Ibn Sina: Qiyās iv.2

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based on the Cairo text ed. Ibrahim Madkour et al.
(DRAFT ONLY)

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في القياسات المختلطة من الإمكان والإطلاق في الشكل الأوّل
iv.2 On syllogisms that are mixtures of possible and absolute in the first figure

فليتأمّل حال إختلاط الممكن والمطلق في الشكل الأوّل. فالضرب الأوّل:

[4.2.1] Let us examine the facts about the mixtures of possible and abso- 190.4
lute in the first figure. The first mood is:
{*Prior Anal* i.15, 33b25. }

كلّ ج ب ، وكلّ ب آ بالإمكان، فظاهر أنّ كلّ ج آ بالإمكان.

Every C is a B;
(1)   and every B is an A with possibility;
so it is evident that every C is an A with possibility.

والثاني: كلّ ج ب ، ويمكن أن لا يكون شيء من ب آ ، فظاهر أنّه يمكن

And the second is: 190.6

Every C is a B;
(2)   and it's possible that no B is an A.
So it's evident that it's possible that no C is an A.

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أن لا يكون شيء من جـ آ ، وأمّا إذا كانت الكبرى مطلقة والصغرى ممكنة

[4.2.2] When the major premise is absolute and the minor premise is a   190.7
possibility proposition,

فليس يكون بيّنا أنّ القياس ينتج على أيّة جهة. وذلك لأنّ الصغرى إذا كانت

it is not clear that the syllogism entails a conclusion with any modality.
That is because when the minor premise

داخلة بالقوّة تحت حكمٍ موجود لم يكن أوّل الوهلة يدرك من حالة أنّه مطلق

is potentially included in things that satisfy a factual condition, one is not
immediately conscious of whether the resulting mode [of the conclusion]
is absolute

أو ممكن للإختلاط الواقع، وإن كان الدخول بالقوّة تحت الحكم بيّنا بنفسه

or possibility, even if in this syllogism the potential inclusion in those things   190.10
is self-evident.

من هذا القياس. إنّما الّذي يشكل، حال كونه مطلقا أو ممكنا أو كليهما.

What is unclear is just whether [the conclusion is] absolute, or possible, or
either of these two.

فإذن لا يكون حال هذا التأليف في لزوم الممكن عنه أو لزوم المطلق في البيان

That shows that this premise-pair doesn't behave like a pair of possibility
premises as regards entailing a possibility proposition or an absolute one
in a proof.

كحال الّذي من ممكنتين. فإنّ الدخول هناك تحت الحكم الممكن بالقوّة لا يشوّش

In the case of the two possibility premises, the potential inclusion in the
relevant class doesn't confuse

الذهن، بل يقضي الذهن فيه بعجلة: أنّ إمكان الإمكان إمكان. ولمّا كان

the mind; in fact the mind judges the question quickly from the fact that
the possibly possible is possible. When

هذه الدعوى كلّيا وفي الشكل الأوّل لم يمكن إبانته بالعكس أو بالإفتراض،

this claimed conclusion is universally quantified, and in the first figure, one   190.15
can't show [the correctness of the syllogism] by conversion or by ecthesis,

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فيجب أن يكون طريق إباتته : الخلف.

so it has to be shown by absurdity.

فكون هذا القياس غير كامل دليل

[4.2.3] The fact that this syllogism is not perfect is an indication   191.1
{This paragraph looks like an interpolation, possibly rough notes by Ibn
Sīnā himself that were prematurely included by a copyist. The preceding
and succeeding sentences join up.}

على غلط من ظنّ أنّ قولنا: كلّ $\overline{ج}$ $\overline{ب}$ ، معناه أنّ كلّ ما يمكن أن يكون $\overline{ج}$

of the error of the person who thought that when we say

(3)   Every C is a B.

it means

(4)   Everything that could be a C, and [everything] that truly is a C,
        is a B.

{Cognitive point: if person X doesn't see the syllogism immediately, this is
evidence that person X is not ampliating. Cf. the distinct point at 183.5. }

ويصحّ أن يكون $\overline{ج}$ ، فهو $\overline{ب}$. ولو كان الأمر على ما قاله لما كان $\overline{ج}$

If the thing was as he said, when C
{NB Nice example of explanation by expansion. }

داخلا في $\overline{ب}$ بالقوّة؛ بل كان داخلا فيه بالفعل، ولكان هو من جملة ما قيل

is included in B in potential — or rather it is included in it in act [on his
accountr] — then it would have been one of all the things that are asserted

عليه إنّه $\overline{آ}$ ، وكان قياسا بيّنا بنفسه. إذ دخل الصغرى بالفعل في المقول

to be As, and the syllogism would have been a self-evident one, since the   191.5
minor term is included in act in what is asserted

على الكلّ.

of 'all [Bs]'.

