

## Ibn Sina: Qiyās ii.3

Trans. Wilfrid Hodges,  
based on the Cairo text ed. Ibrahim Madkour et al.  
(DRAFT ONLY)

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### فصل في عكس الضروريات والممكنات ii.3 Conversion of necessities and possibles

[Nec E and poss I]

ونقول: إذا قلنا بالضرورة لا شيء من  $\bar{C}$   $\bar{B}$  ، فيجب أن يكون بالضرورة  
[2.3.1] We say: If

(1) With necessity, no  $C$  is a  $B$ .

then it has to be that

(2) With necessity, no  $B$  is a  $C$ .

{NB Here as often, *qulnā* serves as quotation marks, not part of the content.  
}

{*Prior Anal* i.3, 25a28.}

لا شيء من  $\bar{B}$   $\bar{C}$  . قالوا: وإلا أمكن أن يكون بعض  $\bar{B}$   $\bar{C}$  ، فأمكن أن يكون

بعض

[Aristotle] says:

95.5

Otherwise it would be possible that some  $B$  is a  $C$ , and so it  
would be possible that some  $C$  is a  $B$ .

{Prior Anal i.3, 25a30.}

ج ب، فأشكل ههنا شيء وهو أنه إستعمل عكس الممكن فيه. وهذا ما لم يبين بعد.

But there is a problem here: the argument uses conversion of a possibility proposition, and this is something that hasn't yet been proved.

فقال بعضهم: إن أنعكاس هذا الممكن يبين بنفسه. فإنه إذا أمكن أن يكون شيء [2.3.2] Some [commentators] say:

The conversion of this possibility proposition is self-explanatory. If it's possible that  $X$  is  $Y$ , it's possible that the latter thing  $Y$  is the former thing  $X$ . And because this is self-evident, it can be used to give information about something else, without relying on a proof of how it goes.

شيئا، أمكن أن يكون ذلك الشيء الآخر ذلك الشيء. ولنا كان هذا بيينا بنفسه،

جاز تعريف غيره به، غير متوقف فيه أن يبين حاله. وعندني أنه يحتاج  
But in my view

هذا العكس إلى بيان ما أيضا. وليس ما فرضوه بيينا أعرف من أن المتنع كونه  
this latter conversion does need some justification too. What they assume 95.10  
to be clear is no better known than the fact that the impossibility of  $Y$  being  
 $X$

شيئا، يمتنع كون ذلك الشيء هو الذي هو المطلوب أو قريب من المطلوب.  
prevents  $X$  from being  $Y$ , which is what we were trying to show, or close  
to it.

[2.3.3] What

لكن

95.11

ما قاله الآخرون أحسن، وهو أنه إن أمكن أن يكون بعض  $B$   $C$  كان فرضه  
other people say is better, namely that if it's possible that some  $B$  is a  $C$ , the  
assumption of it

غير محال. وأكثره أن يكون كذبا. والكذب الغير المحال لا يلزم منه محال. فإن

is not impossible. It may be false in most cases; but when a thing is false and not impossible, nothing impossible follows from it, because

لازم ما يمكن ممكن. فإنّ المحال لا يكون البتّة. فما لا يكون إلّا ويلزمه المحال  
 what follows from something possible is itself possible. Now what is impossible will absolutely never be the case, and so what will not be the case unless something impossible follows from it

لا يكون البتّة. وكيف يكون، وإتّما يكون مع كون ما لا يكون البتّة. فالكذب  
 الغير

will never at all be the case. How could it be, when it could only occur together with something that will never occur? If a thing is false but not 95.15

96

المحال لا يلزمه المحال. فإذا فرض بعض  $\bar{B}$   $\bar{C}$  موجودا، فحينئذ يكون بعض  $\bar{C}$   $\bar{B}$  impossible, no impossibility follows from it. So if it's assumed that

(3) Some  $B$  is a  $C$ .

is true, then in that case

(4) Some  $C$  is a  $B$ .

{NB *mawjūd* for 'true', and in next line. It's contrasted with *kidban*. }

موجودا، فحينئذ يكون بعض  $\bar{C}$   $\bar{B}$  كما علمت كذبا غير محال. لكنك is true, and hence (4) is — as you know — false but not impossible. But you

{What Ibn Sīnā writes is blatantly self-contradictory. But he is probably foreshortening his source. For Aristotle, if something is possible, then to assume it's true is to assume something 'false but not impossible' (34a25), which must be shorthand for 'not impossible, though it could be false'. And of course to assume something is to assume it's true. }

قد قلت بالضرورة: لا شيء من  $\bar{C}$   $\bar{B}$ ، فكيف يكون قولنا: بعض  $\bar{C}$   $\bar{B}$ ، have already said

(5) Necessarily no  $C$  is a  $B$ .

So how could the sentence (4)

غير محال، فهو محال. ولزم من قولنا بعض  $\bar{C}$   $\bar{B}$ ، فقولنا بعض  $\bar{C}$   $\bar{B}$  كذب not be impossible, when it is in fact impossible? But (3) follows from the sentence (3), so (3) is false

ومحال. and impossible.

96.5

على أنّ هذا له وجه، وهو أقرب عندي، وهو أن نقول:

[2.3.4] This on the basis of something that can be put in a way which in my view is very close (to the truth), namely that  
{Several mss give *al-'aqrabu*, which looks plausible. }

إذا جاز وأمكن شيء، أمكن لازمه. فإذا أمكن أن تصدق المطلقة القائلة: بعض

if a thing is possible and can be the case, then what follows from it is also possible. So if it's possible that the absolute proposition (3) is true, {NB The principle 'What follows from the possible is possible' presumably is for modality of the quantifier. What would it mean for modality of the predicate? }

بج، أمكن لازمها ضرورة، أي قولنا: بعض ج ب . وهذا أصح ما ينبغي أن  
its consequence (4) has to be possible. This is a very sound view, and it's  
what one should

يقال.

say.

[Nec A]

وأما إن كان القول موجبا مثل قولك بإضطرار أن يكون كل ج ب ،

If a sentence is affirmative, for example the sentence

96.8

(6) With necessity every  $C$  is a  $B$ .

