> which may occur with *kema*:

- (36) *Kema urup -iyem.*  
 liver go.up 1s:pr  
 'I am enthusiastic (about doing something).'

<sup>4</sup> In one dialect only *irip* 'go up' is used, so the speakers will say *kema iripiyem* 'I am enthusiastic (about doing something).'



- (37) *Kema bagiaw ir -ak.*  
 liver anger go.up 3s:p  
 'He is angry.'

## 2.4 Semantic opposites

These may be indicated by antonyms of the verbs or adjectives:

- (38) *kema efef -ar -ep maninai kiw -em.*  
 liver light become S:R garden go 1s.P  
 'I had a strong urge to go to the garden and I went.'
- (39) *Kema pin -ar -ep me ikiw -em.*  
 liver heavy become S:R not go 1s.P  
 'I have absolutely no desire to go (to a place).'
- (40) *Kema kekan -ep maa wi -em ik -em.*  
 liver firm S:R things they S:R to.be 1s.P  
 'I was firm and gave them food (not giving everything they asked for).'
- (41) *Kema karan -ep maa iiwawun yi -ek.*  
 liver shiver S:R things all me 3s:p  
 'He was afraid (that he was not generous enough) so he gave me everything.'

## 2.5 Inclusion

Certain expressions are more general than others and included within them are several associated expressions of the same general meaning. For example, *kema eliwariya* 'the liver is good' means any general good or happy disposition, and *kema samorariya* 'the liver is bad' means any sad or unhappy state. Each of the above may be replaced by various *kema* expressions indicating various degrees of happiness or unhappiness. The following form a set, indicating happiness:

- (42) *Kemel -iya.*<sup>5</sup>  
 liver 3s:pr  
 'He is happy (when there is food, etc).'

<sup>5</sup> This word is derived from *kema* plus *eliwa*. The final vowel *a* of the former word and the initial vowel *e* of the latter are merged to become *e*. The final *iwa* is deleted. Thus the word *kemel* 'happy' is formed.

- (43) *Kema ten -iya.*  
 liver break 3s:PR  
 'He is relieved (when he has found a lost article); or, He is happy (when someone whom he dislikes is being scolded).'
- (44) *Kema sariar -iya.*  
 liver heal 3s:PR  
 'He feels good again (when he made up with someone whom he was angry with).'
- (45) *Kema siin -iya.*  
 liver narrow 3s:PR  
 'He is pacified (after being angry at someone).'

The following form another set, indicating unhappiness:

- (46) *kema tukun -iya.*  
 liver throb 3s:PR  
 'He is worried (when his son has not returned home).'
- (47) *Kema samor -ar -iya.*  
 liver bad become 3s:PR  
 'He is sad (when he has lost something, or when a pig has damaged his garden).'
- (48) *Kema peel -al -iya.*  
 liver rot become 3s:PR  
 'He is sorrowing (when a relative dies, or when he is thinking of home).'

For indicating fear there is a set of expressions which range in a continuum, increasing in intensity:

- (49) *Paap -iya*  
 afraid 3s:PR  
 'He is afraid (when a child sees a stranger).'
- (50) *Keker op -iya.*  
 fear hold 3s:PR  
 'He is afraid (to go to a strange place, or to do something new).'

- (51) *Kema karan -iya.*  
 liver shiver 3s:PR  
 'He is scared/nervous (when a relative is at his home and he is afraid that he is not hospitable enough to him; when crossing a narrow bridge).'
- (52) *Kema tooton -iya.*  
 liver fear 3s:PR  
 'He is fearful (of a big responsibility; when the police calls on him; when he walks in the bush alone at night).'
- (53) *Kema ipa siin -ar -iya.*  
 liver feces narrow become 3s:PR  
 'He is very afraid (when he is sitting in a small plane, and wishing it to land very soon).'
- (54) *Kema pu -ep iw -iya.*  
 liver die S:R enter 3s:PR  
 'He is terrified (when he sees a snake on the path).'

Of the above set, the last two expressions have the longest forms. This is an indication that with increased intensity in the emotion there is also an increase in the form of expression. This seems to be the case in other sets; for example, compare the following:

- (55) *Kema irinar -iya.*  
 liver fill.up 3s:PR  
 'He forgets.'
- (56) *Kema mika kof -iya.*  
 liver spear knock 3s:PR  
 'He totally forgets and just cannot recall (where he has left the knife).'

### 3. Conclusion

Speakers of the Mauwake language use a wide range of verbs and adjectives with *kema* to communicate their feelings, opinions, state of mind or physical conditions. The list of about 60 expressions is by no means exhaustive. The speakers may create new expressions to express themselves more succinctly. One speaker has been heard to say:

- (57) *Kema efar masial -iya.*  
 liver my bitter.become 3s:PR  
 'I am very angry (because he was wrongly accused of sorcery).'

Although the expression is not accepted by other speakers as being part of their ordinary vocabulary they understand that some kind of unhappiness or anger is being expressed through the word *masia* 'bitter.' As the speakers of the language interact with people from other areas and with speakers of Pidgin, they may create more terms to meet new requirements and situations in their environment.