فأمّا وجه هذا الخلف فهو مبني على أنّ الأمر الممكن

[4.2.4] As for this absurdity: it is built on the fact about propositions   191.6

that in themselves are possibly true,

في نفسه ولو بالمعنى الأعمّ لا يعرض من وضعه محال؛ بل ما يلزمه يلزمه،

that if they are broad-possible then no impossibility results from assuming them; so what follows from them must rather follow from them

وهو ممكن عامّ.

as a broad-possible proposition.

وقد أومأنا إلى حقيقة ذلك فيما سلف، فلا يحسن بنا أن نطول الآن

We have talked about the truth of this fact already, and there seems no good   191.9
reason to draw out

في بيان ذلك بما جرّت العادة به من وضع حروف وإسهاب. فإنّ محصول

an explanation that spells it out at length in the usual way. The customary   191.10
way of making sense of it
{Read *'ishābin* with several mss, for the Cairo *'asbābin*. }

ما جرّت به العادة، ما دللنا عليه فيما سلف. وبالجملة لا يلزم من وضع ما لا
يمتنع،

is what we indicated earlier. In brief, no impossibility follows from the
assumption of something that is not impossible.

أمر ممتنع. لسنا نقول: إنّه لا يلزم من وضع الممكن الحقيقي إلّا ممكن حقيقي.

This is not to say that only what is strictly possible follows from the as-
sumption of something that is striclty possible.

بل نعني بهذا أنّه لا يلزم من وضع الممكن بالمعنى العامّ المشتمل على المعنى

What we mean is rather that only what is broad-possible follows from the
assumption of something broad-possible, where broad-possible is used to
cover both

الخاصّ والمطلق والضروري إلّا ممكن بالمعنى العامّي. فإنّ الممتنع لا يلزمه البتّة،

what is narrow-possible and what is absolute and what is necessary. In
none of these cases does anything impossible doesn't follow from it,

سواء كان ما وضع للزوم ممكنا حقيقيّا أو مطلقا أو ضروريّا. فإنّ ما يلزم الممكن

whether what was assumed for purposes of the entailment was strict pos-   191.15
sible or absolute or necessary. So what follows the broad possible

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العامّي فهو غير ممتنع كائنا ما كان. ولذلك فإنّ الكذب غير المحال لا يلزمه كذب

is not impossible, in all cases. And for that reason, a falsehood which is not impossible doesn't entail a falsehood

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محال، وهو الّذي يستحقّ صدق نقيضه دائما بنفسه بلا شرط، بل إن

which is impossible, i.e. a proposition whose contradictory negation is permanently, intrinsically and unconditionally false. If

لزمه الكذب لزمه كذب غير محال.

a false proposition does follow, then it is a falsehood which is not impossible.

فإذا كان كلّ جَ بَ بالإمكان، وكلّ

[4.2.5] So:

When every C is a B with possibility;
(5)   and every B is an A with truth;
then we say: Every C is an A with possibility.

{One would think that if Ibn Sīnā accepted Barbara MMM, then he would have deduced this one from it by simply deducing possible from actual. Does he deduce possible from actual? We saw there is no direct evidence of his accepting Barbara MMM as opposed to Barbara QQQ. }

بَ آ بالوجود، فنقول: إنّ كلّ جَ آ بالإمكان. والمشهور أنّه كذلك

The standard view is that [the conclusion] is likewise
{This is *Prior Analytics* i.15, 34a34–34b6. The 'likewise' suggests, surprisingly, that here he takes the possibility in the premise to be broad too. }

بالإمكان العامّ. وذلك أن يتبيّن بالخلف. وذلك الخلف مبني على أنّه إن لم

a broad-possibility proposition, and that this is proved by absurdity. The contradiction is created on the basis that if

يكن هذا ممكنا، فليكن غير ممكن. وغير ممكن، هو الّذي بالضرورة ليس يكون.

[the conclusion] is not a possibility statement, then we can suppose that   192.5
[the content of] the conclusion is impossible. To be impossible is to be necessarily not the case.

فلا شكّ أنّ هذا الممكن إذن هو العامّي المقابل للذي الضرورة، وليس يكون،

(This leaves no doubt that the 'possible' here is the broad possible which is opposite to necessary — it is [a proposition that is] broad possible and will not be the case.)
{NB This is scholarly interpretation of the text in front of him. Aristotle? }

أيّ العاتّي. فلنأخذ إذن نقيض النتيجة وهو بالضرورة ليس كلّ ج آ ، ولنفرض

So then let us take the contradictory negation of the conclusion, which is

(6)   With necessity, not every C is an A.

and let us assume that the proposition

أنّ كلّ ج بَ على أنّه موجود، إذ ليس ذلك محالا، فينتج من الشكل الثالث

(7)   Every C is a B.

is true (noting that it was not impossible). Then (6) and (7) entail by the third figure
{In mood Bocardo LXL (Thom). }

أنّ بالضرورة ليس كلّ بَ آ ، وكان بالإطلاق كلّ بَ آ ، هذا محال لم يلزم

(8)   With necessity, not every B is an A.