أو بعض ج ب ، فيقولون إنه بإضطرار أن يكون بعض ب ج .

or

(7) [With necessity] some  $C$  is a  $B$ .

then [Aristotle] says that

(8) With necessity some  $B$  is a  $C$ .

{Prior Anal i.3, 25a32.}

والبيان المشهور

The standard proof

96.9

لهذا هو أنه لا بد من أن يكون بعض ب ج ، لأنه من حيث هو مطلق هذا  
حكمه.

of this is:

There is no doubt that some  $B$  is a  $C$ , because when we take the converse as absolute, this is its content.

{NB This is reporting a *mašhūr* position which uses *min ḥaytu*. Who can it be? Note also that here we first find the consequence with the modality removed, and then we ask questions about restoring it. }

فحينئذ إما أن يكون بإضطرار، أو لا يكون بإضطرار. فإن كان لا  
بإضطرار،

Then this converse has to be either with necessity or not with necessity. If it is not with necessity,

فبعض ج ب لا بإضطرار، وكان كّه بإضطرار، وهذا خلف. وفي هذا  
البيان

then some  $C$  is a  $B$  not with necessity, but [in (7)] every  $C$  was a  $B$  with necessity. This is an absurdity.

This proof contains

مواضع تخليط.

elements of muddle.

{The muddle that Ibn Sīnā complains of is not in Alexander, who tries to recover Aristotle's argment and interprets it as an argument by reductio: we assume that every (or some)  $C$  is a  $B$  with necessity, and the contradictory negation of 'Some  $B$  is a  $C$  with necessity'. The contradictory negation says that every  $B$  is possibly not a  $C$ . (Alexander gets in a muddle by writing 'contingently' for 'possibly', but Ibn Sīnā ignores this.) Alexander now drops the modality and infers that no  $B$  is a  $C$  and hence no  $C$  is a  $B$ . Restoring the modality, no  $C$  is necessarily a  $B$ , and this contradicts that every (or some)  $C$  is a  $B$  with necessity. Ibn Sīnā notes the move of dropping the modality, but he puts it in a different place: ignoring modalities, the converse is 'Some  $B$  is a  $C$ ', and what remains is to apply the appropriate modality. The person under attack argues that it can't be 'It is not necessary that'; Ibn Sīnā ungenerously takes him to be arguing that the converse is never a necessary proposition. Later Ibn Rušd will review this argument of Ibn Sīnā with a similar lack of generosity. }

وذلك لأنّ الذي سلف من تعليمهم في إنعكاس المطلقة الموجبة، إتما كان

[2.3.5] [In the first place,] what [Aristotle] said earlier in his teaching, 96.14  
 about conversion of an absolute affirmative proposition, was just  
 {Aristotle said this at i.2, 25a16ff.}

إنّها تنعكس جزئيّة فقط، ولم يبيّن أنّها إنّ كانت لا بإضطرار فيكون عكسها  
 that an existentially quantified proposition converts; it wasn't shown that 96.15  
 if the proposition is not with necessity then its converse is

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لا بإضطرار. ولا هذا حقّ بوجه من الوجوه. فإنّ كلّ إنسان كاتب  
also not with necessity. In fact it is altogether not true: every human is a  
writer,

لا بإضطرار، ثمّ كلّ كاتب إنسان بإضطرار.  
not with necessity, but every writer is a human with necessity.

فللتخليط الثاني هو أنّا وإن سلّمنا أنّ هذا البيان قد ينفع في إثبات عكس  
[2.3.6] And as to the second muddle, this is that even if we admit that 97.3  
this proof is useful for establishing conversion

الكليّ الموجب، فكيف ينفع في بيان العكس الجزئيّ الموجب. فإنّه ليس يمتنع  
of universally quantified affirmative propositions, how does that help to  
prove conversion of existentially quantified affirmative propositions? In  
fact

قولنا: بعض ج  $\bar{B}$  بالضرورة، أن يكون بعض ج  $\bar{B}$  أيضا لا بالضرورة.  
the sentence 97.5

(9) Some  $C$  is a  $B$  with necessity.

doesn't exclude that some  $C$  is a  $B$  not with necessity.  
{NB Here 'necessarily' can't have widest scope. }

فيجوز أن يكون عكس قولنا: بعض ج  $\bar{B}$  بالضرورة، هو أنّ بعض ج  $\bar{B}$   
So it's possible that the converse of the sentence

(10) Every  $B$  is a  $C$  with necessity.

is

(11) Some  $C$  is a  $B$ , not with necessity.

{Presumably first letter is *fa*, not *qa* as printed. }

لا بالضرورة. ثمّ إن إنعكس على قولهم فصار بعض ج  $\bar{B}$  لا بالضرورة، صحّ مع  
Then if it converts as they say but becomes (11), it can be true together with

صحّة الأصل، وهو قولنا: بعض ج  $\bar{B}$  بالضرورة، ولم يلزم خلف. فإنّك تعلم



the original [converse], namely the sentence (9), and no absurdity follows. As you know,  
 {What he ought to say here is that ‘the’ converse of  $\phi$  is the strongest form that follows from  $\phi$  under all choices of terms. Why doesn’t he? Does he ever use the notion of ‘under all choices of terms’? }

أَنَّ بعض الأجسام متحرّكة ضرورة، وبعضها متحرّك لا بالضرورة. وكذلك  
 some bodies move necessarily and some bodies move but not with necessity. And similarly

بعض الأجسام سود بالضرورة أي دائماً، وبعضها سود لا بالضرورة،  
 some bodies are with necessity (i.e. permanently) black, and some are black but not with necessity. 97.10

[2.3.7] But rather

بل

97.10

الحقّ أنّ هذه تنعكس مطلقة بالمعنى الأعمّ، وهو أنّ بعض  $\bar{B}$  ج بلا زيادة  
 the truth is that (10) converts to an absolute proposition in the general sense of ‘absolute’, namely

(12) Some  $B$  is a  $C$ .

with no condition

شرط. والبرهان عليه هو المثالان المذكوران. وأنت تعلم أنّه ليس يجب أن  
 added. The proof of it is the aforementioned two examples. You know from the example above that  
 {Possibly the latter example is 97.1f, though strictly it wasn’t given as a conversion; the mss have long additions to the next line, explaining how to read it as an example of a conversion. Not clear what the ‘two examples’ are; they should be the pair at 97.6f, but it’s not clear how he deduces his statement from them. }

يكون عكس غير الضروري عن غير الضروري من المثال المذكور. فلا يمتنع  
 the converse of something not necessary need not also be not necessary. It is not impossible

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98

أن يكون الشيء ضروريًا حملة على شيء، ثم ذلك الشيء لا يكون هذا ضروريًا  
for  $X$  to be a necessary predicate of  $Y$ , where  $Y$  is not a necessary predicate

له. وسنزيدك لهذا شرحا في موضعه.

of  $X$ . We will give you a further explanation of this in the appropriate place.

