

### *The Practice of Extispicy*

For the reasons outlined above, extispicy remained indispensable to the Sargonid kings in eliciting divine response to their queries. No other group of specialists operating at the time could render such service in determining the advisability of any course of action to be taken by these monarchs, be it in the realm of international diplomacy or in domestic affairs. The record of the diviners' activity on behalf of Esarhaddon and Assurbanipal is found in the extispicy reports embedded in the corpus of texts under discussion. Such reports, which are in reality records of autopsies performed on dead sacrificial sheep, consist of observations, rather like those of the modern pathologist, of the physical condition of the exta of these animals.

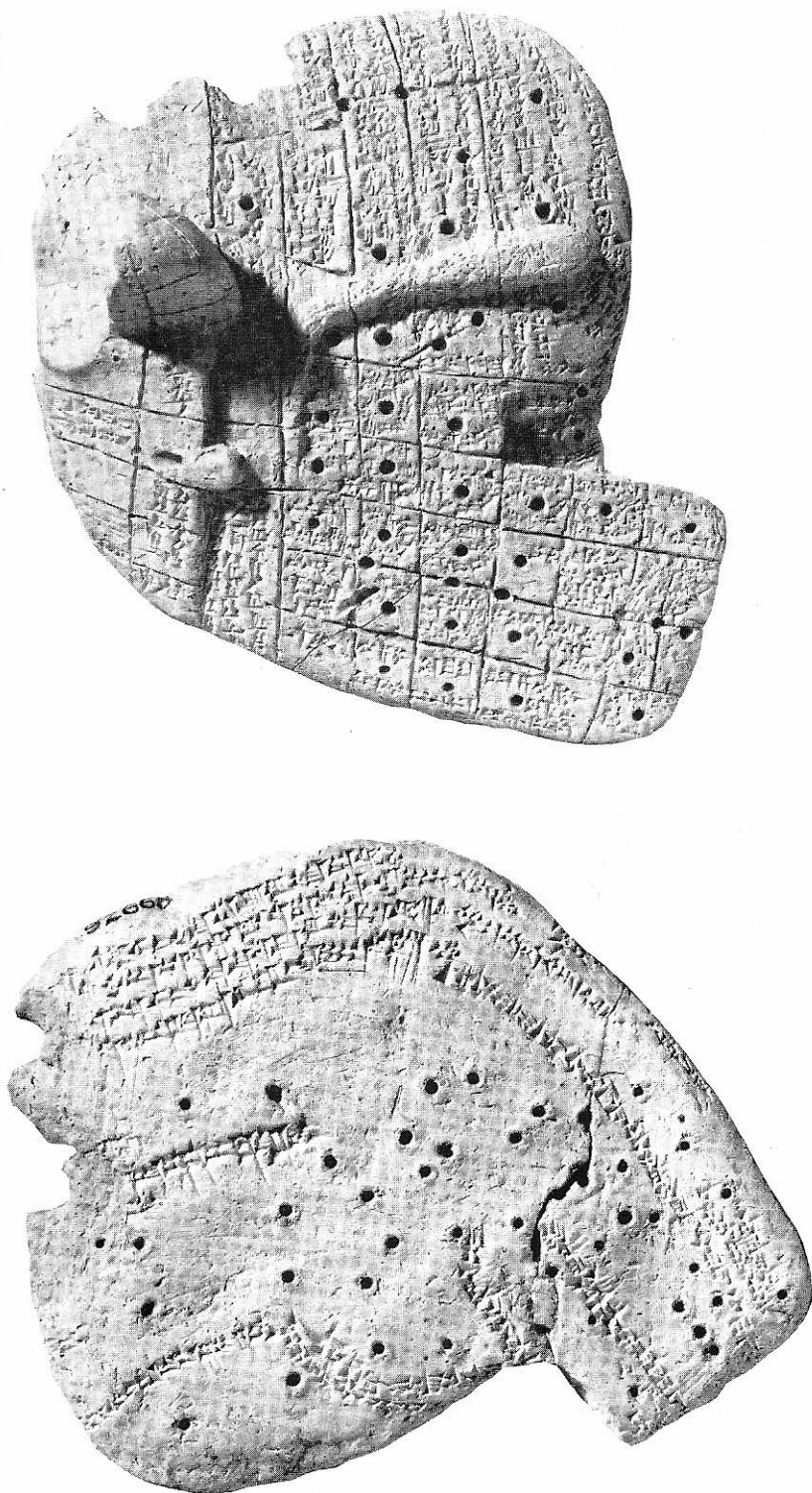
The tradition of recording autopsies of dead sacrificial sheep remained remarkably consistent in Mesopotamia from the Old Babylonian to the Neo-Assyrian times.<sup>89</sup> In spite of the time gap separating the two periods, as well as certain technical changes in the practice and nomenclature of extispicy which came about in the course of time, the observations in the Sargonid reports and queries differ only slightly, with respect to the parts of the exta inspected and the technical terminology employed, from those of the Old and Middle Babylonian reports available to us.

The entire exta of the sheep came under scrutiny in these autopsies, but the starting point of the diviner's inspection was the liver. Here liver models have been as helpful to the modern investigator as they must have been to the apprentice diviner in ancient Mesopotamia. We are fortunate in having a comparatively large number of such models, both from Mesopotamia and elsewhere in the Near East. The major parts of the liver, such as the umbilical fissure, the gall bladder, the caudate lobe, etc., are marked on all extant liver models, and have been most helpful in the identification of the Akkadian terms for these parts.<sup>90</sup>

The parts of the exta of the sheep making their appearance in the omen texts and extispicy reports may be divided into two groups:

1) Anatomical or "fixed" parts, i.e., those parts of the sheep's anatomy, such as the liver, lungs, heart, intestines etc., or parts thereof, such as the gall bladder and caudate lobe of the liver, the accessory lobe of the right lung, the coils of the colon, etc., and their surrounding "territories," whose location on the exta when in normal condition is fixed by virtue of their being either constituent parts of the sheep's anatomy (*parties constitutives* in Nougayrol's terminology),<sup>91</sup> or were so considered by the diviner.

Four markings in particular, which usually appear as creases or fissures on the surface of liver models, were considered parts of the liver whose presence was expected in much the same way as that of the gall bladder, umbilical fissure, and caudate lobe. Their presence or absence and physical condition