But [we had that] with absoluteness, every B is an A. This is impossible.

من التأليف، ولا عن الكذب غير المحال، فيكون عن الأخرى المشكوك فيها.

The impossibility doesn't result from using an invalid syllogistic mood. Nor is it a consequence of the [possibly] false (7), which is not impossi- 192.10 ble. So it will come from the other premise, the one that was in doubt.
{The variant and well-supported text reading *al-ġayri* looks better to me, but the sense is not affected. }

فإذن ذلك محال.

Hence that premise (6) is the impossible one.
{NB Implied use of principle: If conclusion of valid syllogism is impossible, one of the premises must also be impossible. }

هذا ما في التعليم الأوّل، فنذكر أنّ المعلّم الأوّل قد كان منع أن يكون هذا

[4.2.6] This is what is in the First Teaching, so we mention that the First 192.12 Teacher denied that this [third figure]

التأليف يَنتج الضروري. والآن فقد أتنتج منه الضروري، فإنّه إن لم يكن ضروريّا،

composition entails a necessity proposition. But here a necessity proposition has been deduced. (And in fact if it was not a necessity proposition

لم يناقض بالحقيقيّة الوجودي. فبيّن لك من هذا أنّ هذه النتيجة ضروريّة كما

it wouldn't genuinely contradict the impermanent proposition.) So it is clear to you from this that this conclusion is necessary, just as
{His point is not that this is a further reason for believing it's necessity, but that we actually need necessity for the application he has just given. Presumably his problem is that two apparently contradictory absolute propositions can both be true in the same context. }

إذ عيّناها نحن. وإنّما لم تورد في التعليم الأوّل، حيث تعلّم الأشكال ضروريّة

we ourselves have articulated it. It was not mentioned in the First Teaching, where the figures are taught as something necessary
{Not confirmed in the manuscripts, but in Ibn Sīnā *ka-mā 'iḏā* is common and I haven't seen another *ka-mā 'iḏ*. But the sense is a bit strange. For translation I ignored the *'iḏ*.}

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على سبيل الإرتياض والإمتحانات. ألا ترى أنّها لمّا إستعملت، إستعملت

for exercising [the student] and testing [the material]. Don't you see that
when you use it, you use it
{*'imtiḥān* is usually testing not of the student but of the material - trying
it out so as to build up experience and intuitions. He says at 204.11 that
the modal syllogisms in Aristotle are mostly for *'imtiḥān* and they are not
definitive; see also 208.6. Elsewhere he says *'irtiyāḍ* is the purpose of non-
demonstrative syllogisms. I know no other place where he suggests that
the predicative figures are just for 'testing'. }

منتجة للضروريّة.

as entailing a necessity conclusion?

على أنّه قد يمكن أن تبيّن هذا الخلف على هذه الصورة، من

[4.2.7] This use of absurdity can be justified   193.2

غير أن يؤخذ كذب غير محال البتّة؛ بل أن يقال: إن كان بالضرورة ليس

without any appeal to the device of taking [a consequence of a possible
proposition] as [perhaps] false but not impossible. Instead one says:

(9)   If with necessity not every C is an A;
         and every B is an A

كلّ ج آ ، وكان كلّ ب آ ، فواجب من الشكل الثاني أن يكون بالضرورة

then by the second figure it has to be that

(10)   With necessity not every C is a B.

{Second figure Baroco XLL (Thom). This is another proof of 192.2 by con-
tradiction, but taking the other premise. }

ليس كلّ ج ب ، وكان ممكنا أن يكون كلّ ج ب ، هذا خلف. وقد بيّنوا

But [by the other premise in (5) it was possible that every C is a B, and this   193.5
makes an absurdity. They also showed
{It seems 'they' is *Prior Anal* i.15, 34b2–6, but if so Ibn Sīnā seems to have a
text with different modalities from the standard Greek. }

هذا الخلف بوجه آخر بأن جعلوا المكنة وجودة حتّى يكون: كلّ ج ب ،

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this absurdity in another way, by making the possiblility premise a real-world proposition so that the syllogism becomes:

> Every C is a B;
> (11)   and every B is an A;
> so every C is an A.

{For his text to make sense, the conclusion should be with possibility.}

وكلّ ب ا ، فكلّ ج ا . وكان بالضرورة ليس كلّ ج ا ، وما كان يجب

Then [they assumed that] with necessity not every C is an A. But there was no need for them to give
{NB Here *mā kāna* with *mā* a negation. }

أن يؤخّر هذا عن الأوّل.

this argument when they had given the first one.