### 3.1 Mental Activities

<i>Kema irinar-iya.</i> liver fill.up	'He forgets.'
<i>Kema ep-iya.</i> liver come	'He remembers/recalls.'
<i>Kema ekap-iya.</i> liver come	'He recalls.'
<i>Kema ik-ua.</i> liver to.be	'He keeps it in mind.'
<i>Kema korin-iya.</i> liver stuck	'He is confused.'
<i>Kema mika-kof-iya.</i> liver spear knock	'He totally forgets and cannot recall.'
<i>Kema-iw ika-iya.</i> liver-with to.be	'He is conscious.'
<i>Kema wa-iya.</i> liver put	'He is attentive/remembers what he was told.'
<i>Kema suuw-iya.</i> liver push	'He thinks.'
<i>Kema weep-iya.</i> liver fold	'He makes the effort to recall.'
<i>Kema sererek-iya.</i> liver clears.a.path	'He reminds him.'

<i>Kema puk-ia.</i> liver split	'He understands (mature).'
<i>Kema fook-ia.</i> liver split	'He tells him (of things that he is ignorant of).'

### 3.2 Intention or Opinion

<i>Kema wiarpaayar-ia.</i> liver their know	'He knows their intention/opinion.'
<i>Kema naap ika-ia.</i> liver thus to.be	'That is his opinion.'
<i>Kema ook-ia.</i> liver follow	'He follows his opinion (He does what he likes).'
<i>Kema kuisow wa-ia.</i> liver one put	'He has firmly decided.'
<i>Kema ere-erupar-ia.</i> liver two-two.become	'He is undecided.'
<i>Kema kir-ia.</i> liver turn	'He changes his mind.'
<i>Kema lilew ora-ia.</i> liver go down	'He has decided.'
<i>Kema gariar-ia.</i> liver shake	'He is tempted and changes his mind.'
<i>Kema kirip-ia.</i> liver turn	'He changes his mind by persuasion.'
<i>Kema enim-ia.</i> liver eat	'He tempts him.'
<i>Kema akim-ia.</i> liver try	'He tests him (his intention or try will).'
<i>Kema karan-ia.</i> liver shiver	'He is afraid (that he will be accused of inhospitality or not being generous).'
<i>Kema kekan-ia.</i> liver firm	'He is firm in not giving all his firmfood away.'

<i>Kema efefar-iya.</i> liver light	'He has a strong urge (to do light something).'
<i>Kema pinara-iya.</i> liver heavy	'He has no desire (to do something).'
<i>Kema nūwa pu-īya.</i> liver handle break	'He has decided not to do what he has done before.'

### 3.3 Emotion

<i>Kemel-iya.</i>	'He is happy.'
<i>Kema eliwar-iya.</i> liver good	'He is feeling good (absence of anger).'
<i>Kema ten-iya.</i> liver break	'He is relieved (from worry or tension).'
<i>Kema sariar-iya.</i> liver well	'He feels happy again (after anger, fear or sadness).'
<i>Kema siin-iya.</i> liver narrow	'He feels vindicated (His anger subsides).'
<i>Kema teek-iya.</i> liver pluck	'He makes him happy (returning a lost article or scolding someone whom he is angry with).'
<i>Kema samorar-iya.</i> liver bad.become	'He is sad/unhappy.'
<i>Kema tukun-iya.</i> liver throb	'He is worried.'
<i>Kema unu-unowa wa-iya.</i> liver many-many put	'He is very worried.'
<i>Kema peelal -iya.</i> liver rot.become	'He grieves/He is sorrowing.'
<i>Kema karan-iya.</i> liver shiver	'He is nervous/scared (when he is crossing a bridge).'
<i>Kema tooton-iya.</i> liver afraid	'He is fearful (of new or a big responsibilities, meeting new experiences and situations, walking in the bush by oneself).'

- Kema ipa siinar-iya.* 'He is very afraid (sitting in a small plane).'  
liver feces narrow.become
- Kema puep iw-iya.* 'He is terrified (when he suddenly comes  
liver die go.in upon a snake in the path).'
- Kema wisar-iya.* 'He wishes to possess something.'  
liver sorry
- Kema urup-iya.* 'He is enthusiastic to do something or about  
liver go.up something).'
- Kema bagiaw ir-iya.* 'He is angry.'  
liver anger go.up
- Kemal-iya.* 'He has pity on him.'  
liver become
- Kema epaskun waimik* 'They agree with each other / cooperate  
liver together.put with each other.'

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## APPENDIX

### Physical Parts

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*kema*

liver 'liver'

*kema mumua* 'heart'  
liver seed

*kema kofora/fofola* 'lungs'  
liver foam

*kema wisa pukiya* 'breathless, panting'  
liver breath break

*kema marewariya* 'short of breath'  
liver not become

*Kema wafur-iya.* 'He is gasping for breath.'  
liver throw 3s:PR

*Kema muf-iya.* 'He is breathing weakly.'  
liver pull

*Kema tiitin-iya.* 'He has a pain in the chest.'  
liver pain

*Kema enekar-iya.* 'He is thirsty.'  
liver light

*Kema aw-iya.* 'He is thirsty.'  
liver afire

*Kema gaan-iya/golon-iya.* 'He is burping.'  
liver snap gurgle

*Kema in-iya.* 'He is resting.'  
liver sleep

*Kema yasuw-iya.* 'He is quenching his thirst.'  
liver wash

*Kema welaw-iya.* 'He has finished his work/activity.'  
liver finish



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### Abbreviations

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1s:f	first person singular, future tense.
1s:pr	first person singular, present tense.
2p:pr	second person plural, present tense.
2s:imp	second person singular, imperative.
3p:pr	third person plural present tense.
3s:p	third person singular, past tense.
3s:pr.	third person singular, present tense.
caus	causative affix.
D:R	Medial verb, different referent.
excl	exclamation affix.
irr.foc	irrealis focus.
nom	nominalizer.
ques.	question affix.
s:r	Medial verb, same referent.