5. Liver model with annotations (Old Babylonian).

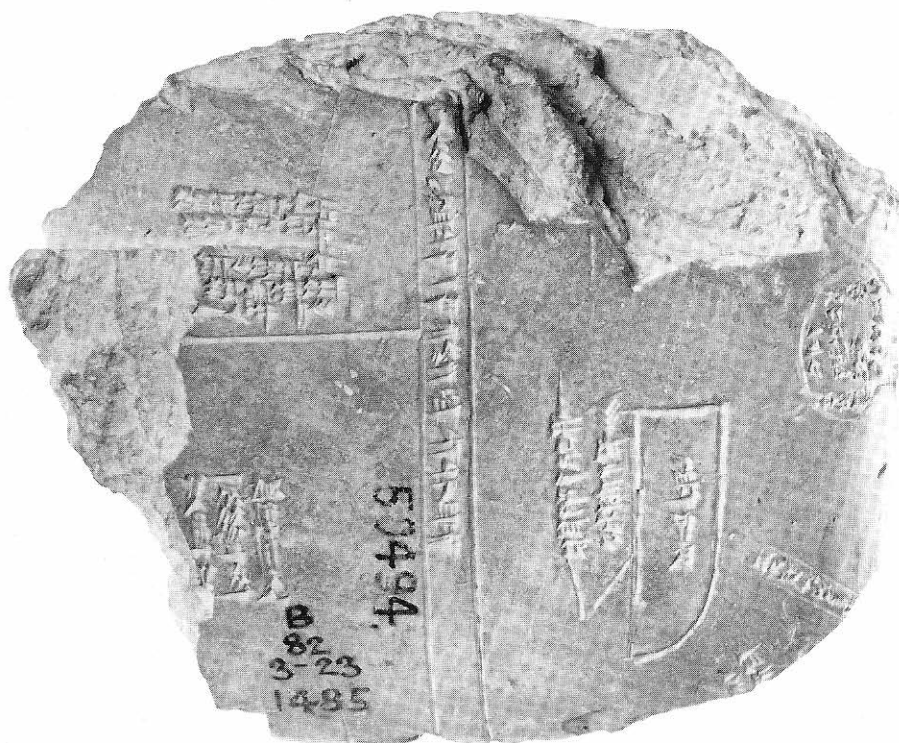
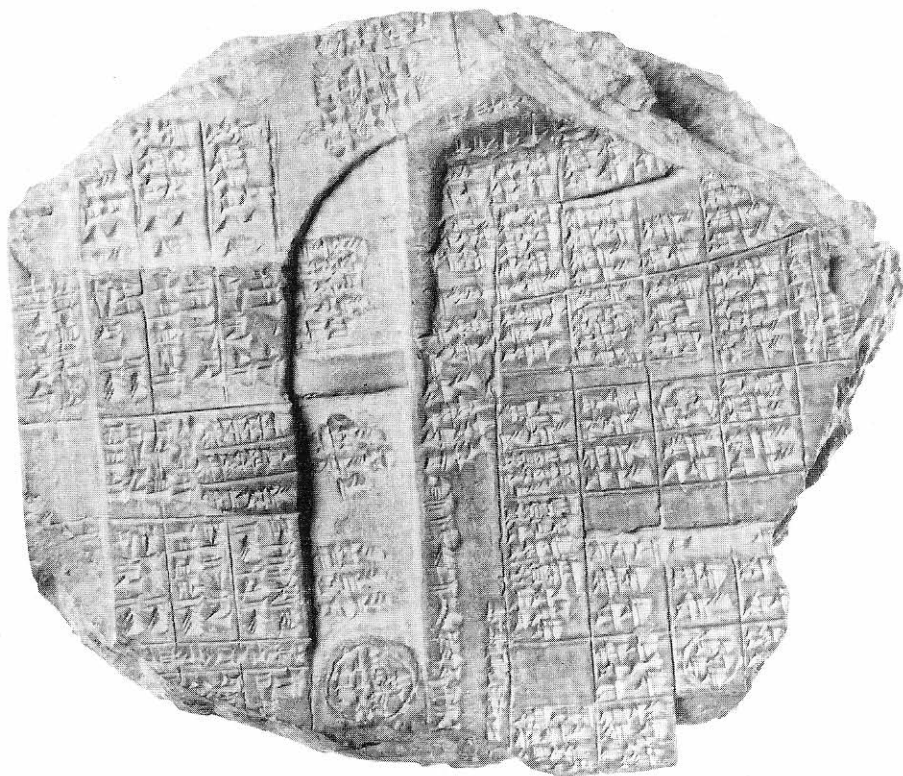


FIG. 7a, b. *Liver model with annotations (Neo-Assyrian?)*.  
BM 50494.

were recorded as standard observations in extispicy reports from the OB to the NA period. These four markings on the liver were known in Akkadian as *naplastu/manzāzu*, *padānu*, *danānu* and *šulmu*, meaning 'station,' 'path,' 'strength,' and 'well-being,' respectively. It was the absence of any of these or any other part of liver, their dislocation from their normal position, or any other abnormality observed on them by the haruspex which made them ominous, and predictions were derived from their abnormalities.

2) Fortuitous markings (*parties fortuits*, in Nougayrol's terminology), such as holes, abrasions, blisters, scars, fissures, and a host of others, whose presence and condition was equally ominous, could be found anywhere on the exta. Some of these markings, such as 'weapon'-marks, 'foot'-marks, cross-shaped marks, etc., owe their names to their peculiar configurations, some of which appear in drawings found in omen texts and extispicy reports.<sup>92</sup>

### *The Exta and its Organs*

Among the parts of the exta attested in extispicy reports are parts of the liver, the lungs and their parts, the heart, the intestines, the vertebrae, the breast-bone, the stomachs, etc. The liver itself as a whole is never an object of examination in extispicy reports; its parts are. The term "liver" (*amūtu*) occurs, in fact, only twice in the Old and Middle Babylonian reports.<sup>93</sup> This is not the case in the omen texts. Omens concerning the liver were collected and integrated into omen compendia already in the OB period,<sup>94</sup> and later into tablets 14, 15, and 16 of the expository text *multābiltu*, chapter 10 of the haruspicy corpus (*bārūtu*).<sup>95</sup>

Unlike the liver, other parts of the sheep, such as the lungs and the heart, are frequently noted in the observations as whole organs and are often described as being normal (*šalmu*), especially in OB and MB reports. As for the lungs, this organ as a whole, as well as its numerous parts are attested in the present corpus. Some of the most common of these are the 'middle finger' (= the accessory lobe of the right lung) and the 'cap' (= apical lobe?) of the lung. The heart as a part of the exta whose salient features (i.e., abnormalities) call for discussion is attested already in OB Mari.<sup>96</sup>

The parts of the exta enumerated in the extispicy reports appear in what may be called a canonical order, one which remained practically unchanged through the centuries. The parts of the liver enumerated in the Sargonid reports and queries, for example, appear in an order similar, if not entirely identical to that of the OB and MB reports. As in the latter, they begin with the 'station,' followed by the 'path,' the 'strength,' and the 'well-being,' or their parts. The inspection proceeded in a counter-clockwise direction, usually ending with the 'yoke' or the 'increment.' Such differences between the Sargonid reports and those from earlier periods as there are, aside from expected differences in orthography, lie mostly in the choice of protases from the omen compendia. This choice reflects, in the case of the former, the practice of extispicy in the first millennium as we find it in the omen series *bārūtu* and compendia such as KAR 423.

## *The Liver and its Parts*

### *The 'Station' (naplastu/manzāzu)*

This important marking on the liver is well-attested from early in the OB period (Mari) to the late Seleucid texts.<sup>97</sup> In the OB omen texts and extispicy reports it is written both syllabically (*naplastu*, *mazzāzu*, in Mari *naplasu*)<sup>98</sup> and logographically (IGI.BAR and KI.GUB, rarely IGI.TAB).<sup>99</sup> In the MB reports, as well as in those from Boghazköi, KI.GUB is the common writing.<sup>100</sup> In the Sargonid reports and queries, and in the omen texts of the first millennium in general, the standard spelling is NA.<sup>101</sup>

For the location of the 'station' one must turn to the liver models. It is clearly discernible on those from Boghazköi (e.g. KUB 4 71–73 and 37 223), where it appears as a marking on the ventral lobe of the liver perpendicular to the 'path,' as well as on the "orientation" liver published by Nougayrol, RA 62 31ff. This part of the liver should perhaps be identified with the reticular impression on the liver.<sup>102</sup>

Some of the irregular configurations of the 'station' attested in the omen literature are also relevant. According to YOS 10 17:47f, a *naplastu* could resemble the Old Babylonian signs PAB and KASKAL (consisting of two or more intersecting wedges).<sup>103</sup> In YOS 10 14:5f and 14, it is said to be shaped like the Old Babylonian BE sign, i.e. a horizontal wedge terminating in a *Winkelhaken*. In other texts, it is compared to the *gamlu*-staff, the lunar crescent (*uskāru*), a bow (*tilpānu*) and a kind of shell.<sup>104</sup>

In YOS 10 11 i 23, the liver is said to have four 'stations.'<sup>105</sup> In other OB omen texts there are said to be two 'stations,' of which one is located normally, the other elsewhere on the liver.<sup>106</sup> The 'station' could also deviate from its normal configuration by being long<sup>107</sup> or pointed.<sup>108</sup> In the Sargonid reports and queries a common protasis concerning the 'station' is "the middle of the 'station' is effaced."<sup>109</sup>

### *The 'Path' (padānu)*

The 'path' (*padānu*) appears in the liver models from Boghazköi as a marking on the ventral lobe of the liver perpendicular to the 'station,'<sup>110</sup> and is perhaps identifiable with the abomasal impression on the liver (cf. RIA 6 525, fig.1). It is not identical with *neptû*, a marking on the liver which usually appears in omen texts among protases dealing with the *padānu*, and in extispicy reports where one would expect the *padānu* to be in the canonical order of parts of the liver (i.e., following the 'station').<sup>111</sup>

One of the most common characteristics of the 'path,' especially in omen texts of the first millennium, is the existence of two or more such markings on the liver. The 'paths,' two or more, are placed in various combinations, and form a variety of designs, as the following examples from the omen collections illustrate:

"There are two 'paths,' and they are drawn like a design.