ومع هذا فيجب أن نورد وجوه التلخيص الذي تكلفه أصحاب التعصب عن

[2.3.8] And furthermore we have to mention aspects of the summary 98.3  
which a group of partisan people have taken the trouble to write about

هذا اللازم. فقال بعضهم: إن قولنا: كل كاتب إنسان بالضرورة، ليس  
this consequence. One of them said:

The sentence

(13) Every writer is a human, with necessity.

is not

{NB Here a modal with the modality at the end is attributed to  
an earlier commentator. }

حقًا، وذلك لأنّ الكاتبين المعدومين هم إنسان معدومون؛ فبعض ما هو  
كاتب

true, because nonexistent writers are nonexistent people; so some  
writers

98.5

هو بالإمكان ناس، أيّ تمكنا أن يصيروا ناسا.

are human [only] with possibility, i.e. it's possible for them to  
become human.

وهذا هو الإنسان الذي ذكر أنّ قولنا: كل ج ب ، معناه كل ما يقال له

This is the same person who said that the meaning of the phrase 'Every  $C$   
is a  $B$ ' is 'Everything that fits the description of being

أته بالفعل ج ، وأخرج ما هو كاتب بالإمكان، داخلا في قولنا: كاتب.

a *C* in act', and he excluded what is a writer with possibility from counting under the description 'writer'.

فالآن قد أدخل الكاتب بالقوة في هذه الجملة، ومع ذلك فليس نجد البتة مقدّمة  
But now he has included potential writers in this class. Besides this, [on his interpretation] we won't ever find a premise that is

كلّية ضرورية موجبة. فإنّ قولنا: كلّ إنسان حيوان بالضرورة، كاذبة؛  
universally quantified, necessary and affirmative. Thus the sentence 98.10

(14) Every human is an animal with necessity.

is false,

لأنّ الناس المعدومين حيوان بالإمكان. فبعض الناس، وهو الذي بالقوة،  
because nonexistent people are animals [only] with possibility. So some people (namely those who are potential)

حيوان بالإمكان، فليس بالضرورة كلّ إنسان حيوان (?). ولا نجد مثالا من  
are animals [only] with possibility, and so it is not true that with necessity every human is an animal. [Using his interpretation] we can't find a single real-life example

الأمثلة المستعملة للكلّي الموجب، يكون صادقا البتة.  
of a universally quantified affirmative true proposition.

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#### [Nec I and 'by his being a writer']

{The next few pages, up to the end of 103, discuss the two phrases *min jihati* and *min haytu*, literally 'from the aspect' and 'from the place where'. Ibn Sīnā seems to regard the phrases as synonymous; he flits between them, e.g. at 99.11, 100.13. The two phrases as Ibn Sīnā uses them need extended treatment; I am working on it. Meanwhile:

Today both phrases are regarded as typically philosophical. There is no sign that the classical Arabic speakers saw them this way. For example Ibn Hisham in the 14th century regards *min haytu* as typical of Islamic law, and he doesn't suggest any connection with philosophy. Ze'ev Maghen, *After Hardship Cometh Ease: The Jews as Backdrop for Muslim Moderation*, De Gruyter, Berlin (2006) p. 182, quotes an item of the *ḥadīth* literature from late in the 7th century, in which there is a discussion of the meaning of

the phrase *min ḥaytu*. Both interlocutors assume that *ḥaytu* carries its early literal meaning of place, but only one takes the *min* ‘from’ literally. The dispute is about whether men are instructed to penetrate their wives ‘in the right place’, or ‘from the right direction’. In view of Ibn Hisham’s remark, the connection with rules of behaviour is interesting.

As far as I know, *min jihati* occurs a few times in the 9th century translations of the Organon, *min ḥaytu* never. In the 10th century al-Fārābī uses both phrases often, particularly *min ḥaytu*. It’s virtually certain that these pages of Ibn Sīnā, and a further discussion at pp. 144–149 below, respond to a discussion in al-Fārābī’s now lost *Longer Commentary on the Prior Analytics*. Ibn Rušd in his *Masā’il* quotes al-Fārābī in words which appear more or less verbatim in Ibn Sīnā. So the good money is on al-Fārābī being the person who introduced the pair of phrases *min ḥaytu* and *min jihati* to logical discussion. See Tony Street, ‘“The eminent later scholar” in Avicenna’s Book of the Syllogism’, *Arabic Sciences and Philosophy* 11 (2001) 205–218. Very regrettably, al-Fārābī doesn’t include either *min jihati* or *min ḥaytu* among the logical phrases that he discusses in *Alfāz* or *Ḥurūf*.

*min ḥaytu* and similar phrases made their way into Scholastic discussions, translated as *qua* or *inquantum*. Burley quotes Ibn Sīnā as an authority on these phrases; he cites the *Ilāhiyyāt*, not the *Qiyās* which he didn’t know. Burley also attributes to Ibn Sīnā a rule for paraphrasing out these phrases: ‘*A is B qua C*’ means ‘*A is C* and every *C* is *B*’. I refer to this rule below as Burley’s rule. It works quite well in some cases, though I doubt that it correctly represents Ibn Sīnā’s thought.

English translations of the Scholastics tend to translate *qua* and *inquantum* as ‘insofar as’. There are a few cases where this represents the literal sense of *min ḥaytu*. But aside from these, ‘insofar as’ is a weasel phrase better suited to politics than to logic. I would never knowingly use it in logical research, and I would need reassurance about the competence of any other logician who so used it. A very sound principle is to avoid ever using the phrase in translations of Ibn Sīnā. Fortunately in the passage under discussion here this is not hard. }

وقال بعض المحصلين: إن قولنا بعض الكتاب ناس بالإمكان، صحيح.

