Ibn Sina: Qiyās ii.2

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(DRAFT ONLY)

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Now that this has been proved, let us show whether the universally quantified affirmative converts. What form should it convert to?

To universally quantified affirmative, or to existentially quantified? And 88.5 does it or doesn’t it stay absolute? We say: when

قَولْنَا كُلُّ جَب ـ بُلْسِسْ يَلِزَّ أنَّ كُلَّ ـ جَبُّ. مِثَالُ كُلِّ إِنْسَانٍ حَيْوَانٍ، وَلَسْنَ.

it is given that

(1) Every $C$ is a $B$.

it doesn’t follow that

(2) Every $B$ is a $C$.

An example is:

(3) Every human is an animal, but not every animal is human.

Also we have:

(4) Every human watches; but not everything that watches is human.

So a universally quantified affirmative proposition need not convert to a universally quantified affirmative proposition, since
sometimes its predicate is more inclusive [than its subject].

[2.2.2] But conversion of this proposition to an existentially quantified proposition does have to hold. Thus when it is given that

Every \( C \) is a \( B \).

It follows that

Some \( B \) is a \( C \).

The customary proof of this is to say:

If it’s not the case that some \( B \) is a \( C \), then

No \( B \) is a \( C \).

And this proposition converts to:

No \( C \) is a \( B \).

But it was given that every \( C \) is a \( B \), and this is an absurdity. This is the proof that is given in this chapter [of the First Teaching].

[2.2.3] We should examine this proof to see whether it is sound or not. 88.14 One issue is that if

the contradictory negation of an affirmative existentially quantified absolute proposition is a negative universally quantified absolute proposition, 88.15 and it is correct

that some strict [absolute propositions of this form] don’t convert, then this is not a proof. As you know, the point is that when

you take the contradictory negation of a proposition, you have to specify the circumstances and the time. At this point [Aristotle] doesn’t bother to specify any status or time
{NB .haal wa-waqt (twice).}

in either [the proposition or its contradictory negation], so as to ensure that the negative statement is the [contradictory] opposite of the other, and that it is well-defined when the absurdity [is shown]. [Without the specifications] this universally quantified negative proposition is not the [contradictory] opposite [of the affirmative proposition] and need not even convert this way. We say: In spite of these two objections [(to the taking of an opposite

and to the conversion)], this proof is still correct. This is because if the speaker speaks falsely when he says

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

the falsehood implies at least that there is nothing that is [at some time] a $B$ and is also at some time a $C$.

If there was a $B$ that was at some time a $C$, and then he said (9), then what he said would be true, regardless of the time and circumstances.
{His claim is that (9) has a minimum reading, viz. that something that at some time is a $B$ is at some time a $C$. This minimum reading allegedly will always follow from any reading of ‘Every $B$ is a $C$’.}
And if it is true together with this that every $B$

is not at any time a $C$, then in that case this universally quantified negative absolute is not the contradictory of the existentially quantified affirmative proposition (9). But if one falsely says (9), then the thing that one could say truly and not falsely is precisely that (10)

None [of the things that are at some time Bs] are Cs at any time.

If one of these contradictions of this existential proposition (9) is this negative proposition (10), and it was already clear from the form of (10) that it converts to a proposition in the same form, which is incompatible with (9) however it is taken, and a fortiori incompatible with the universally quantified proposition (5). So therefore this proof is sound.

[2.2.4] But if the absolute proposition (9) is taken in the/a narrower meaning, (10) is not

If [the] one of the above is not the absolute proposition (9) but the existential proposition (10) could be false, not because (9) is false, but because its contradictory: (10) could be false, not because (9) is false, but because the predication [in (9)]
is permanently true. In that case (10) would be false, but the proposition taken to be its contradictory negation in the standard treatment doesn’t have to be true

so as to get an absurdity.

So it’s clear from this that the First Teaching had no intention of proceeding
From this choice of interpretation of an absolute proposition. But if the absolute is taken in the narrower sense, {Here ‘the narrower sense’ as if just one. }

then its convertibility is clear in the light of the ecthesis that we will indicate later.

And now we say: the contradictory negation of

And now we say: the contradictory negation of

and the negated proposition which signifies permanence [of the predicate].