"There are two 'paths,' and they are intertwined like the PAB sign.

"There are two 'paths,' and they are intertwined like a cross.

"There are two 'paths,' and they are intertwined like a snake.

"There are two 'paths,' the upper one is like a bow, the lower one like a bowstring.

"There are two 'paths,' the upper one is like a bowstring, the lower one like a bow." (CT 20 3:19-24)

"There are two 'paths' and they are crossed." (CT 20 10:13)

"There are four 'paths,' and they lie side by side.

"There are four 'paths,' and they are drawn parallel.

"There are four 'paths,' and they lie separately." (CT 20 13 r.6-8, see also *ibid.* 9-11 and 12-16, said of 5 and 6 'paths,' respectively).

Omens concerning two 'paths' are attested already in OB extispicy reports.<sup>112</sup> When two or more 'paths' are present, one may be shorter than the other(s).<sup>113</sup>

Another characteristic of the 'path,' attested especially in the late texts, is its predilection to acquire a bifurcation (*larû*).<sup>114</sup> Finally, the 'path' is often said to be effaced (*paštu*), in whole or in part,<sup>115</sup> or curled (*kaṣṣu/kuppuṣu*).<sup>116</sup>

Aside from the 'path' itself, several other markings, such as the *šubtu* (logograms DAG, KI.TUŠ) and *puṣqu* (logogram PAB.HAL),<sup>117</sup> are also attested in omen texts and extispicy reports. The exact relation of these markings to the 'path' is not entirely clear, but note, for example, the protasis "the 'path' reaches its 'seats,'" commonly attested in the Sargonid reports and queries,<sup>118</sup> and the references to 'seats' to the right and left of the 'path.'<sup>119</sup> The 'path' is also said to descend or fall towards towards the left 'seat' (JCS 21 229 M:22) or towards its 'narrow part.'<sup>120</sup> "Descending" toward its own and other parts of the liver<sup>121</sup> is therefore another characteristic of the 'path.'

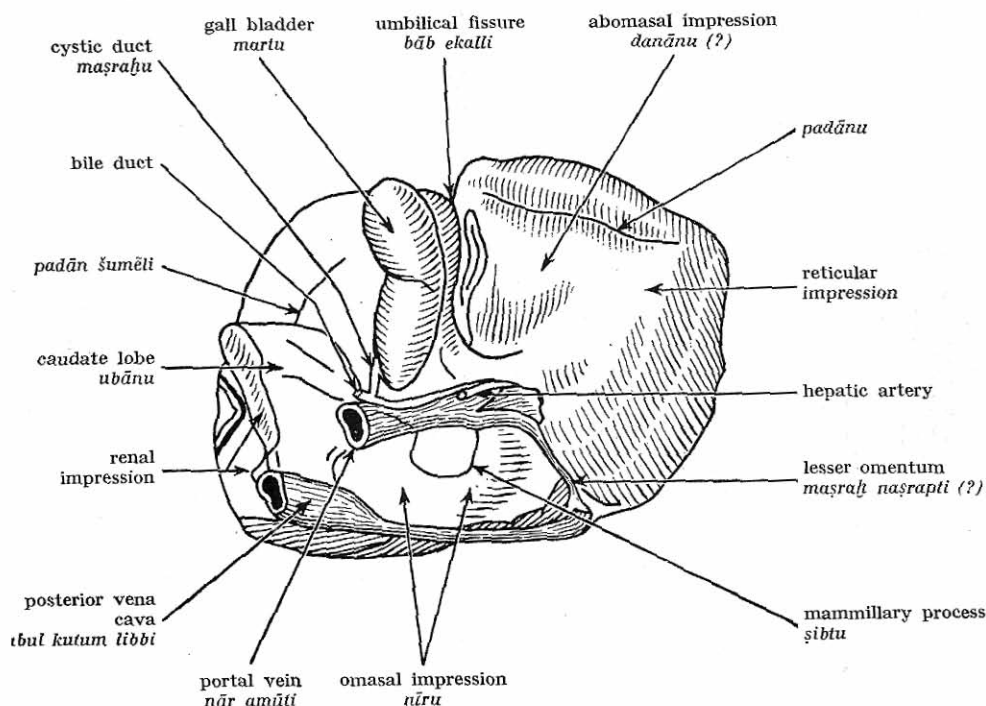


FIG. 8. Sheep's liver, visceral surface. Drawing by R.D. Biggs after S. Sisson and others.  
RA 63 160.

An OB text dealing in part with the *pušqu* is YOS 10 20. See also Starr Rituals 32:44, 34:101, and the discussion *ibid.* p. 79.

### *The 'Crucible' (našraptu)*

The normal location of the 'crucible' (*našraptu*, logogram NÍG.TAB)<sup>122</sup> is on the ventral lobe of the liver. It evidently has some association with the 'path,' because the latter is sometimes said to be present, at other times absent from the *našraptu*. Cf., for example, YOS 10 11 iv 16ff, "if the 'path' is within the 'crucible,' the country will obey its king."<sup>123</sup> The presence of the 'path' in the 'crucible' was evidently a good omen. From the protases it is further evident that the location of the 'path' is such that it could easily lie within the "territory" of the 'crucible' or in close proximity to it.<sup>124</sup>

The 'crucible' is not as well-represented in extispicy reports as it is in omen texts, such as CT 20 31–37, 38. For its occurrence in the Sargonid queries and reports, see no. 63 r.12 and 64 r.11.<sup>125</sup> From these reports and from the omen texts it appears that the place of the 'crucible' in the canonical order is between the 'path' and the 'gate of the palace,'<sup>126</sup> in the general area where the MB reports place the KA.DÙG.GA. In fact, the tablet dealing with the 'crucible' in the *pān takālti* series (chapter 5 of the *bārūtu*) precedes the one dealing with the KA.DÙG.GA.<sup>127</sup> The evidence for the location of the 'crucible' on the liver is therefore quite clear and unambiguous. Its identification, however, is another matter. An identification with one of the impressions which the stomachs of the sheep make on the liver, e.g. the abomasal impression, is possible, but uncertain.<sup>128</sup> Note also a SUR *našraptim* (Akkadian reading unknown), to be identified, perhaps, with the lesser omentum.<sup>129</sup>

The *našraptu* is commonly associated with the verbs *kapāšu* "to be curled" and *naparqudu* "to lie flat," and its normal configuration, in fact, can be said to be curled.<sup>130</sup>

### *The 'Strength' (danānu)*

*Danānu* 'strength' (logogram KALAG) is attested in omen texts and extispicy reports from the OB period on.<sup>131</sup> It belongs to the parts of the liver known collectively as *pān takālti*, and tablet 4 of this series is devoted to it.<sup>132</sup> Its location according to the liver models from Boghazköi and the "orientation" liver is in the proximity of the umbilical fissure perhaps on the inside and to the left of the latter.<sup>133</sup> Note the following protases showing its proximity to the 'crucible' and its parts:

"The 'strength' is perforated towards the *ruqqu* of the 'crucible';

"The 'strength' turns towards a 'weapon'-mark and follows the 'crucible.'" (Boissier DA 6:10f)

"[The 'str]ength' is long and follows the 'crucible.'" (KAR 423 ii 38)

The 'strength' is one of the four markings said to be present, under normal conditions, on the liver (see above). The Sargonid texts, however, single out the opposite omen, i.e. "the 'strength' is absent."

*The 'Gate of the Palace' (bāb ekalli)*

This part of the liver (Neo-Assyrian logogram: ME.NI; OB and MB: KÁ É.GAL), whose location is indicated on the liver models and whose identification with the umbilical fissure is certain, is well attested in omen texts and extispicy reports of the OB period, where a number of extensive omen collections (e.g., YOS 10 22–27) are devoted to it.<sup>134</sup> It is there said to be "closed" or "tight" (YOS 10 23:4, 24:29), "massive" (ibid. 27), or "wide" (ibid. 21); it may leave its normal location to be found elsewhere on the liver.<sup>135</sup> In YOS 10 23:11, referring to two 'gates of the palace,' "they lie side by side and are equal in size"; cf. ibid 24:2, "the 'gates of the palace' are two and they 'ride' upon one another," and ibid. 30, "the 'gate of the palace' is empty, so that two of your fingers can enter inside it."