[2.3.9] One of the commentators said:

98.14

The sentence

(15) Some writers are human with [necessity].

is [not] true,

{In spite of the unanimity of the mss in reading 'with possibility', this must surely be 'necessarily human'?? Similarly the 'not' is needed from the comments below. }

{'One of the commentators': Ibn Sīnā describes him below (99.9) as careful with details but given to partisanship. At 102.2 he quotes a commentator who must be al-Fārābī, if we compare the text with what Ibn Ruṣd quotes from al-Fārābī. Ibn Sīnā doesn't say that the commentator at 102.2 is the same as the present one, but he doesn't deny it either and it seems to be a continuation of the same discussion. So one's first guess must be that the person being quoted throughout this discussion is al-Fārābī. The remark about partisanship could be Ibn Sīnā's normal complaint that other logicians rely too much on Aristotle. }

وذلك لأنّ معنى هذا أنّ بعض ما يوصف بأنّه كاتب بالضرورة، هو إنسان.

because this sentence means that something fitting the description 'writer' is necessarily human.

98.15

وسواء لم يكن كاتباً، أو كان كاتباً، وكان بالضرورة كاتباً، أو كاتباً

But it's irrelevant whether he is or is not a writer, and whether his being a writer is

لا بالضرورة، حتى يكون عنسانا بالضرورة، وإن لم يكن كاتباً. فإذن  
كونه

or is not with necessity — he would be human by necessity even if he hadn't been a writer. Therefore his being

إنسانا بالضرورة، ليس لأنّه كاتب.

with necessity a human is not a consequence of his being a writer.

فإذا قلت: بعض ما يوصف بأنه كاتب، هو إنسان بالضرورة إن لم يكن

So when you say: 'Something that fits the description 'writer' would be human with necessity, even if it weren't a writer',

99.3

كاتباً، فأنت تقول في نفسك، لا من جهة أنّه كاتب، فحجة أنّه كاتب

then you say to yourself 'Not just because he is a writer', because the fact that he is a writer

{My translation 'just because' for *lā min jihati 'an* is taken from the context. At 145.11 Ibn Sīnā glosses *min jihati* as *li-'anna*. It is not clear from Ibn Sīnā's discussion what kind of 'because' the commentator has in mind. Ibn Sīnā's own view is that 'human' is part of the definition of 'writer' (100.7 below), and hence we can deduce 'human' from 'writer' immediately. The commentator could differ about this, or he could take the view that even though 'writer' entails 'human', being a writer is not what makes a person a human — a more metaphysical kind of 'because'. The fact that Ibn Sīnā doesn't discuss this issue doesn't tell us anything about the commentator, because it was Ibn Sīnā's strong view that metaphysical questions of this kind have no place in logic. For a *min jihati* clause that is meant but not expressed, see Ibn Rušd *Masā'il* 104.6 in a discussion of al-Fārābī. }

لا توجب الضرورة. فإذن يكون غير ضروري أن تكون معه الإنسانية،  
فيكون

doesn't impose any necessity. Therefore being human is not a necessary consequence of being a writer. So 99.5

بعض الكتّاب وهو الكاتب من جهة ما هو كاتب ليس ضروريًا أنّه  
إنسان

some writer, namely

(16) The writer, just because he is a writer

doesn't necessarily have to be either a human  
{NB 'The writer, *min jihati mā* he is a writer' is an example of a  
writer. }

أو ليس بإنسان، وذلك من جهة ما هو كاتب. فبعض الكتّاب ممكن أن  
يكون

or not a human, as far as his being a writer is concerned. In fact  
some writers, just from the fact that they are writers, could be

إنسانا من جهة ما هو كاتب.

[not] human.

{Again have to add 'not', probably '*an lā yakūna*. }

وهذا الرجل، وإن دقق، فقد غالط وحمله التعصب على تمحل وجه بعيد،  
[2.3.10] This man took care with details, but he still said misleading 99.9  
things, and his tolerance of partisanship led him to improbable lengths of  
casuistry.

وغلط من ظنّ أنّ قولنا: الكاتب من حيث هو كاتب، لا يوجب الضرورة؛  
It would be a mistake for anyone to think that the phrase 'The writer, just 99.10  
because he is a writer' doesn't affirm any necessity,

حتى يصحّ معه أنّ الكاتب من جهة ما هو كاتب، لا يكون حمل الإنسان  
and hence that it is correct that 'the writer, just because he is a writer'  
doesn't have 'human' predicated

{NB *min ḥaytu huwa* paraphrased as *min jihati mā huwa*.}

{Not sure what *ma<sup>c</sup>ahu* is doing here. }

ضروريًا عليه، وليس كلامنا في أنّ كونه كاتبًا هو الذي جعل حمل الإنسان  
of him necessarily. What we are saying is not that his being a writer either  
does or doesn't make it necessary to predicate 'human'

عليه ضروريًا أو لم يجعل، بل كلامنا في الإنسان هل يحمل على الكاتب من جهة  
of him, but rather we are discussing whether 'human' is in fact true of 'the  
writer, just because

ما هو كاتب. فإن قال: إنه يحمل عليه دائماً، فيكون ضروري الحمل عليه.  
he is a writer'. If one were to say 'It is true of him permanently', then that  
would [make it] necessarily true of him.

فبين أنه يحمل عليه، وإن لم يكن لأجل أنه كاتب. وكذلك إذا زالت الكتابة  
Now it's clear that ['human'] is true of [any writer], even if the reason is not 99.15  
that he is a writer. And likewise if an individual writer ceases to be a writer  
{This remark could refer back to (15), because it is not clear that 'human' is  
true of 'the writer, just because he is a writer'. But I am trying to make this  
still part of an argument about 'the writer, just because he is a writer'. }



100

مع كونه إنسانا محمولا على الشيء الذي هو الكاتب، فإنّ ذلك لا يمنع أن يكون  
while 'being a human' is true of him, this doesn't stop 'human' being

محمولا على الكاتب، ودائما له. فليس أنّه لا يكون ويحمل على شيء، يوجب  
true of the writer, and permanently so. So it is not the case that [if 'writer']  
ceases to be true in some case, then it has to be

أته حين يكون لا يحمل عليه دائما.  
that while he is human it is not predicated of him permanently.  
{This translation is rather desperate. Possibly a corrupt text. }

فأما إن قال: إنّ الكاتب من جهة ما هو كاتب، هو كاتب فقط ولا زيادة،  
[2.3.11] Suppose he said:

100.4

The writer just because he is a writer is purely a writer with  
nothing added;  
and 'human' means something distinct from his being a writer.  
So 'human' is not true of the writer just because he is a writer.  
This is about the content of 'human', and [the same applies to]  
'animal'.