These are fundamental points that you will have to remember for yourself, because people don’t bother with them.

We say: It’s possible to prove this conversion both by instantiation and by ecthesis. The former runs as follows.

{‘This conversion’ is at 88.9f.}
If every \( C \) is a \( B \), then let one of the things fitting the description \( C \) be specified; let it be \( d \). Then

\{NB Ecthesis using an individual.\}

\[
\text{If } d \text{ is a } C \text{ and it is a } B \text{, then the thing fitting the description } B, \text{ namely } d, \text{ fits the description } C. \text{ And likewise}
\]

\{NB An example of } p \land q \text{ being taken as trivially equivalent to } q \land p. \text{ Also the step from } \phi(d) \text{ to } \exists x \phi(x) \text{ is obviously intended but not mentioned. }\}

It’s possible to prove [the conversion] by absurdity, using a syllogism which the excellent later [philosopher] made, thus. If it is not the case that

\{NB The proof of the conversion here is a doublet of 81.1–4 above.\}

some \( B \) is a \( C \), then no \( B \) is a \( C \); this is a negative absolute proposition with the meaning ‘for as long as its essence continues to fit the description

\{NB The demonstration is only claimed for one kind of negative absolute.\}

\{NB Syllogism with two terms equal, described as ‘natural’. \}

Street’s choice of ‘No \( C \) is a \( C \)’ is probably the best reading. The one with \( D \) is impossible.

This is absurd.

\{No absurdity yet; ‘No \( C \) is a \( C \)’ just entails there are no \( C \)s. This does
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contradict 'Every $C$ is a $B$ because of the existential assumption, but both the excellent philosopher and Ibn Sinā should have mentioned this."

وأَمَّا أَنَّ هَذَا الْعَكْسُ مَا حَالَهُ، فَنَقْوِلُ: حَالَهُ أٌيْضاً الإِلَاثَالِ عَالِمٗ، فَلَا يَنْزِمُ إِلَّا [2.2.7] What form does this converse take? We answer that it is broad absolute. When

كانَ كُلّ كاتِب مَستَبَقٔا، أَيْ وقَتًا مَا، يَجِبُ أَنْ يَكونَ بَعْضٌ مَا هَوَّ مَتِيقَتُ هوَ

(11) Every writer is a watcher, i.e. at some time.

it doesn’t have to follow that

(12) Some watcher is a writer for as long as his essence is satisfied (or even for as long as he watches).

In some topics such a converse has to be true, for example

Every human is an animal, i.e. as long as it continues to exist, and permanently.

and

Some animal is a human, i.e. so long as its essence continues to be satisfied.

These two are both included under broad absolute.

{NB But here it is clear that ‘broad absolute’ includes different sentence forms? }

[2.2.8] Someone might well say:

Given that

Every writer watches.

it follows that some watcher is a writer for as long as his essence continues to be satisfied.

The argument is that in the sentence
The writer while he is a writer is one of the watchers.

The writer himself while he is a writer is a writer so long as his essence continues to be satisfied, and he is himself one of the subjects for the predicate ‘watching’. So something that fits the description ‘watcher’ is a writer for as long as his essence continues to be satisfied. Hence in this case the proposition does convert to a necessary one.

We say in answer to this: In the first place, we are just explaining, and this is not a debate that we are personally involved in. So we say: The fact that some watching person is a writer for so long as his essence continues to be satisfied doesn’t prevent there being other watching people who are not like that. With existentially quantified propositions, the truth of a denial doesn’t prevent the truth of [the corresponding] affirmation, {The corresponding affirmation is got by swapping the quality without changing the quantifier.}
and in just the same way the truth of ‘Some $B$ is a $C$ with necessity’ doesn’t prevent the truth of the proposition ‘Some $B$ is a $C$ but without necessity’. Thus some bodies

أبيض بالضرورة، وبعضها أبيض لا بالضرورة. فإذا كان بعض ما هو موضوع are white necessarily, and some are white but not necessarily. So if something of which ‘watching’ is true

الشرط ليس بالضرورة. is a writer with necessity when we adopt the condition ‘while he is a writer’, [it can still be true that] without the condition the same holds