وقيل بعد هذا في التعليم الأوّل ما معناه: إنّ المقدّمات المطلقة لا يجب أن

[4.2.8] In the First Teaching, it says after this what he has in mind: that the absolute premises shouldn't   193.9
{*Prior Anal* i.15, 34b7}

يلتفت إلى سورها البتّة، حتّى يكون إطلاقها أنّ سورها قد صدق وقتا ما فلا

refer to their quantifier at all, in such a way that their absoluteness is that   193.10
their quantifier is true at some time. So the proposition
{NB Absoluteness on the quantifier. Here it clearly means that the time quantifier is given a particular (in general imaginary) instantiation, which apparently he regards as attached to the subject quantifier. }

يجب أن يقال في المطلقات: كلّ ج ب ، ومعناه كلّ ج ب في هذ الزمان.

(12)   Every C is a B,

in the meaning that every C is a B at such-and-such a time, shouldn't be used as an absolute proposition.

وذلك لأنّه لا مانع أن يصدق وقتا ما أنّ كلّ متحرِك إنسان، إذا لم يكن

This is because there is nothing to prevent its being true at some time that every moving thing is a human, if there is

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متحرّك غيره. وإذا قلنا: كلّ فرس يمكن أن يتحرّك، صدقنا. وإذ قلنا:

nothing else moving. But the proposition

(13)   Every horse can be moving.

is true, and when we say

كلّ متحرّك يمكن أن يكون إنسانا أيّ وقت ما. لم يجب عنه أنّ كلّ فرس

(14)   Every moving thing [[can be]] a human (i.e. at such-and-such a time).

it doesn't follow from this that every horse
{It has to be 'Every moving thing is a human', in spite of the lack of ms support. Also Ibn Sīnā has missed Aristotle's argument, which is that with this interpretation the syllogism can't be valid, because of the all/none counterexamples. Note also that Aristotle speaks of the counterexample conclusions as 'following', as noted by Striker p. 148. }

ممكن أن يكون إنسانا، بل بالضرورة لا شيء من الأفراس إنسان. فإن جعل

can be a human. With necessity, no horse is a human.   193.15

بدل الإنسان الحيوان، كان بالضرورة كلّ فرس حيوان. فهذا ما قيل في التعليم

With necessity every horse is an animal, but this is putting 'animal' in place of 'human'. So this is what was said in the First Teaching.
{He seems to miss that this in Aristotle is an application of the all/none method for proving sterility. }

الأوّل، فقد جعل هذا سببا لأنّ يكون مثل هذا الأكبر لا يتألّف عنه قياس.

It has been counted as a reason for not constructing any syllogism with a major premise of this kind.

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فقد بان وصحّ أنّ إستعمال المطلق والوجودي على هذه الصفة ليس بجيّد، وأنّ

So it is clearly correct that the use of absolute and impermanent proposi-
tions of the kind described above is not good, and that

التعليم الأوّل يخالفه.

the First Teaching disagrees with it.
{Later on this page he gives his dissenting perspective: we should ask what
the speaker intended. }

وإن كان لقائل أن يقول: إنّ هذا القياس غير مؤلّف، فإنّ الكبرى

[4.2.9] Someone might well say: 194.3

(15)

> This syllogism is not [correctly] composed. When the major
> term stands in this configuration, the middle term in it has to
> be shared [between the premises]. So [the minor premise] will
> say that every horse can be moving 'at that time'. But this is
> false, because at that time there can't be anything that is moving
> and not human, since every moving thing is human, and when
> everything moving is human it's impossible that a horse is mov-
> ing.

إذا كانت بهذه الجهة فيجب أن يكون الأوسط مشتركا فيه، فيقال: إنّ كلّ

فرس يمكن أن يكون متحرّكا في ذلك الوقت. وهذا كاذب؛ لأنّ في ذلك

الوقت لا يمكن أن يكون شيء متحرّكا غير الإنسان، إذ كان قد يجد كلّ

متحرّك إنسانا، وحين يوجد كلّ متحرّك إنسانا يستحيل أن يكون الفرس

متحرّكا. لكنّا نقول له: إنّ ذلك لا يوجب كون هذه القضيّة المكنة كاذبة

Our reply to him is as follows. That doesn't make this possibility proposi-
tion false

محالة، وأعني بالمكنة المكنة بالإمكان الخاصّ. فإنّ ذلك القول لا يكون

and impossible, where by 'possibility' I mean narrow possibility. [The con-
tent of] this sentence is in fact neither

{NB Maybe he confuses 'this sentence can't be true' with 'this sentence asserts that something is impossible'. }

محالا ولا واجبا. فإنّه وإن وجد أنّ لا متحرّك هو فرس، فليس ذلك كذبا محالا،

impossible nor necessary. Even if it is true that no moving thing is a horse, 194.10 [the content of the proposition] is not false and impossible,

ولا صدقا حقّا ضروريّا، بل هو أمر بين هذين. فهو الممكن الخاصّ الّذي يقع

nor is it necessarily true. Rather it is intermediate between these two. So it is the kind of narrow possibility that holds