In omen texts and extispicy reports of the first millennium, the 'gate of the palace' is less well represented. One relevant text is K 3878+ (Boissier DA 217–219), whose protases begin with right and left 'doorjambs' (*sippu*) of the 'palace gate.' These are to be identified, perhaps, with the two areas to the immediate right and left of the umbilical fissure.<sup>136</sup>

*The 'Well-Being' (šulmu)*

In the canonical order of parts of the liver, the 'well-being' (logogram SILIM) is usually located between the umbilical fissure and the gall bladder; more accurately, between the umbilical fissure and the cystic duct (*maṣraḥ marti*).<sup>137</sup> Its proximity to the gall bladder is reflected in several protases, e.g.

"A 'well-being' appears in the ... of the gall bladder;

"A 'well-being' shaped like a crescent appears at the side of the gall bladder;

"The 'well-being' reaches the side of the gall bladder." (TCL 6 3:17f and r.21; cf. no. 338:3f.)

The 'well-being' is one of the markings which appear in the liver models as creases on its surface, and like them it was said to be present, under normal conditions, on the liver. It is one of the parts of the liver known as *pān takālti* and the sixth tablet of this series (TCL 6 3, cf. KAR 423 ii 48–68) is devoted to it. What this part of the liver means in anatomical terms is as yet unknown.<sup>138</sup>

A 'well-being' can occur elsewhere on the exta of the sheep in general, e.g. in the throat of the sheep.<sup>139</sup> A 'well-being' of the 'increment' (*šulum šibtī*, see nos. 279:6 and 287:7) is attested already in extispicy reports from Mari.<sup>140</sup> Like *šulmu* itself, it is listed among the parts of the *pān takālti* in KAR 423 iii 2.

The 'well-being' should not be confused with "the path to the right of the gall bladder" in spite of TCL 6 3 r.18.<sup>141</sup> This feature of the liver is listed as a distinct part of the *pān takālti* in KAR 423 ii 69ff and is also attested elsewhere in the omen literature.

*The Gall Bladder (martu)*

*Martu*, the gall bladder, is clearly marked on all extant liver models and is well represented in the omen series and extispicy reports from the OB period onward. Its common logogram is ZÉ, but in the extispicy reports from Mari and in some texts from Boghazköi it is known as SIPA, "shepherd." Among the



parts of the gall bladder attested in extispicy texts, "tip" (*appu*), "top" (*rēšu*), "middle" (*qablu*), "bottom" (*išdu*), "narrow part" (*qutnu*), and *maṣrahu* (the cystic duct) are among the most prominent.<sup>142</sup> The "top," "middle" and "bottom" frequently occur in these texts as a triad devised for purposes of prediction.<sup>143</sup> Both *qutnu* and *maṣrahu* can replace the "bottom" in the triad.<sup>144</sup>

Anatomically, the gall bladder consists of a fundus (i.e. its expanded end), body, and a neck (i.e. its narrow end leading into the cystic duct). If the latter is to be identified with the *qutnu* (or *qutun marti*), and the body with the "middle," then the fundus perhaps corresponds to the "top" of the triad. The difficulty lies in differentiating between the *qutnu* and the "bottom". As just noted, both *qutnu* or *maṣrahu* can replace the "base" as the last member of the triad. Yet the latter is well-attested, independently of this triad, in gall bladder protases, e.g., "if the top and the bottom of the gall bladder are held together," YOS 10 31 iii 13.<sup>145</sup> This is the case also in extispicy reports, which commonly refer to the base of the gall bladder. A protasis common in these reports is "the base of the gall bladder is firm on the right, loose on the left."<sup>146</sup> Note also YOS 10 31 vi 15ff, "the tip and the base of the gall bladder are firm; its middle is loose."

As the examples just cited show, the gall bladder is commonly associated with the verbs *kānu* "to be firm" and *nasāhu* "to pull out," (stat.) "to be loose." In OB and MB reports it is also often described with the statives *nanmurat* "visible"<sup>147</sup> and *šubbat* "flattened."<sup>148</sup> The latter is also fairly common in the present corpus, e.g. nos. 76 r.6, 104 r.3, 175 r.12, 324:4, 313:5, as well as in omen texts of the first millennium in general.<sup>149</sup> A standard observation in the Sargonid reports and queries, but one which is rarely attested elsewhere, is "the left of the gall bladder is 'bound.'"<sup>150</sup>

### *The 'Base of the Throne' (nīdi kussī)*

The 'base (or stand) of the throne' (logograms ŠUB—AŠ.TE or ŠUB—(GIŠ). GU.ZA), attested from the OB period on, in both omen texts and extispicy reports,<sup>151</sup> is located on the liver in the area between the gall bladder and the caudate lobe, closer to the latter. For its suggested identification with the renal impression on the liver, see Starr Rituals p. 88.<sup>152</sup>

It is possible that this part of the liver is identical with the '(base of) the throne of the finger' (*išdi*) *kussī ša ubāni*, attested, for example, in RA 27 142:9ff.

### *The 'Finger' (ubānu)*

The caudate lobe was known to the classical writers as the "head of the liver" (*caput iecoris*); the lobe of the liver par excellence, and to the Mesopotamian diviners as the 'finger' (*ubānu*, logograms ŠU.SI and U). The 'finger' and its parts are well represented both in the omen texts and extispicy reports from the OB period on. The seventh chapter of the Neo-Assyrian omen corpus *bārûtu* is devoted to it.

Of the parts of the 'finger' mention must be made especially of the "surfaces" of the 'finger,' of which there were apparently three. For descriptive and predictive purposes, the caudate lobe was evidently considered a solid triangle

with three "surfaces."<sup>153</sup>

1. The "land" (KUR) of the 'finger,' e.g. YOS 10 33 iii 27ff, Starr Rituals 32:60, 35:122.

2. The "median area" (*ṣēr bīrīti*) of the 'finger' (between the gall bladder and the caudate lobe), e.g. YOS 10 33 ii 28ff, Starr Rituals 32:61f, 35:123.

3. The "palace" (*ekallu*) of the 'finger,' e.g. Boissier DA 220f, 222f and duplicate CT 31 42f; BRM 4 12:23ff.<sup>154</sup>

A further part, DAGAL ŠU.SI, is attested in syllabic writing in an OB extispicy report,<sup>155</sup> and is evidently to be read *rupuš ubāni*, "wide part of 'finger'." References to this part of the 'finger' in extispicy reports are mostly to its left side.<sup>156</sup> For omens showing the relationship between *ṣēr ubāni*, *rupuš ubāni* and *ekal ubāni*, see Boissier DA 222:10–15 and 223:22–33.

A verb commonly associated with the 'finger' and its parts is *ekēmu* "to take away, absorb" especially in the statival meaning "to be atrophied,"<sup>157</sup> and one of its characteristic is the predilection of its parts to "absorb" one another, e.g. "the right side of the 'finger' absorbs (*i-te-ki-im*) its left," YOS 10 33 iv 24ff, and vice versa in line 26.<sup>158</sup> A common protasis in the Sargonid reports and queries is *ubānu ebbet*, "the 'finger' is thick," e.g. no. 10 r.3, and passim in these texts.

### *The 'Increment' and the 'Yoke' (ṣibtu and nīru)*

The identification of the 'increment' (*ṣibtu*, logogram MĀŠ) and the 'yoke' (*ni-ri*)<sup>159</sup> with the papillary process and the omasal impression, respectively, is now practically certain. They are clearly marked on the "orientation" liver and are the last in the canonical order of parts of the liver to be examined.<sup>160</sup>

In OB and MB reports, as well as in those of the Sargonid period, the 'increment' is commonly said to be normal (*šalmu*), with both masculine and feminine stative forms attested,<sup>161</sup> whereas in the OB and MB reports we also find the description (*w*)*ašbat* "enlarged."<sup>162</sup> In extispicy reports from Mari we find the protasis "the 'increment' is a *magšaru*-ax,"<sup>163</sup> with a favorable apodosis, which is explained as follows in the late commentary series *ariktu* = *kāšittu*:

"*Magšaru* predicts strength. If there is a 'weapon' on the right side of the gall bladder and it points downward, it is a weapon of power (*magšaru*), a weapon of Šamaš" (CT 20 39:20).