بutf not with necessity. 91.15

[2.2.10] Also if we compare this argument with the truth of the matter, we are under no obligation to concede that 91.15

الكاتب من حيث هو كاتب يوصف بالضرورة. فإن ذات الكاتب بشرط أن the writer, while he is a writer, fits the description ‘watching’. The essence of the writer under the condition that

يؤخذ كاتبا فقط لا يوصف بالضرورة. فإن الشرط هو أن يكون كاتبا فقط he is taken as just a writer doesn’t fit the description ‘watching’. The condition is just that he is a writer

{NB At this point he shifts to a different reading of min ْیَحْتُ، viz. from ‘$C$ is a $B$ while it is a $C$’ to ‘$C$ is a $B$ as part of what it is for it to be a $C$’.}
without any addition. If a person is just a writer, how could he also be a watcher? He would be just a writer who is not just a writer.

Rather, when ‘writer’ is taken absolutely, regardless of how it fits the description ‘writer’, it’s possible that he does fit the description ‘watcher’, regardless of how, but it will not be with necessity. When things are taken

By contrast, if a writer is just a writer, and we take ‘writer’ absolutely, then it’s possible that he also is a watcher, regardless of how. And always the term from

\{NB Here a \textit{min haytu} is described as a condition which strips off the accidents. \}

\{More precisely, we have a subject of the form ‘X \textit{min haytu} Y’; the properties that can truly be ascribed to X \textit{min haytu} Y are those that X has which are the form allowed by Y. Note for example that ‘A and B’ can be true of X \textit{min haytu} Y without either A or B being true of it. \}

their definitions and what is in their definitions.

Also you are going to learn that the phrase

(17) while he is a writer

is not a part of the subject at all in sentences like

(18) The writer while he is a writer watches.
Rather it is a part of the predicate. And we will use this to prove to you that the doubt can be resolved in a second way.

We return to what we said before: A converse of an absolute proposition of either kind doesn’t have to be anything but broad absolute. The reason is

�َذَّإِنْ أَخْذَتُ الْمَلْعَةُ حَاصَّةً، وَجَدَتْهَا قَدْ تَنْعَمَسْ حَاصَّةً، وَقَدْ تَنْعَمَسَ

that if you take a narrow-absolute proposition, you find that it could convert either to a narrow-absolute proposition or

{NB Here it seems he confuses rules for conversion with facts about matter. }

ضروريّةً، مثالٌ أَوَّلٌ: كُلّ كَاتِبٌ مَسْتَيْقَظُ، وعَكْسُهُ: بَعْضٌ ماٰ هُو مُسْتَيْقَظُ
to a necessary proposition. An example of the first case is

(19) Every writer watches.

which converts to

(20) Some watcher is a writer (which is not with necessity).

كَاتِبٌ لَا بَالَدِرَوَةً. ومَثَالٌ ثانِيٌ: كُلّ إِنسانٌ مَتْنَقَسٌ لَا بَالَدِرَوَةً، وعَكْسُهُ: إِنَّ

An example of the second is:

(21) Every human breathes (which is not with necessity).

converts to

بعضٌ مَا يَنْتَقَسُ إِنسانٌ بَالَدِرَوَةً.

(22) Something that breathes is a human (which is with necessity).

وَإِذْ عَرَفْتُ حَالٌ الْكَلِّيّ الْمُوَجِّبِ المَطلقِ;

[2.2.10] Now that you know the facts about universally quantified affirmative absolute propositions,

فَكَذَلِكَ فَإِعْلَمْ حَالٌ الْجِزْئِيّ الْمُوَجِّبِ، وَأَنَّهُ يَنْتَقَسُ مَاٰ هُو جَزِئٌ مُوجِبًا وَالبَيَانِ
you should likewise be aware of the facts about existentially quantified affirmative propositions, namely that they convert to the same form as themselves, existentially quantified affirmative. The proof is the same proof, which is a good reason not to spend more time on it.
I have already mentioned examples in which we contradict what we said about the conversion of a universally quantified affirmative proposition to an existentially quantified proposition. 

Does he mean the discussion at 90.15ff?