على المطلق. وأمّا الممكن الّذي لا يقع على المطلق، ويعتبر فيه الزمان المستقبل،

of things that are true absolutely. The kind of possibility which doesn't hold of things that are true absolutely, the one about what is true in the future,

فلا يمكن أن يقال إلّا ويدلّ عليه فيه بوجه ما على الزمان المستقبل. فإمّا أن

can only be used to make statements about what is in some way true in the future. So either

لا يأتلف منه مع هذا المطلق قياس البتّة، وقد ألف؛ وإمّا أن لا يراعي

one can't [correctly] make the syllogism with that kind of possibility premise and the absolute premise above, although that is the syllogism that has been made; or what [Aristotle said] is not being

ما ذكروا. وما علينا من ذلك شيء، فإنّ علينا أن نحكمَ في كلّ موضع بما

taken into account. What we need to take home from this discussion/Aristotle's 194.15 words (??) is that in every case, when we judge how things

يجب فيه، مع إعتبار أنّه إن كان المراد بالمطلق كذا كان كذا. وإن كان

have to be, we do it by interpreting the [speaker's] intention as being 'With absoluteness X is Y', and if

المراد بالمطلق شيئًا آخر، كان له حكمٌ آخر. وما علينا أن نناقش في الألفاظ،

he intended something else with absoluteness, that's a different content. We have to discuss the expressions,

ونصرّ على أنّ قائلا عني كذا دون كذا.

and decide that the speaker means this rather than that.
{NB It all depends on what the speaker means by his premises. }

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[From here to 196.17 corresponds to nothing in Aristotle.]

وإذ قد بيّنا هذا، فنعود قائلين: أنّه قد تبيّن بهذا البرهان أنّ النتيجة ممكنة

[4.2.10] Now that we have proved (5), we go back to the point that in   195.1
this demonstration it is shown that the conclusion is a broad-possibility
proposition.
{This was claimed at 192.4 and the proof follows that statement. }

عامّة. وذلك هو الحقّ، إن أخذنا المطلق ما يعمّ الضروري وغيره. فإن أخذناه

That is correct if we took the absolute premise [in (5)] to be the kind of
absolute that includes both necessary and non-necessary. But if we took it

المطلق الّذي لا ضرورة فيه لم يجب أن يكون إلّا ممكنه بالمعنى الأعمّ. فإن ظنّ

as the kind of absolute which excludes necessary propositions, [the conclu-
sion] can only be a possibility proposition in the broader meaning. So if
someone thought

الظانّ أنّه قد صحّ من طريق الخلف المذكور أنّ النتيجة ممكنة حقيقيّة خاصّيّة،

that it was correct, because of the above-mentioned absurdity, that the con-
clusion is a strict-narrow-possibility proposition,

فلم يحسن. فإنّه ليس إذا لم يكن جَ بَ بالإمكان الخاصّ والأخصّ يجب أن

that would not be correct. In fact when it is not the case that C is B with   195.5
narrow or narrower possibility, it can't be true that
{NB *laysa yajibu* here has to mean 'It can't be that'. }

يكون بالضرورة ليس كلّ جَ آ ؛ بل يجوز أن يكون بالضرورة كلّ جَ آ . لأنّ

with necessity no C is an A. But it might be true that with necessity every
C is an A. This is because

الأمر المخالف للممكن ليس هو الّذي هو ضروري اللّوجود، بل الضروري

the things that are incompatible with being [strictly] possible are not the
things that are necessarily not true, but rather the things that are necessarily

في الوجود واللّاوجود جميعا. لكنّا نبيّن أنّ النتيجة حينئذ تكون ممكنة خاصّيّة

true and the things that are necessarily not true together. But in this case

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too we will prove that the conclusion is a narrow possibility proposition.

<div dir="rtl">أيضا. وذلك لأنّه إن كان بالضرورة بعض جـ آ ، وليكن كلّ جـ بـ موجودا،</div>

It is so because

(16)   if with necessity some C is an A;
        let it be true that every C is a B;
        then with necessity some B is an A.

{Here he invokes Disamis LXL (Thom), which Thom MMS p. 73 lists as accepted by Ibn Sīnā and rejected by Aristotle. Note also that Ibn Sīnā's argument here requires his false rule of possibility. }

<div dir="rtl">فيكون بالضرورة بعض بـ آ . وكان كلّه لا بالضرورة.</div>

Then it holds of every [C] that it is not with necessity [an A].   195.10
{Supposedly the conclusion in (16) is absurd, so the first premise is false, as stated here. The conclusion in (16) is supposed to be contradicting the assumption that the major premise in (5) is narrow-absolute. NB Note here that narrow-absolute would assert that for every B, it is not necessarily an A.}