والإنسان معنى آخر غير أنّه كاتب، فليس محمولا عليه، كان هذا حكم الإنسان

والحيوان. فإنّ الإنسان، من حيث هو إنسان، هو أنّه حيوان. نعم الحيوان  
But in fact [HUMAN] is an animal. Yes, [ANIMAL]  
{At some point, which is indeterminate in the text but in the translation  
I make it happen here, Ibn Sīnā moves over to the viewpoint he had ex-  
pressed in *Ibāra* i.7. He explained there that in the proposition 'The human  
is X', 'The human' can refer to the 'nature', i.e. in effect to the meaning  
[HUMAN]. The sentence is true when X is part of the nature [HUMAN],  
for example if it is a constituent of the definition of [HUMAN], and in this  
case X will be true of all individual humans. But as he notes here, neither  
[WRITER] nor [NOT WRITER] is a constituent of [HUMAN], so both 'The  
human is a writer' and 'The human is not a writer' are false. Near enough,  
these X are the things that are true of a human just because he is a human;  
so it is legitimate to treat the phrase 'the human, just because he is a human'  
as naming the idea [HUMAN]. Ibn Sīnā has in fact done just this in several

places earlier in the *Šifā'*; for example at REF. Ibn Sīnā also tends to refer to [ANIMAL] as *ḥayawāniyya* 'animalness'; this usage appears at 101.8 below.  
}

حينعذ جزء من حدّه، وكذلك الحيوان والإنسان جزآن من حدّ الكاتب. فإنّ  
in this case is a part of the definition of [HUMAN], and likewise [ANIMAL]  
and [HUMAN] are two parts of the definition of [WRITER].

الكاتب من الخواصّ الذاتية، بمعنى، أنّها توجد في حدّها الموضوع وجنسه  
[WRITER] is an essential proprium (of [HUMAN]), in the sense that its  
definition contains its substrate, which is of course its genus ([HUMAN]).

لا محالة. وبعد هذا كلّ، فإنّ الكاتب إذا أخذ أنّه كاتب فقط، وكان  
All of that being so, if the writer was taken to be purely a writer [and nothing  
else], even with  
{I think this is meant to show up al-Fārābī's claim as absurd. But Arabic  
doesn't always flag up counterfactual conditions as counterfactual, so only  
the context shows that Ibn Sīnā's conclusion here is not one that he is him-  
self endorsing. }

الإنسان مقارنا له كان غير محمول عليه بالضرورة لا بالإمكان؛ فكان بعض  
'human' linked to him, then 'human' would not be true of him either with  
necessity or with possibility; so we would have 100.10

(17) Some writer is not human, with necessity and not possibility.

الكاتب بالضرورة ليس إنسانا لا بالإمكان، وهو الكاتب من جهة ما هو  
This writer would be 'the writer, just because he is

كاتب.  
a writer'.

على أنّ ههنا غلطا آخر. وهو أنّ قولنا: من حيث كذا، ومن جهة كذا،  
[2.3.12] There is another error here. The phrases 'just because etc.' and  
'from the aspect etc.'  
{NB Here Ibn Sīnā directly associates *min ḥaytu* with *min jihati*. }

من أجزاء المحمول. فقوله: بعض الكاتب من جهة ما هو كاتب ليس بالضرورة  
are parts of the predicate. So the sentence

(18) Some writers, just because they are writers, are with necessity  
not human.

إنسانا، هو بمعنى قوله: الكاتب ليس من الضرورة إنسانا، من جهة ما هو  
means the same as

100.15

(19) The writer is, from necessity, not human just because he is a  
writer.

كاتب، ولو كان هذا الإعتبار ليس جزءا من المحمول، بل جزءا من الموضوع،  
If this phrase was interpreted not as a part of the predicate, but as a part of  
the subject,

101

للمنعه منه محال. فإنا كنا نقول: الحيوان من جهة ما هو حيوان، ناطق  
then an impossibility would follow from it. In fact we would be saying

(20) The animal, just because it is an animal, is rational (or isn't rational).

{NB This is reduplication (min jihati) in the Burley sense. See following lines. }

أو ليس؛ فلو كان من جهة ما هو حيوان ناطق، للزم أن يكون كل حيوان ناطق؛  
If it was — just because it is an animal — rational, then it would follow that every animal was rational;

ولو كان الحيوان من جهة ما هو حيوان ليس بناطق، للزم أن لا يكون أحد  
and if the animal — just because it is an animal — was not rational, then it would follow that no

من الحيوانات ناطقا. لأنّ الشيء الذي يقال على الشيء من حيث هو هو، ومن  
animal is rational. This is because if  $X$  is true of  $Y$  just because it is  $Y$ , and because that

حيث هو طبيعته، فيقال من حيث كان، وكيف كان. لكن لما كان قولنا  
is its nature, then  $X$  is true of  $Y$  because of what it is and in all cases. But 101.5  
when the phrase

من حيث ومن جهة كذا جزءا من المحمول، لم يلزم أن يجاب أنّ الحيوان من  
'just because' or 'from the aspect' etc. is a part of the predicate, it doesn't follow that the animal has to be —

جهة ما هو حيوان ليس بناطق، بل أن يجاب أنّ الحيوان ليس من جهة ما هو  
just because it is an animal — not rational, or rather that the animal has to be not — just because it

حيوان بناطق، بل قد يكون وقد لا يكون. فإذا كان كونه بحيوانية تسلب  
is an animal — rational; rather it can be rational and it can be not rational.  
And because its being [ANIMAL] denies

{It's reasonably clear how Ibn Sīnā reaches his conclusion about what holds when the phrase is part of the subject. But the reason for his different conclusion when the phrase is part of the predicate is not clear. He doesn't have

a meaning for *min haytu* which he can lift compositionally to sentences containing it; in any case this is generally not how he thinks. Rather he asks how we normally use sentences containing the phrase. Without knowing his criteria for counting the phrase as part of the predicate, or having any concrete examples of the kinds of sentence that he would take as illustrating this possibility, there is very little we can do to test his conclusions. }

عنه النطق، غير كونه لا بحيوانية توجب عليه النطق، لم يلزم أن يكون الأمر  
rationality to it, without its being not [ANIMAL] forcing it to be rational, it  
doesn't follow that the thing can  
{I don't understand the phrase 'without ... to be rational'. Another translation? }

في تسليم القسمين على السواء.

equally well be assumed to go either way.