The Mari protasis seem to correspond in the Sargonid reports and queries to the protasis "(there is) a 'weapon'-mark of the 'increment' (which) rises (from right) to left," likewise with a favorable apodosis.<sup>164</sup>

It should be noted that while the identification of the 'yoke' with the omasal impression appears to be certain, the former may have covered an area larger than the latter does in modern anatomy; see Biggs, RA 63 (1969) 166. For the part of the 'yoke' known as its "narrow part" (*qutun nīri*), possibly an area to the right of the lesser omentum, see *ibid.* pp. 163 and 166.<sup>165</sup>

With the 'increment' and the 'yoke,' the inspection of the liver comes to an end. However, before it proceeds to the lungs and their parts, an obscure pair known as the "upper and lower parts," not yet identified anatomically, is commonly noted. The most common omens associated with this pair, attested from the MB period on,<sup>166</sup> are *elītum/šaplītum illik* "the upper/lower part is elevated," the former of which was interpreted as favorable, the latter as

unfavorable.<sup>167</sup> Some other protases concerning this pair are also worthy of note:

"The upper part is elevated: the lower part is bent toward the upper part," JCS 37 149:30;

"the upper part and the lower part are in equilibrium," no. 296:9f;

"the upper part and the lower part are intermixed," JCS 37 146 no.16:6, cf. no. 41 r.11 of the present corpus.

Note also the protasis "the upper part crosses the surface of the right lung," attested in several omen texts<sup>168</sup> and in nos. 51:8, 301:5, 310:6 and 317:11 of the present corpus.

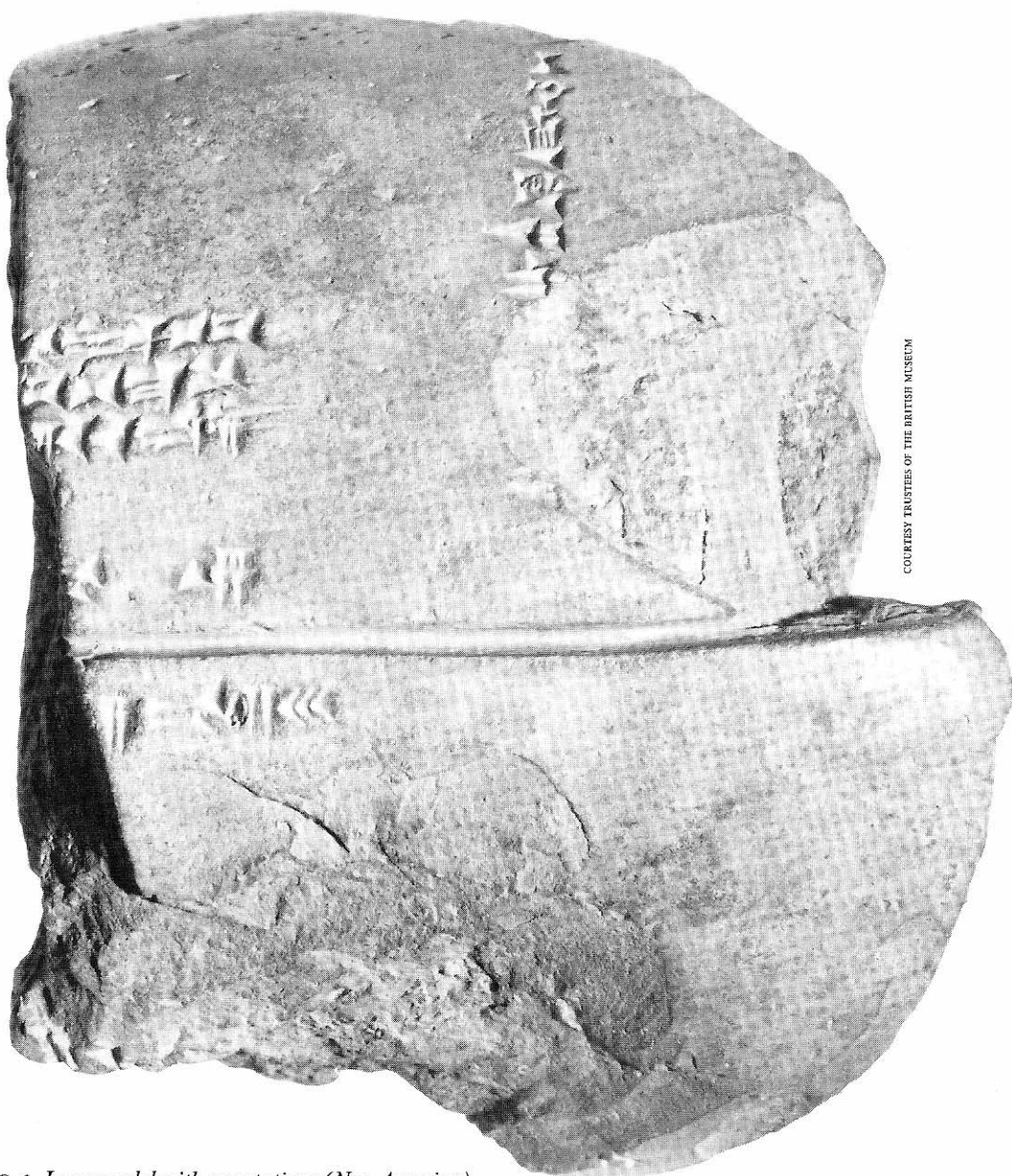


FIG. 9. *Lung model with annotations (Neo-Assyrian).*  
Rm 620.

## *The Lungs and Their Parts*

The lungs (*hašû*, logogram MUR), are the next organ of the exta to be examined. They are well-represented already in extispicy reports of the OB and MB periods, where they are commonly said to be either "suspended" (*talil*) or "not suspended," a condition whose meaning is not entirely clear.<sup>169</sup>

A major source for these parts of the exta are the "orientation" texts, such as CT 31 1–8, of which plates 2–5 deal with the lungs. These texts served as an aid to the diviner in locating the parts of the exta, and their purpose was thus similar to that of the liver models. They simply articulated what the latter depicted. Aside from the major parts of the lungs, these texts list also others whose identification remains unknown. Only a few of the parts enumerated in the "orientation" texts appear in the extispicy reports or in omen texts in general.<sup>170</sup> A list of the parts of the lungs, arranged alphabetically, follows below.

<i>ah nāri</i> "bank of the river"	<i>nīru</i> "yoke"
<i>dannatu/dunnu</i> "hard part"	<i>nīš rēši/mukil rēši</i> "head lift" <sup>172</sup>
<i>ekallu</i> "palace" <sup>171</sup>	<i>pušqu</i> "narrow part"
<i>gipšu</i> "mass"	<i>rupšu/tarpašu</i>
<i>imēru</i> "donkey"	<i>ruqqu</i> "cavity"
<i>kappu</i> "lobe"	<i>samiltu/samištu</i>
<i>kubšu</i> "cap"	<i>z/siniptu</i>
<i>kutallu</i> "rear"	<i>šēru</i> "back"
<i>maššartu/niširtu</i> "watch"	<i>šulultu</i>
<i>muštašnintu</i>	<i>šulummatu</i>
<i>nakkapu</i> (CAD N/1 s.v., 186a)	<i>ummatu</i>
<i>nāru</i> "river"	<i>ubān haši qablītu</i> "middle finger"
<i>nību</i>	<i>ubān haši kidītu</i> "outer finger"

### *The 'Middle Finger' (ubān haši qablītu)*

Certain parts of the lungs received special attention in omen texts and extispicy reports, notably the so-called "middle 'finger' of the lung," the accessory lobe of the right lung.<sup>173</sup> In the Sargonid reports, this part is commonly, if not exclusively, said to be either "loose" or "bound."<sup>174</sup> This predilection is attested already in the MB reports.<sup>175</sup>

Aside from the characteristics of the "middle finger" noted in Starr Rituals page 74f, attention may also be drawn to omens referring to two "middle fingers" of the lung, one located normally in the lung, the other abnormally elsewhere, e.g.

"There are two 'middle fingers' of the lung, a normal one located normally, a second one reaching on the right/left," YOS 10 39:7ff;

"There are two 'middle fingers' of the lung, the one placed normally, the other stands on top of the 'cap' [of the lung?], its front facing its location," *ibid.* 14.