<div dir="rtl">وأمّا أنّه هل يجب</div>

[4.2.11] There is a question whether [the conclusion of (5)] should be   195.10
{Are we still assuming that the major premise is narrow-absolute? Cf. 195.18 below. }

<div dir="rtl">أن يكون ممكنا الممكن الّذي لا يدخله المطلق حتّى يكون كلّ جـ بـ بالإمكان</div>

a possibility proposition with the kind of possibility that doesn't include [being true in] the absolute, so that it states that every C is a B with narrower possibility,

<div dir="rtl">الأخصّ ولا إطلاق إيجاب البتّة ، فنقول: ليس ذلك بواجب. فإنّه يجوز أن</div>

where it is not affirmed at all [of any C] that it is [a B absolutely]. Our view is that it doesn't have to be. In fact it could be that

<div dir="rtl">يكون آ أعمّ من بـ . فيكون موجودا لكلّ ما هو بـ بالفعل ولما ليس بـ .</div>

the As include the Bs and that [A] is true of everything that is a B in act, and of something that is not a B.
{NB Here *mā* + V means 'something that Vs', not the usual 'whatever Vs'. But only the context shows this. }

ولا يجب أيضا أن يكون لِما هو بٓ عند ما هو بٓ ؛ بل قبله أو بعده،

Also it doesn't have to be that A is true of Bs only for as long as they are Bs; but it could still hold before or after [they are Bs].

فيكون جٓ موجودا له، وإن كان ممكنا له أنّه بٓ ، لكنّ كون الشيء مطلقا لا يمنع

So C will be true of a thing even when it is [only] possibly a B. But a proposition's being absolute doesn't prevent   195.15
{The first sentence confirms that the conclusion need not be narrower-possible. The force of the second sentence is unclear since it is unclear whether the absolute is supposed to imply 'true now'. }

كونه ممكنا حقيقيًّا. فإنّه وإن كان مطلقا له في وقت، ولم يكن ضروريًّا، فيجوز

it from being a strict possibility proposition. In fact even if something holds absolutely at a time, and not necessarily, it can

أن يكون له في وقت ما ممكنا بحسب القياس إلى مستقبله، الّهمّ إلّا أن يكون

hold at some time with the kind of possibility that is in terms of the future — though not of course if it

موجودا له دائما، وهذا يمنع صدق الكبرى على الشرط المذكور. وتبيّن لك

holds permanently, which would prevent the truth of the major premise under the aforementioned condition. A way of looking at this that shows it to be correct
{Not a condition but an assumption, that the major premise is narrow absolute. }

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وجه يُحقّق هذا، إذا علّمت بعد أنّه لو كان بدل هذه الوجوديّة ضروريّة كانت

was proved for you [earlier], when you learned afterwards that if in place
of this impermanent [premise] there was a necessity proposition

النتيجات ضروريّة.

then the conclusion would be a necessity proposition.

وأمّا الآن فنقول: إنّه لو كان في مسألتنا هذه جـ آ دائما ما دامت ذاته

[4.2.12] Now we say: Suppose that in this question of ours, the C was   196.3
an A permanently for as long as its essence continued to be
{NB *law* with an answering <u>*tumma*</u> instead of *la*. }

موجودة، ثمّ كان يمكن له أن يكون بـ وأن لا يكون، وقد كنّا قلنا: إنّ كلّ

satisfied. Then it is possible for it to be a B, and possible for it not to be a
B. We have already said that every

ما يوجد له بـ فإنّه إنّما يوجد له آ وقتا ما، فيكون إذا صارت جـ بـ صار له آ

thing that B is true of will have A true of it at a certain time, so it can be the   196.5
case that when the C becomes a B, A becomes true of it

أمرا غير دائم وذته موجودة. وقد كان آ له دائما، فيكون آ له دائما ما دام ذاته

but not permanently for so long as its essence is satisfied. But [we have sup-
posed that] A is true of it permanently, so A will be true of it permanently
for as long as its essence continues to be

موجودة، ومع ذلك فإنّه قد يصير له غير دائم عند أمر ما موجود مع ذاته،

satisfied, but nevertheless A will be true of it not permanently and for so
long as it exists and its essence is satisfied.
{NB Horrible pun if the text is right: the individual exists (*mawjūd*) and its
essence is satisfied (*mawjūd*)! }

هذا خلف. فيكون السبب في هذا ما فرضناه من كون آ دائما لـ جـ . فإذن

This is absurd. The cause of this absurdity is our assumption that A is
permanently true of C. So therefore
{NB 'The cause of this absurdity' as if just one premise caused it. Also this
application of absurdum is a Robinson. }

18

لا يكون له دائما حيث تكون الكبرى صادقة. وإذا لم يكن له دائما، لم يكن مانعا

A won't be true of the *C* permanently when the major premise is true. When *A* is not permanently true of the *C*, that doesn't prevent

{No, he hasn't shown this, because the major premise doesn't imply impermanence, though it is compatible with it. At best he can say the conclusion need not hold permanently. }