101.10

وكيف يكون جزءاً من الموضوع؟ وأجزاء الموضوع يجب، إذا كان بعدها

[2.3.13] But how can it be a part of the subject? When a part of the subject is followed by  
{NB Here he assumes that a qualifier follows the noun that it qualifies. }

101.11

شيء يحمل على الموضوع، أن تبيء بعيدة كقولنا: الحيوان الناطق كذا؛

something that is predicated of the subject, there has to be something that reaches across the distance of the thing [from the subject]. For example

(21) The rational animal etc.

معناه الحيوان الذي هو الناطق كذا. فإذا قلنا: بعض الكتاب من جهة ما هو

means

(22) The animal which is rational etc.

So when we say

(23) Some writer, just because he is a writer

كاتب، فيجب أن يكون معناه بعض الكتاب، المأخوذ من جهة ما هو كاتب،

it would have to mean

(24) Some writer, who is taken to be only because he is a writer

أو بعض الكتاب، الذي هو من جهة ما هو كاتب فقط. فيكون إدخال هذا السور  
or

(25) Some writer who is only because he is a writer.

Adding the quantifier ['some']

101.15

102

فيه هذرا، فإنّ الكاتب الذي أخذ من جهة ما هو كاتب فقط لا يتبعص ولا أيضا  
in the sentence gives nonsense. 'The writer who is taken as only because he  
is a writer' can't be separated out into individuals. Nor does it make sense  
to

يتسور بالكلّ، حتّى يقال: كلّ كاتب المأخوذ من جهة ما هو كاتب؛  
quantify it universally, as in

(26) Every writer who is taken as only because he is a writer.

ولا يكون هذرا إذا جعل هذا جزءا من المحمول، فقليل: بعض الكتاب هو  
It is not nonsense when this is put as a part of the predicate, as in

(27) Some of the writers are, just because they are writers, etc.

من جهة ما هو كاتب كذا، فإذا كان هذا جزءا من المحمول، فيجب أن  
But when this is a part of the predicate, then it would have to

يكون جزءا من الموضوع عند العكس.

be a part of the subject if we converted.

102.5

{The conclusion from this argument seems to be that *min haytu* phrases  
can occur in the subject only when the subject is a nature or meaning read  
materially (à la Carnap), in which case they can't be quantified. So a propo-  
sition with such a phrase as a component of its predicate can't convert to a  
quantified proposition. }

وهب أنّه جزء من الموضوع، أليس يجب أن يكون جزءا من المحمول؟

[2.3.14] Grant that it is a part of the subject; then isn't it possible for it to  
be a part of the predicate? 102.6

قيل: فيكون قولنا كلّ إنسان ممكن أن يكون كاتبا، معناه أنّ كلّ إنسان  
It was said:

The sentence

(28) Every human can be a writer.

means that every human

102.7

{This is almost verbatim what Ibn Rušd ascribes to al-Fārābī, Masa'il p. 102, but with a different example (Every animal can be sleeping). }

ممكن أن يكون كاتباً، الذي هو من جهة ما الكاتب كاتب فقط؛ وهذا  
كاذب،

can be a writer who is, just because he is a writer, a writer,

But this is false,

فإنه ولا واحد من الناس يوصف بأنه كاتب المأخوذ من جهة ما هو كاتب  
in fact nobody is described as 'a writer taken as only because he is a writer'.

فقط. فإنّ الإنسان لا يكون الشيء الذي هو محمّد الكاتب فقط الذي أنه إنسان  
[HUMAN] is not an idea which is just stripped down from [WRITER] by 102.10  
denying of it that it is human and

وأته حيوان، خارجاً من وجوده مسلوباً عنه. ولسنا نلتفت عند ما نقول  
animal, taking these as outside its mode of existence. When we say  
{'Mode of existence' (*wujūd*): One of Ibn Sīnā's key doctrines (*Madkal* i.2)  
is that universals have two modes of existence, one in the world and one  
in the mind. The one in the mind consists in the universal having abstract  
relations to other universals. I take him to be referring to this mode here. }

إنّ الإنسان ممكن أن يكون كاتباً، إلى إعتبار في الكاتب، وجهة تقترب به،

(29) The human can be a writer.

we don't put any special interpretation on 'writer' or attach to it any aspect  
{Ibn Rušd takes issue with Ibn Sīnā here, saying that the aspect is always  
understood even if not uttered. He seems to be following al-Fārābī in this.  
}

غير معنى مطلق أنه كاتب بلا شرط لا بشرط لا. فننظر، هل يهمل ذلك على  
which is different from the absolute meaning of 'writer', without any con-  
dition. So we consider whether 'writer' is true of  
{My translation follows the mss which omit *lā bi-šarṭin lā*. I suppose it could  
mean 'without a second-order condition ruling out a first-order one'. ?? }



الإنسان، فيجب أن لا يلتفت في الموضوع إلا أنه الذي هو موصوف بكذا،  
the human, and for this one shouldn't take into account any features of the  
subject except that it is described as such-and-such,  
{Should probably be 'we shouldn't', though there is no ms evidence for  
this. }

103

بلا شرط دوام أولاً دوام، ولا بشرط من جهة، ولا نلتفت إلى المحمول  
without any condition that it is permanent, or that it is not, or any condition  
of aspect, and we take into account the predicate

إلا مأخوذاً محمولاً. فأبى شرط الحقناه به، فهو جزء الجملة، هو المحمول، ثمّ  
only as we have it. If we attach any condition to the predicate, it is a part of  
the whole predicate. Then if we convert the proposition,

بعد ذلك يربط ويؤخذ عند العكس فيما يجعله [[محمولاً أو]] موضوعاً، ولا يهم.  
after that it is linked and taken in the conversion in what the conversion  
makes [[the predicate or]] the subject, so it doesn't go missing.