Another characteristic of the 'middle finger' of the lung is that it may leave its place and find itself located elsewhere, e.g.

"The 'middle finger' of the lung leaves its place and stands in the right/left

fissure," *ibid.* 17f.<sup>176</sup>

In the queries but not in the reports, appears also a part called the "middle" *qablītu* which shares with the "middle finger" of the lung the descriptions "loose" and "bound" as well as its position in the order of parts of the exta. It is therefore likely that the two are identical, the former being an abbreviation of the latter.

A part of the middle 'finger' of the lung attested both in omen texts and the Sargonid queries is NÍG.PI, whose Akkadian reading is evidently *uzuntu/uzutu*.<sup>177</sup> This term could also refer to the 'finger' of the liver,<sup>178</sup> and both kinds of NÍG.PI are, in fact, attested in the same protasis in an unpublished text.<sup>179</sup> In other words, it is part of both the lobes of the lungs (the accessory lobe of the right lung) and the liver (caudate lobe).

### *The 'Cap' (kubšu)*

The 'cap' (*kubšu* or *kubuš hašīm*) is possibly one of the lobes of the lung, although which one remains uncertain. Its identification with the apical lobe, proposed by Hussey, JCS 2 (1948) 25, has been adopted by the CAD (vol. K 486).

For references to the 'cap' in omen texts, see Klauber PRT p. xlvii.<sup>180</sup> In the Sargonid queries and reports a common protasis associates it with *kīdītu* "outside" which is, most likely identical with the "outside finger" of the lung.<sup>181</sup> The two are usually said to "ride" upon one another.<sup>182</sup>

### *The 'Cavity' (ruqqu) and the 'Back' (šēru)*

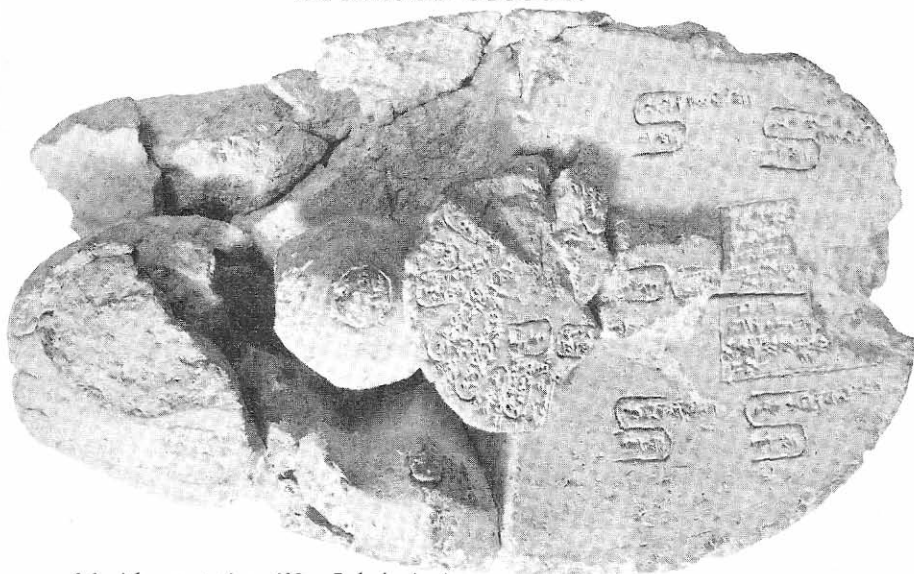
Hussey (*loc. cit.*) identified the 'cavity' (logogram SAL.LA MUR) and 'back' of the lung with the concave (mediastinal) and convex surfaces of the lungs, respectively.<sup>183</sup> In the protases on which the Sargonid haruspices have drawn, the major characteristic of it is that it is split either on the right or on the left.<sup>184</sup>

### *The 'Head Lift/Holder' (nīš/mukīl rēši)*

The 'head lift' of the lung (*nīš rēš haši*, logogram MU.SAG MUR),<sup>185</sup> already attested in the MB reports,<sup>186</sup> may be identical to *mukīl rēši*, "head holder," which is clearly shown to be part of the lung by OB and MB reports.<sup>187</sup>

A clue to the identification of the two, although not conclusive, may be found in the unpublished omen text Rm 106+:5f, "if ditto (i.e., the MU.SAG) of the right lung is long and perforates the trachea: *mukīl rēš damiqti* ("supporter of good," a good spirit); if ditto of the left lung is long and perforates the trachea: *mukīl rēš lemutti* ("supporter of evil", an evil spirit)." If the association of protasis and apodosis here is paronomastic, then MU.SAG of the protases may be identified with *mukīl rēši* of the apodoses.

Other omens in the same text may offer a clue to the location of this part of the lung, at least in relation to the trachea (GÚ.HAR) and the apical(?) lobe (*kubuš haši*). In addition to the passage just quoted, cf. *ibid.* 3f, "the MU.SAG of the right/left lung is long and reaches the trachea," and *ibid.* 11f, "ditto of the right/left lung surrounds the trachea." This part of the lung, then, when longer



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FIG. 10. Lung model with annotations (Neo-Babylonian).  
ND 4307 (MALLOWAN, *Nimrud and Its Remains*, Fig. 255B).

than normal, can reach, perforate, or envelop the trachea, the latter dividing at its end into the bronchi of the lungs. A clue to its location relative to the *kubuš hašī* is provided by the common protasis beginning "between the 'cap' of the lung and the MU.SAG of the lung flesh protrudes like a peg."<sup>188</sup>

It should be noted that a 'head lift' can also occur elsewhere in the sheep.<sup>189</sup>

#### *The 'Watch/Secret' (maššartu/niširtu)*

The relation between two parts of the lungs, *maššarti hašī* (logogram EN.NUN MUR) and *niširti hašī* (logogram MÍ.ŠEŠ MUR) calls for a comment, because the two may be one and the same. A clue to this possibility lies in the OB omens YOS 10 36 ii 42, iii 31–34, where the protases all deal with *maššartu*, while the apodoses, with *niširtu*. As in the case of *nīš/mukil rēši* (see above) there is, evidently, a paronomastic association between protasis and apodosis in these omens, with *maššartu* in the former giving rise to *niširtu* in the latter.

These parts of the lung are not attested in the present corpus, though they do occur in canonical omen texts from the first millennium.<sup>190</sup>

#### *The 'Donkey' (imēru)*

This part of the lung (logogram ANŠE MUR) does not occur in the queries and reports of the present corpus.<sup>191</sup>

#### *The Hard/Solid Part (dunnu)*

This part of the lung, perhaps the diaphragmatic lobe (logogram KI.KAL), is not attested in the present corpus, but is known from canonical texts where it occurs in two forms, *dannat* and *dunni hašī*.<sup>192</sup>

## *Other Parts and Features of the Extā*

### *The Breast-Bone (kaskāsu)*

The breast-bone (*kaskāsu*, logogram GAG.ZAG.GA)<sup>193</sup> is rarely attested in OB extispicy reports.<sup>194</sup> In OB omen texts as well as in MB extispicy reports, it is commonly associated with the verb *naparqudu* "to lie flat," especially in the verbal pair *kapāšu* "to be curled" – *naparqudu*.<sup>195</sup> This association persisted into the NA omen texts.<sup>196</sup>

In the Sargonid queries and reports the breast-bone usually appears after the inspection of the lungs and their parts is completed. The standard observation is *kaskāsu ebi*, "the breast-bone is thick" (the word *ebi* mostly written syllabically, but sometimes also, by way of a rebus writing, KUG). Other attested qualifications are *hussur* "blunted" (e.g. 290 r.5 and 296:14), *paṭir* "split" (282:10 and 15), etc.

### *The Coils of the Colon (tīrānu)*

In the Sargonid reports the *kaskāsu* is usually followed with the number of coils of the colon (ŠA.NIGIN = *tīrānu*),<sup>197</sup> a practice they share with extispicy reports of all other periods. In the OB and MB reports the number of coils of the colon is invariably 10–14; in the Sargonid reports 10–16, but higher numbers are also attested.<sup>198</sup> Unlike the OB practice, the Sargonid reports do not confine themselves to merely noting the number of the coils of the colon, but often cite protases from the omen texts, e.g. 139 r.17; 142 r.13; 181 r.2.