أن يكون آ ل جَ ممكنا أخصّ مع كونه مطلقا. فإنّه يكون مطلقا له بشرط

A being true of the *C* both with the narrower possibility and absolutely. In   196.10
fact *A* can be true absolutely of the *C* under a condition

وجهة وإعتبار غير الإستقبال، وممكنا بشرط كلّ وقت شأت أن نفرضه له

which specifies a modality and a consideration different from being true in the futue. Thus *A* can be true of the *C* with possibility under a condition specifying any future time that we choose for it.
{NB *wajha* and *'i^ctibār* }

مستقبلا. فأمّا أنّ هذه النتيجة هل تصدق مطلقة؟ فنقول: إنّه لا يجب ذلك،

[In that case] will this conclusion be true with absoluteness? We say: It need not be,

لأنّه يجوز أن يكون الواحد من جَ لا يوجد البتّة بَ من وقت حدوثه إلى وقت

because it can be that one of the *C*s is never a *B* from the time of its creation to

فساده، ويكون إنّما يوجد له آ عندما يكون هو بَ فقط. فيكون الوا؛هد من

the time of its destruction, and *A* is true of it only while it is a *B*. Then this *C*

جَ لا يتّفق له بَ البتّة، ولا أيضا آ . مثل قولنا: كلّ إنسان يمكن أن يكتب،

will not have either *B* or *A* true of it at all. An example is   196.15

(17)   Every human can write;
and every writer touches the paper with his pen.

وكلّ كاتب ممّاسّ بقلمه الطرس، فليس يلزمه صدقه بالإطلاق، حتّى يصدق

The truth of the conclusion with absoluteness, which would be that it is true

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أنّ كلّ إنسان مماسّ بقلمه الطرس. فإذا علمت هذا، فقتّش عليه سائر الضروب.

that every human touches the paper with his pen, doesn't follow. Now that you know this, try it out with it the other moods.

[With negative premise]

والضرب الّذي بعد هذا هو: كلّ جَ بَ بالإمكان، ولا شيء من بَ آ ، فلا

[4.2.13] The mood which is next after this is:

(18)
> Every C is a B with possibility;
> and no B is an A;
> so no C is an A, with broad possibility.

{Celarent, *Prior Anal* i.15, 34b19.}

شيء من جَ آ بالإمكان العامّ. وبيانه على قياس ما قد علمت بالخلف. ومع

Its proof is by a syllogism which you already know, by absurdity. Never-theless

ذلك فالمشهور أنّ النتيجة هي [لا] شيء من جَ آ بالضرورة. فقد قيل ما يدلّ على

the standard view is that the conclusion is that no C is an A with necessity.
In the First Teaching it is said what are the indications that
{NB *šay'un* should clearly be *lā šay'a*, with several mss. Also the Greek of
Aristotle has here 'it is necessary that possibly ...', where the 'necessary' is
the necessity of the entailment. }

ذلك في التعليم الأوّل.

this is so.

لكنّ الأولى أن يكون قد وقع في اللّفظ تقديم وتأخير، ويكون معناه ليس

[4.2.14] But the best [explanation] is that some of the text has got into   197.5
the wrong order, and the [intended] meaning is 'It is not the case that

بالضرورة آ ، ولا في شيء من جَ ، لا أنّه بالضرورة لا في شيء من جَ · وفرق

بين

with necessity A is in any C', not that 'With necessity it is not in any C'.
There is a difference between

قولنا: ليس بالضرورة لا في شيء من جَ ، وبين قولنا: بالضرورة ولا في شيء

saying 'not with necessity in any C' and saying 'with necessity not in any
{NB point of usage: does the *wa-* before *lā* indicate that this is not the second

part of a double negative? I think there are counterexamples to this in the ʿ*Ibāra*.}

من جَ كما علمت. وأورد لهذا في التعليم الأوّل مثالا يدلّ على أنّ المراد فيه هو

C′, as you know. In the First Teaching [Aristotle] gave an example for this, which indicates that the intended [meaning] in it is
{*Prior Anal* i.15, 34b33.}

أنّ النتيجة قد تكون ضروريّة، لا أنّها تكون دائما ضروريّة. والمثال لذلك:

that the conclusion 'can be necessary', not that it 'is permanent and necessary'. The example is:
{NB *dāʾiman* here in the metalanguage, meaning 'in all cases'? No, I think it and *ḍarūriyyatan* are in apposition. The example refers to times. }

كلّ إنسان يمكن أن يفكر أتي بالفعل، ولا شيء من المفكّر بغراب، والنتيجة:

(19)
Every human can meditate (i.e. in act);
and no meditator is a crow;
and the conclusion is that no person is a crow, which is with necessity.