{From the sense it seems we should delete *maḥmūlan 'aw*. No mss support  
this, but there is evidence that the present text confused the copyists. Alter-  
natively Ibn Sīnā has switched in midstream from talking about predicate  
conditions to talking about conditions of any kind. }

ولو كانت هذه الشروط معتبرة لبطل كثير من المقدمات الضرورية، وصارت  
And if these conditions are taken into account, then many necessary premises  
are falsified and become

{NB In general, taking into account conditions (on the predicate?) makes  
it harder for a proposition to be true, and thus necessary propositions are  
often downgraded to possible. }

ممكّنات.

only possible.

ولتجمع جوامع ما قلناه. فلننظر هل إذا كان ج ب ، و ب ممكن في ج خاص به ،  
فهل إذا حمل ب

[2.3.15] Let us sum up what we have said. So let us consider whether,  
when there are  $C$  and  $B$ , and  $B$  is possible in  $C$  as a special case of it, then 103.6  
when  $B$  is true

{Amending to read  $j wa-b$  instead of  $j b$ , as the sense requires. }

على ج ، ف ج أيضاً يحمل على ب أو لا يحمل؟  
of  $C$ , is  $C$  also true of  $B$  or is it not?

فلتكن ج الحيوان، و ب الكاتب، فلننظر هل يجب أن نأخذه من حيث

So let  $C$  be animal and  $B$  writer, , and let us consider whether we should 103.8  
take 'writer' as 'writer, just because

هو كاتب. لكننا نجد الكاتب، من حيث هو كاتب، مسلوبا عنه أنه  
he is a writer'. But we find that no 'writer, just because he is a writer' is

حيوان، ف ج مسلوب عن الحيوان الكاتب من حيث هو كاتب؛ بل يجب أن  
an animal, and so  $C$  [(i.e. 'animal')] is false of the animal who is a 'writer, 103.10  
just because he is a writer'! But rather we have to

يراعي ما كان أوجب، فنجعله موضوعا، فبين أنّ الحيوان يكون محمولا عليه،  
be careful about what is affirmed, so we take the writer to be a subject  
individual, and then it is clear that 'animal' will be true of him.  
{It is not clear to me what 'being careful' consists in here. Ibn Sīnā seems  
to reach a different conclusion without altering the input. }

فتراه يكون محمولا عليه وقتا ما، أو ما دام الذات موجودة. فإن كان الحق  
So you can see that it will be true of him at some time, or for as long as his  
essence continues to be satisfied. And if the truth was  
{NB. Reference to the individual essence confirms that Ibn Sīnā means sub-  
ject individual in 103.12. The verb *yurā'iyā* is his normal term for handling  
conditions and additions, but in this case his advice seems to be to ignore  
the *min haytu* clause in defiance of al-Fārābī's claim (supported by Ibn Rušd  
later) that the clause is understood. In iii.2, e.g. at 148.8, he will confirm this  
position by arguing that adding the clause changes it to a 'different propo-  
sition'. }

هو أنه محمول عليه دائما ما دام ذات الكاتب موجودة، فالحيوان ضروري  
that it was predicated of him permanently so long as the essence of the  
writer continues instantiated, then 'animal' is necessary

للكاتب، والكاتب ليس ضروريا للحيوان. وفي هذا بلاغ لمن أنصف.  
for the writer, and 'writer' is not necessary for the animal. That is enough  
about this for any unprejudiced person.

Transcription checked 8 Oct 09. Readings checked 3 Nov 12.

**[Nec O]**

وأما الجزئية السالبة الضرورية، فإنها لا تنعكس. فإنه ليس إذا كان  
 [2.3.16] Existentially quantified negative necessity propositions don't 104.1  
 convert. When  
 {Prior Anal i.3, 25a33. Aristotle says 'same reason as before', i.e. as at i.2,  
 25a23 where he uses 'human' and 'animal'. }

بالضرورة ليس كلّ موصوف بأنه حيوان إنسانا، يجب أن لا يكون بالضرورة

(30) With necessity not everything fitting the description 'animal' is a human.

it doesn't have to be that

(31) With necessity not every human is an animal.

كلّ إنسان حيوانا. وإعلم أنّ قولنا بالضرورة ليس، ليس سلب الضرورة، بل  
 And be aware that the negation of 'necessarily' is not the phrase 'with ne-  
 cessity not'; rather it is

سلب الضرورة ليس بالضرورة.

'not with necessity'.

**[Poss  $\phi$ ]**

وأما المقدمات الممكنة، فقد قيل فيها في مثل هذا الموضع ما أصف: قالوا:  
 [2.3.17] My view of possibility premises has already been discussed 104.5  
 when we considered similar things. [Aristotle] says:  
 {Conversion of 'Some  $C$  is a  $B$  with possibility' at 95.7. }

إنّ الممكن بإشتراك الإسم يقال على الضروري وعلى المطلق وعلى الممكن  
 الحقيقي.

'Possible' is used ambiguously for necessary and absolute and strict possible.

{Prior Anal i.3, 25a36–25b20. There is nothing about 'strict' in

Theodorus' Arabic, though modern commentators seem to agree with Ibn Sīnā that Aristotle is here talking about contingency. }

فما كان ف الضروري والمطلق فحكمه حكم ذينك. وما كان في الممكن  
الحقيقي

The cases that fall under 'necessary' and 'absolute' behave as in those two classes. The cases that fall under 'strict possible'

فحكمه قد يخالف، على ما سنبيّن لك في موضع آخر. فأوهم ظاهر هذا  
اللفظ

can behave in different ways, as we will show you in another place.

The plain sense of this expression makes us think

أنّ الممكن إذا قيل على الضروري لم يكن مخالفا له إلا في اللفظ، فيقال له ممكن  
that [he means that] when 'possible' is applied things that are necessary, it differs from 'necessary' only in expression, so that 'possible' is said

ونعني أنه ضروري. فإذا لم يكن مخالفا إلا في اللفظ كان عكسه عكسه. وليس  
and we mean 'necessary'. If it does differ only in expression, then it con- 104.10  
verts the same way as 'necessary'. But this is

ينبغي أن يفهم الأمر على هذه الصورة. فإنه ليس أحد من الناس يقول  
not the right way to understand the thing. No person in any language  
describes

ولا في لغة من اللغات يقال ممكن على الضروري، ويعني به الضروري.  
necessary things as 'possible' and means by it that they are necessary.