There is no need for us to count all of them, but rather one should mention what we said in the answer about the terms that I mentioned as intended to show that a negative universally quantified proposition need not convert. The nub of the matter is that you have to consider the whole

What did he mention? The answer or the terms? I would have expected 'awradtuhu in the first case and 'awradtuhā in the second. Also is it the terms, or is it definitions (which he did mention a propos of whether a condition could limit to definitional properties)?

الموضوع وجملة المحمول فتعكمه كما هو، لا تنقص جزءا مما فيه ولا تغييه، أعني subject and the whole predicate, so that when you swap around you leave each of these exactly as it was before, and you don’t remove or alter any of its parts. I mean that

if you remove part of a term, then even if you keep the original properties that the proposition had before the conversion, intending to keep

الإيجاب والسلب مع نقصانه لم تعد الحكم ثابتًا. فإنا إذا حفظت المحمول كما it as an affirmation or a negation at the same time as you remove part of it, the outcome is not secure. If you keep the predicate just as it was, 

كان والموضوع كما كان وعكمت لم تغلط ولم تغفو. and the subject just as it was, but you swap them around, you won’t have made a mistake and you won’t have deceived anybody.
[2.2.12] As for negative existentially quantified propositions, they don’t convert. Thus when not every animal is human, or not every human is a writer, it doesn’t have to be the case that that not every human is an animal, or that not every writer is a human.

[2.2.13] There another species of conversion that we have to examine, namely the one called contradictory conversion. In this one takes the contradictory negation of the predicate and puts it as subject, while the contradictory negation of the subject is put as predicate. So we say: when

\[(23) \text{Every } C \text{ is a } B.\]

it follows from this that

\[(24) \text{Everything that is not a } B \text{ is not a } C.\]

\{NB Clearly here the subject doesn’t include the quantifier.\}

\[\text{بـليـس } ج، \text{ وإلا فليـكون بعض ما ليـس } B \text{ ليس } ج، \text{ فهو } ج. \text{ فبعـض ما ليس}
\]

For otherwise something that is not a \(B\) is not not a \(C\), so it is a \(C\). So

\[(25) \text{Something that is not a } B \text{ is a } C.\]

\{NB laysa laysa cancels. \}

\[\text{بـهوـ ج، يتعـكس فبعض ما هو } ج \text{ هو ما ليس } B، \text{ وقـلنا } ج. \text{ وإذا}
\]

which converts to give

\[(26) \text{Something that is a } C \text{ is something that is not a } B.\]
But we said that every $C$ is a $B$. Also

\[
\text{قيلنا: كل ما ليس ب ليس ج، صمم كل ج ب، وإلا فليس ب ليس كل ج ب.}
\]

if

(27) Everything that is not a $B$ is not a $C$.

it is true that every $C$ is a $B$. For otherwise it is true that not every $C$ is a $B$.

\[
\text{فبكون بعض ما هو ج مسلوبا عنه ب، فذلك البعض ج وليس ب.}
\]

Then some $C$ has $B$ denied of it. But then by (27) this some $C$ is not a $C$.

[2.2.13] But when we say:

(28) No $C$ is a $B$. 

it doesn’t follow that nothing that is not a $B$ is not a $C$. Thus when you say

\( (29) \) No human is a stone.

it doesn’t follow either that nothing that is not a stone is not a human, or that nothing that is not a stone is a human. But it does follow that something that is not a stone is a human. For otherwise nothing that is not

\{NB Surely it doesn’t follow without the further assumption that there are humans. This illustrates the dangers of trying to prove general laws by particular examples. \}

is a stone is a human, so that no human is not a stone, while (29) said that nobody

\( \text{is a stone. And when we say:} \)

\( (30) \) Some $C$ is a $B$.

it follows that something that is not a $B$ is not a $C$. In fact

\{NB Here he quantifies also over nonexistent things. Also contrary to what Ibn Sinā says, this seems not to be a deduction from (94.5) at all, but a use of default assumptions about universals in general. \}
a $B$ is not a $C$. Also it follows from the sentence

(31) Not every $C$ is a $B$.

that not everything that is not a $B$ is not a $C$.

For otherwise everything that is not a $B$ is not a $C$, so everything that is a $C$ is a $B$. But there are things here that we need to take another squint at,

والأولى أن نجعل مواضعها كتاب اللواحق.

and the best place for us to do that is the book of appendices.