فلا شيء من الناس بغراب، وذلك بالضرورة. وإذا جعل بدل الغراب،

If one puts 'moving thing' in place of 'crow',

المتحرّك، أنتج نتيجة غير إضطراريّة. فإذن النتيجة تارة تكون ممكنة، وتارة

it entails a conclusion which is not necessary. Therefore the conclusion [of this mood] is sometimes a possible proposition and sometimes

تكون ضروريّة.

a necessary one.
{Unpick. The conclusion can be only-possibly true or necessarily true, in examples with true premises. Therefore the premises do not entail a strict-possibility conclusion or a necessity conclusion. }

وقد بقي علينا أن ننظر في هذه الحدود. فقد قيل في التعليم الأوّل يجب أن

[4.2.15] It remains for us to investigate these terms. It was said in the   197.14
First Teaching that
{*Prior Anal* i.15, 35a2.}

يطلب غير هذه. وقد صدق. فإنّ الكبرى في القياس الأوّل ضروريّة، إلّا

different examples are needed, and this is true. The fact is that the major   197.15
premise in the first syllogism is a necessary proposition, unless
{Why is this an objection? Necessary truths are still truths. At worst one
could say that with this example Aristotle could have shown a stronger
non-deducibility. Maybe 198.3 hints at an answer: some people read the
major premise in (19) as stating narrow absoluteness, i.e. that the proposi-
tion is true but not necessarily so. But as the text stands, they are hardly
entitled to read it this way. }

أن يجعل بدل المفكّر المتخيّل، فيكون سلب الغراب عن المتخيّل ممّا يصحّ

one puts 'imaginer' in place of 'meditator', so that it denies that 'crow' is
true of any of the things that can truly be said to imagine

في وقت ما فيكون أوّل شيء قد نسينا النصيحة والوصيّة المذكورة في هذه

at some time. But in the first place this would be to forget the advice and
the warnings that were given only

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الساعة، وثانيًا: أنّ هذا بعينه يمكن في الضرب الّذي كبراه موجبة مطلقة. فإنّه

a moment ago. And secondly these same terms could be used in the mood
whose major premise is affirmative absolute: in fact

قد يصدق هناك أنّ كلّ متخيّل غراب، ولا ينتج أنّ كلّ إنسان يمكن أن

it can be true there that every imagining thing is a crow, and it doesn't entail
that every human can

يكون غرابا. لكنّه إذا أخذ المطلق ما يعمّ الضروري، كان الإنتاج على ما ذكر

be a crow. But when the absolute is taken as including the necessary, the
entailment is as stated

في التعليم الأوّل. فإنّه تارة يكون ضروريًا إن كانت المطلقة في مادّة ضروريّة،

in the First Teaching. So sometimes [the conclusion] is a necessary propo-
sition (when the absolute premise is in necessary matter),

وتارة غير ضروريّة إن كانت المطلقة في مادّة غير ضروريّة.

and sometimes it is not a necessary proposition (when the absolute premise   198.5
is in a matter which is not necessary).

والضرب الّذي

[4.2.16] The next mood   198.5

بعده وهو أنّه يمكن أن لا يكون شيء من ج بَ ، وكلّ بَ آ ، ينتج: يمكن

is

It is possible that no C is a B;
(20)   and every B is an A;
entailing: It is possible that no C is an A.

أن لا يكون شيء من ج آ . وتبيّن بعكس السالبة إلى الموجبة، ثمّ بعكس

It is proved by converting the negative premise to an affirmative one, and
then converting

النتيجة. وكذلك إذا كان من سالبتين كلّيّتين، فإن جعلت الصغرى سالبة

the conclusion. The same applies when both premises are negative and
universally quantified. But if the minor premise is taken to be negative

مطلقة لم يجب عنه قياس. والعلّة فيه ما علّمت في المطلقات. فإن جعلت

absolute there doesn't have to be a syllogism from it. You were taught the reason for that in the discussion of the syllogisms with absolute premises. If the minor premise is taken to be

الصغرى موجبة جزئيّة مطلقة، والكبرى ممكنة كلّية، موجبة كانت أو سالبة،

affirmative existentially quantified absolute, and the major premise a uni-   198.10
versally quantified possibility proposition, either affirmative or negative,

فالعبرة للكبرى بلا شكّ. فإن كانت الصغرى ممكنة، والكبرى مطلقة،

then the major premise is the one that controls the modality of the conclusion, no doubt about that. If the minor premise is a possibility proposition and the major premise is absolute,

فالنتيجة على ما سلف لك. فلا خلاف أنّها تكون جزئيّة. وإن كانت الصغرى

then the conclusion is as you learned earlier, and it makes no difference if [the minor premise] is existentially quantified. If the minor premise

سالبة جزئيّة ممكنة، تبيّنت بالعكس إلى الإيجاب على نحو ما علّمت.

is a negative existentially quantified possibility proposition, [the syllogism] is proved by converting to the affirmative in the way you have learned.

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