ولا الشبهة التي دعت إلى أنه يجعل في لفظة الممكن إشترাকা، حتى كان  
The problem which invites us to take the expression 'possible' as ambigu-  
ous takes the form that  
{NB The *lā* at the beginning of this line is cashed in only at 104.18. Un-  
friendly sentence construction! }

يجب مرّة أن يقال على الضروري ومرّة أن لا يقال، وكان يمتنع كونها مقولا على

in some cases 'possible' has to apply to necessary things and in other cases it doesn't. Also when it applies to

الضروري أنّها تنعكس إلى السالبة العكس الذي يجرى بينهما، إذ كان ما يمكن  
 necessary things, this prevents us from making the kind of conversion 104.15  
 which runs between affirmative and negative, using the fact that what can  
 possibly

أن يكون ممكن أن لا يكون. وكان يوجب كونها مقولا على الضروري أنّ  
 be the case can also possibly be not the case. Also when 'possible' applies  
 to necessary things, this requires that

سلبها لا يقال عليه، وإلا كان نقيضها وهو أنه ليس ممكن مقولا على الضروري،  
 its negation doesn't apply to necessary things — otherwise its contradictory  
 negation, 'not possible', applies to necessary things,

وكان الضروري ممتعا شبة توجب أن يكون حلّها بأنّ الممكن يقال على  
 الضروري  
 so that the necessary becomes the impossible. This is not a problem which  
 requires for its solution that 'possible' is applied to necessary things

قولا مترادفا.

as a synonym of 'necessary'.

فإنّ الممكن إذا كان له معنيان، وأحدهما أعمّ من الواجب، والآخر  
 [2.3.18] But 'possible' has two meanings, one of them including 'neces- 104.19  
 sary' and the other

105

مباين للواجب فإنّ الشبهة تنحلّ أيضا. وهل الممكن الذي يجب قوله على  
disjoint from 'necessary'. This solves the problem too. Is the 'possible'  
which has to be said [just] of  
{The discussion down to line 4 is hairy and I'm not sure I have it right. As  
always, the text may be corrupt. }

الضروري إلا الممكن الذي سلبه لا يقال على الضروري؛ لأنّ سلبه أنّه ليس  
necessary things different from the 'possible' whose negation doesn't ap-  
ply to necessary things? [The question arises] because the negation [of the  
latter] is 'not

ممكن ومعناه ممتنع. فيكون الممكن الذي يجب أن يقال على الضروري هو  
الذي  
possible', meaning impossible. [If the two 'possibles' are the same, then]  
the 'possible' that has to apply [just] to necessary things is what

هذا سلبه. فإذا كان هذا الممكن المقول على الضروري الوجود معناه أنّه  
ضروري  
has this as its negation. When this 'possible' is said of something that is  
necessarily true, its meaning is that the thing is necessary.

ومفهومه ذلك، كما يكون في الأسماء المترادفة، كان ما ليس بضروري وما ليس  
But [if they are the same 'possible'], then as with any two synonymous 105.5  
nouns, we must understand that 'not necessary' and 'not

مممكن معنى واحد، وكان ما ليس بضروري إذن هو الممتنع، وهذا محال؛ بل  
possible' mean the same, so that what is not necessary is the same as what  
is impossible. This can't be correct. But rather

الممكن المقول على الواجب هو إسم محصل موضوع بدل إسم غير محصل هو  
'possible' in the sense in which it applies to necessary things is a determi-  
nate name which is used instead of the indeterminate name

لفظة غير ممتنع، وهو أعمّ من الواجب ومن الممكن. فليس إذن صحّة إنعكاس  
'not impossible', and it includes both the necessary and the possible. And  
in that case the correct form of its converse is not

الضروري أو المطلق وهو أخص منه، يوجب صحة إنعكاسه في نفسه.  
 either necessary or absolute, both of which are special cases of it, so the  
 correct form of its converse has to be possible in the same sense.

[2.3.19] But one should بل يجب 105.9

أن يعلم أنّ معنى الكلام المذكور في التعليم الأول الصحيح هو أنّ هذا إذا قيل  
 know that the correct meaning of the text in the First Teaching discussed above is that when 'possible' is applied 105.10

على الضروري وعلى المطلق وعلى الممكن، فما منه في مادة الضروري فحكمه ما  
 قيل.

to propositions that are necessary, propositions that are absolute and propo-  
 sitions that are possible, then propositions with necessary matter behave as  
 has already been stated,

{NB Here he states that Aristotle's discussion of conversion of e.g. 'neces-  
 sary' propositions is meant to be about ones which are necessarily true, not  
 about ones that state that their content is necessarily true. Also he doesn't  
 really mean 'matter' in the sense discussed in 'Ibāra, which refers only to  
 the terms and not to what is expressed about them. }

وكذلك ما هو في مادة المطلق فحكمه ما قيل. وأما الممكن الحقيقي فسيُتضح  
 and likewise propositions with absolute matter behave as has already been  
 stated. But as for propositions whose matter is strict possible,

أمره بعد، ليعلم أنّ بعد إيضاح الحكم في جميع ما يجب هذا العام، يتضح حكم  
 the facts about these will be made clear later. This is so that we know that  
 after he has set out the facts about all the cases implied by 'possible' in the  
 general sense, the facts

{The text would read better without *hāḥā*, which is no doubt why several  
 mss leave it out. But we don't know that Ibn Sīnā didn't write it. }

هذا العام. والنطق في الممكن الحقيقي وفي عكسه جرت العادة بتأخّره، فلنؤخّره.  
 about this general 'possible' will have been set out. The custom is to post-  
 pone discussion of the strict possible proposition and its conversion, so let  
 us postpone it.

{Picked up again at 205.11. }



QIYAS ii.3

*Prior Anal* i.3, 25a36

Transcription checked 8 Oct 09. Readings checked 2 Nov 12.