The survey above reflects the order of parts of the extā as they appear in extispicy reports of all periods. Other parts, such as the vertebrae, the rib cage (GAG.TI), etc., appear as standard observations in the Sargonid reports and queries, but less so in the OB and MB reports.<sup>199</sup>

### *The Vertebrae (kunukkū)*

The vertebrae (*kunukkū*, lit. "seal (impression)," logogram KIŠIB.MEŠ) make their appearance already in the OB and MB reports.<sup>200</sup> In the Sargonid reports and queries, a 'standard' observation is *nahsū* (written LAL.MEŠ), "recessed," or the like.<sup>201</sup> Note, exceptionally, "a vertebra is recessed on the left," nos. 43 r.14 and 63:11, and "the vertebrae are visible," 317:15 (KIŠIB.MEŠ IGL.IGI-ru).<sup>202</sup>

The traditional translation of *kunukku*, "vertebra," is not entirely accurate. K 3978+ ii 17f gives us the following description: "If you have before you the 'vertebrae' (KIŠIB.MEŠ), flesh 'riding' upon the backbone and 'bound' to the joints of the ribs on the left and on the right, its name is 'vertebrae'." In the light of this passage, taken literally, *kunukku* appears to refer to the fleshy covering of the backbone.<sup>203</sup>

### *The Fortuitous Markings on the Extā*

Aside from the parts whose locations were considered "fixed," the extā was filled with numerous fortuitous markings, such as holes, fissures, abrasions

and sundry configurations bearing descriptive names such as 'weapon'-marks, 'foot'-marks, 'request'-marks, cross-shaped marks, etc., whose names, as noted above, were often derived from their distinctive appearance. Because of their ominous import, the presence and appearance of these markings was noted with great care. In fact, a not inconsiderable part of the extispicy literature is devoted to the presence of such markings either within the "fixed" parts of the exta, or within other markings.

Some of the latter are enumerated as follows in the explanatory text *multābiltu*, chapter 10 of the extispicy corpus:

GIŠ.TUKUL GÌR BÙR DU<sub>8</sub> KAM-tum BAR-tum kak-su-ú KAR-tum ni-ip-hu "weapon, foot, hole, fissure, request, cross, arrowhead, atrophied part, swelling" (CT 20 44 i 51).

This list does not exhaust the number of such markings known to us. It is a convenient starting point, however, for a discussion of the fortuitous markings on the exta. We will consider them, with the exception of the rare *kaksû* and the difficult *niphu*, in the order in which they appear in this list.

### *The 'Weapon'-Mark (kakku)*

This is one of the most ubiquitous markings on the exta. It can appear anywhere on the latter, either alone, or quite often in conjunction with other fortuitous markings. For the presence of 'weapon'-marks in various parts of the liver see, for example, CT 31 19:13ff, where it is said to be present in the top/middle/base of the left side of the 'station'; above the right/middle/[left] of the 'path' (ibid. 25ff); and in the top/middle/base of the right surface of the 'finger' (rev. 11ff).<sup>204</sup> Of particular importance was the so-called "weapon-mark on the right" (*kak imitti*), to which numerous omen texts and fragments of the first and second millennium are devoted.<sup>205</sup> It may have derived its name from its location to the right of the gall bladder.<sup>206</sup>

For a *kak imitti* in the gall bladder and cystic duct, see YOS 10 46 i 1ff.; in other parts of the liver, ibid. ii 30ff and iii. Its normal shape appears to have been that of an arrow-head,<sup>207</sup> and it is quite often said to lie parallel to or in succession with one or more other 'weapon'-marks (usually two or three).<sup>208</sup> Thus we find the *kak imitti* side by side with the less common "weapon-mark on the left," in a similar context, in CT 30 38 (K 7269):2ff, "the 'weapon'-marks on the right/left are two, and they are placed parallel to/in succession with each other."<sup>209</sup> No drawings are preserved in the extant part of this tablet.

Certain combinations of 'weapon'-marks bear special names, such as *per-niqqu*, which is described as "two embracing 'weapon'-marks."<sup>210</sup> They are occasionally attested in the queries (7 r.9 and 64 r.14). Another type of 'weapon'-mark is *kakku āridu*, although the meaning of *āridu* is uncertain.<sup>211</sup> The 'weapon'-mark is also known by other names, favorable and unfavorable, e.g., "weapon of assistance" (*kak rīši*),<sup>212</sup> "weapon of sorrow" (*kak lumun libbi*),<sup>213</sup> "weapon of well-being" (*kak šulmi*), etc.

### *The 'Foot'-Mark (šēpu)*

The 'foot'-mark (logogram GÌR)<sup>214</sup> clearly got its name from its shape; see KBo 7 7 for a drawing of a 'foot'-mark on a liver model. In the OB and MB



omen texts and extispicy reports, the 'foot'-mark is attested both in the liver and the lungs.<sup>215</sup> The omens in the reports describing the presence of 'foot'-marks in the liver commonly, if not exclusively, pertain to the gall bladder.<sup>216</sup>

### *The Hole (šīlu)*

The 'hole' or 'perforation' (*šīlu*, logogram BÙR) is another of the most ubiquitous of all fortuitous marks on the exta. On its ominous significance, see in detail Starr *Rituals* pp. 86f, 99f. In general, the presence of a 'hole' in the exta was an unfavorable omen, the severity of the prediction depending on whether a 'hole' merely was present (*nadi*, *šakin*) or went all the way through (*ipluṣ*) the organ examined. The latter case, not attested in the present corpus, invariably portended death.

### *The Fissure (piṭru)*

Both omen texts and extispicy reports from all periods abound in examples for the presence of fissures (*piṭru*, logogram DU<sub>8</sub>) in the exta. See, for example, YOS 10 10:8f (OB extispicy report), "it (i.e. the liver) has a hole and a fissure in the left side." The absence of a fissure from the liver is noted in YOS 10 31 xiii 6ff, "if the liver rolls over, and has neither a fissure nor a 'gate,'" and in the late text TCL 6 1:21, "the liver has no 'increment' or left fissure." It is said to be absent from the trachea in YOS 10 36 iv 20, "the trachea has no fissure." For omens derived from fissures in the lungs, see YOS 10 36 iii 1ff.

From the OB period on, a distinction was made between a right fissure and a left fissure, *piṭir imitti/šumēli*.<sup>217</sup> Of the two, the latter is the better attested one, especially in omen texts of the first millennium.<sup>218</sup>

### *The 'Request'-Mark (erištu)*

Like all other fortuitous markings, a 'request'-mark (logogram KAM/KÁM, usually with the complement *-tum*)<sup>219</sup> can be found anywhere on the exta, but it is most commonly attested in the liver.<sup>220</sup>

Unlike some of the other fortuitous marks, we do not know the configuration of an *erištu*-mark (although one is depicted in KUB 4 72), nor does its name provide us with a clue to its appearance. Its name, "request, desire," does however, provide a paronomastic link or association with the verb *erēšu* and its derivatives in the apodoses.<sup>221</sup>

### *The Cross-Shaped Mark (išpallurtu)*

This marking was distinguished, apparently, by its cross-shaped appearance.<sup>222</sup> It seems to have occurred on the liver only. For attestations in first millennium omen texts, see for example K 3868 (unpub.) r.5, "the liver is filled with cross-shaped marks ([*p*]a-lu-ra-a-ti)," and TCL 6 1 r. 52f, "the right/left sides of the liver are filled with cross-shaped marks (BAR.MEŠ)." CT 44 37:1–9 deals with the presence of this marking in the 'palace of the finger,' either by itself or together with other marks, e.g.:

"[if in the ... 'finger' there is a cr]oss-shaped mark and a cyst is buried inside it,"

"[if ... i]n the right side of the 'finger' there is a cross-shaped mark and inside (it?) there is an *erištu*-mark"

Occurrences in the 'path' are listed in the OB text YOS 10 18:4–8, mostly in a broken context, but see *ibid.* line 7, "in the right side of the 'path' there is a cross-shaped mark."

### *The Atrophied Part (nēkemtu)*

This marking (logogram *KAR-tum*) is associated with and derived from the verb *ekēmu* "to take away, absorb" so that its meaning depends, of course, on that of the latter.<sup>223</sup> The following examples illustrate the relationship between *ekēmu* and *nēkemtu*:

"If the right side of the [lung] is atrophied (*e-ki-[im]*), and its atrophied part (*né-ke-em-ta-ka*) is held fast," YOS 10 36 ii 22;

"Let the left side of the 'finger'... be atrophied (*le-ki-im*), let its atrophied part (*né-ke-em-ta-ša*) die out," Starr Rituals 33:63, cf. *ibid.* 35:124 for the opposite conditions.<sup>224</sup>

We learn something about the appearance of a *nēkemtu* from the following description:

"If you have an atrophied part (*KAR-tum*) before you, a 'weapon'-mark whose front is wide is said to be a 'weapon'-mark, (but) a 'weapon'-mark (shaped) like a human (finger)-nail is said to be an atrophied part." (K 3959+:21f; this piece joins CT 30 47 K 6327.)

"The front of the atrophied part," noted in nos. 288:3 and 330:5 of the present corpus, is also known from the MB reports, cf. "the right side of the 'finger' is atrophied, and the front of the atrophied part (*IGI KAR-tim*) is split," JCS 37 146:5.

### *The Cyst (dihhu)*

This marking, usually written syllabically *di-hu* or *zi-hu*,<sup>225</sup> is mostly translated "blister" or "pustule," indicating some kind of abscess or growth on the exta, but CAD § 178f describes it as a "surface scarification ... normally depressed." We follow Biggs<sup>226</sup> in taking *dihhu* for a cyst.

A common characteristic of the *dihhu* is the presence of fluid in it, e.g. YOS 10 16:2, "in the top of the 'station' there is a cyst and its fluid is black"; CT 28 44 r.7, "there is a cyst in the top of the gall bladder and the fluid of the gall bladder intermingles with that of the cyst, and the fluid of the cyst with that of the gall bladder"; RA 27 149:21, "there is a cyst in the cystic duct which does not release fluid"; KAR 153 r.11, "[in the ... of the] middle 'finger' of the lung a very small cyst whose fluid is very moist is buried in the flesh." In the reverse case, i.e. whenever fluid is absent from the cyst, it is said to be empty, as in YOS 10 18 r.47, "in the ... 'path' there is a cyst, but it is empty."

The presence of fluid in the cyst is reflected in the apodoses, which speak of rains, floods, and the devastation resulting therefrom. This is the case even where fluid is not mentioned in the protases. Cf., for example, YOS 10 16:1, "if the 'station' has many cysts hanging, early rains [...]," and KAR 153 r. 13, "if in the area of the middle 'finger' of the lung there is a cyst, water will detain my army."

Another characteristic of the cyst, resulting from its predilection to hold fluid, is moistness or softness, cf. KAR 153 r.10, "[if in ...] the middle 'finger' of the lung there is a moist cyst, there will be rain at the beginning of the month; on the fifteenth day it will rain abundantly."<sup>227</sup> The opposite condition is attested e.g. in TCL 6 2 r.81, "in the right/left side of the gall bladder there is a cyst and it is dry (*ruššuk*)."<sup>228</sup>

Cysts can display a variety of colors, see e.g. TCL 6 1 r.7-9, "the liver is filled with white/red/green cysts (*di-hi*)."<sup>229</sup>

### *Accumulations of Markings*

The presence of different fortuitous markings within individual parts of the liver is commonly attested.<sup>230</sup> The liver itself as a whole is said on several occasions to be filled with sundry fortuitous markings, for example, 'weapon'-marks, cysts, holes, 'request'-marks, and cross-shaped marks (TCL 6 1 rev. 3ff). In the extant part of the unpublished Kuyunjik tablet K 3868, which likewise deals with the presence of fortuitous markings on the liver, we find *kaksû*-marks, 'request'-marks (written NIN.MEŠ), and cross-shaped marks.

Equally common is the presence of markings within markings, either of the same or of a different kind, e.g.:

"in the left side of the gall bladder there is a fissure within a fissure; (...) between the right and the left, in the right side there is a hole within a hole," KAR 150:7ff and r.9f;

"in the top of the 'finger' there is an atrophied part within an atrophied part," YOS 10 6:4;

"there is a hole in the top of the 'weapon'-mark on the right; (...) there is a cyst in the top of the 'weapon'-mark on the right," YOS 10 46 iii 40 and iv 38;

"in the left side of the gall bladder there is a 'foot'-mark and within it there is a cyst/'request'-mark/hole/'weapon'-mark," CT 30 2:17ff.

### *The Filament (qû)*

Parts of the exta are often said to be held by "filaments" (*qû*, logogram GU).<sup>231</sup> They may fill the liver, as in TCL 6 1:51, "the (entire) liver is held by filaments," or *ibid.* 54ff, "the liver is filled with filaments in the neck of the gall bladder."

The presence of filaments is attested in all major parts of the liver, e.g. in the caudate lobe ('finger'),<sup>232</sup> in the umbilical fissure ('gate of the palace'),<sup>233</sup> in the gall bladder,<sup>234</sup> in the 'station',<sup>235</sup> and in the 'path'.<sup>236</sup> They may link two parts of the liver, as in YOS 10 11 iv 12; a white filament is attested in YOS 10 33 iv 33ff.

Filaments are attested in other parts of the exta too, e.g. in the heart, in the diaphragm (*tallu*), and in the intestines (*qerbû*):

"the epigastrium (*rēš libbi*) is held/constricted by filament(s)," YOS 10 42 ii 33ff;

"there are a filaments above the diaphragm," *ibid.* iii 23;

"the intestines are held by filaments," RA 65 (1971) 70:27f.

### *The Identification of Fortuitous Markings*

Some of the factors considered by the Assyrian diviner in identifying and distinguishing one fortuitous mark from another are described in the following passage:

"If the 'weapon'-marks of the right, as many as there are, whether of the *pān takālti* or of the lungs face upward, it is unfavorable; if they face downward, it is favorable; if they face to the right, it is unfavorable; if they face to the left, it is favorable.

If the 'weapon'-marks on the left, as many as there are, whether of the *pān takālti* or of the lungs face upward, it is favorable; if they face downwards, it is unfavorable.

If there is a 'foot'-mark in the place of a favorable 'weapon'-mark of the right, you count it as a 'weapon'-mark. A 'foot'-mark on the left (you count) as a 'weapon'-mark on the left.

An atrophied part, a 'foot'-mark, a bifurcation (*larû*), a design (*uṣurtu*), an elevation (*tību*), and an indentation (*dikšu*), you also count as a 'weapon'-mark." (Boissier DA 45:2-8)

Considerations like these helped the diviner to ascertain, for purposes of prediction, the ominous worth of the numerous configurations and markings which abounded on the surface of the exta.

Of the last four markings mentioned in the passage cited, at least two, *larû* and *uṣurtu*, merit some discussion, because they are well-attested in the omen literature and in the reports and queries.

### *The Bifurcation (larû)*

Just about any part of the exta, or any fortuitous marking, for that matter, can display branching or bifurcation (*larû*, lit. "branch," logogram PA), e.g. "A design in the area of the 'finger' has two branches in its tip," BRM 4 12:71.

The 'path' is commonly said to have branches, e.g. "the right side of the 'path' has a bifurcation toward its right narrow part," CT 20 12:1f.<sup>237</sup> The 'station' is said to have a bifurcation in Rm 2,103 iii 35ff (and duplicates); note especially line 38, "the top of the 'station' has a branch toward the inside and this branch does not bind the base of the 'station'." A bifurcation of the 'well-being' is attested in TCL 6 3:2f, "the 'well-being' has a bifurcation toward the side of the gall bladder/umbilical fissure."

### *The Design (uṣurtu)*

Designs of sundry configurations are commonly said to occur in various parts of the liver and the lungs, mostly the 'finger' and the 'path.' We have little idea of what they looked like, since they are never described more precisely, as the following examples show:

"There is a design in the right side of the 'path'" YOS 10 20 r.21;

"In the right side of the 'finger' a design is drawn from its base to its top and it reaches the top of the 'finger'" BRM 4 12:7;

"A design is drawn from the left surface of the 'finger' to the base of the 'finger'" *ibid.* 10;

"A design is drawn in the right side of the middle 'finger' of the lung" KAR 153 r.17.