

PHYA PA CHOS KYI SENG GE ON ARGUMENTATION BY  
CONSEQUENCE (*THAL 'GYUR*) (2): THE ANALYSIS OF  
THE CORRESPONDENCE BETWEEN A CONSEQUENCE AND  
ITS REVERSE FORM AND THE THIRTEENFOLD  
TYPOLOGY OF CONSEQUENCES

PASCALE HUGON

### Introduction

This paper is part of a series of articles on the theory of argumentation proposed by the Tibetan thinker Phya pa Chos kyi seng ge (1109–1169),<sup>1</sup> and in particular on his views on argumentation “by consequence” (Tib. *thal 'gyur/thal ba*).<sup>2</sup> In Hugon 2011 [2012], I provided a general introduction to Phya pa’s theory of argumentation, with a focus on autonomous arguments (Tib. *rang rgyud*). An outline of Phya pa’s theory of argumentation by consequence was offered in Hugon 2013. This previous paper examined the nature of consequences, their function as means of proof and/or refutation, and the form of consequence statements prescribed by Phya pa (see below §1.2 for a summary of the main points). I elaborate on this overview in the present paper by going into the details of the sections of Phya pa’s epistemological works – his epistemological summary (*Mun sel*) and his commentary on Dharmakīrti’s *Pramāṇaviniścaya* (*'Od zer*) – that deal with the identification and definition of various kinds of consequences: fallacious consequences, genuine consequences and, among the latter, proving consequences and refuting consequences.<sup>3</sup>

<sup>1</sup> A compilation of the information currently available on Phya pa, his life and his works, can be accessed at [http://www.ikga.oeaw.ac.at/Online\\_Texte](http://www.ikga.oeaw.ac.at/Online_Texte).

<sup>2</sup> Phya pa uses both terms. *Thal ba* prevails in the *'Od zer*, *thal 'gyur* in the *Mun sel*. I translate both with the neutral term “consequence.” On the use of the expression *reductio ad absurdum* as an equivalent for *prasaṅga* and *thal 'gyur*, see Hugon 2013: 696–700.

<sup>3</sup> Two other papers address more specific issues. In Hugon 2015b, I examine Phya pa’s typology of arguments by consequences based on the type of the logical reason involved.

I highlight in particular the existence of two distinct frameworks in Phya pa's texts. In the first, Phya pa exclusively deals with consequences that fulfill a probative function equivalent to that of direct proofs. In the second, more extended framework, he also includes consequences that fail to prove the proponent's thesis but still succeed in refuting the opponent.

In the first framework, Phya pa's focus is on establishing the criteria that define "proving consequences." He does so through an analysis of the correspondence between selected features of a consequence and of its reverse form. He identifies thereby three features of the consequence that must be verified in order for the reverse form to fulfill the necessary conditions for being a correct direct proof.

In the second framework, Phya pa's analysis of these three features of consequences takes into account a broader range of options. Phya pa considers whether or not these features are accepted by the addressee of the argument, and whether or not this acceptance is supported by a valid cognition. These options generate a thirteenfold typology of consequences.

In my examination of the passages relevant to each of these two frameworks, I pay a special attention to Phya pa's treatment of problematic cases, notably consequences involving an unestablished subject or a non-instantiated logical reason. These cases generate, in the first framework, exceptions to the correspondence between the features being analyzed. The same issues lead, in the second framework, to further subdivisions in the thirteenfold typology.

My discussion of Phya pa's thirteenfold typology also singles out Phya pa's position regarding consequences with a true conclusion (§4). I compare Phya pa's view that a true conclusion cannot be eliminated

A follow-up article will take up Sa skya Paṇḍita's version of this typology. In Hugon (forthcoming), I deal with Phya pa's solution to the problems that arise in the case of arguments by consequence whose subject is unestablished. Further parts of my study on the topic of consequences will address Phya pa's interpretation of the *prasaṅga* passage of Dharmakīrti's *Pramāṇaviniścaya*, and his criticism, in the Madhyamaka context, of Candrakīrti's followers who want to limit their arguments pertaining to emptiness to the use of consequences that only have a refuting function. An edition and translation of the excursus on arguments by consequence by Phya pa's predecessor rNgog Blo ldan shes rab (1059–1109) is also in preparation.

whatsoever with the different positions adopted by some of his predecessors and successors.

My examination of the similar case of consequences with a true premise (§5) sheds light on scenarios that are omitted in Phya pa's seemingly exhaustive typology. Contrasting the case of the true premises with that of the true conclusion, I show that Phya pa holds the premises of an argument by consequence to be rejected by default unless they are actively subscribed to by the opponent, whereas he holds the conclusion to be accepted by default unless the opponent actively eliminates it. I discuss the impact that these "defaults" have in the practice of debate and the potential strategies available to the proponent, upon whom the burden of presenting a genuine consequence statement is incumbent.

In the last part of the paper (§6), I reflect on the co-existence of the two frameworks in Phya pa's discussion of consequences and on the ambiguity generated by the alternative divisions of consequences that they propose. I argue that the juxtaposition of the two frameworks in Phya pa's texts, as well as the way exceptions and special cases are dealt with, reflects a gradual process of composition in which an earlier model was updated and integrated rather than refuted and replaced.

## 1. Phya pa on argumentation by consequence

### 1.1. *Structure of the presentation of arguments by consequence in Phya pa's epistemological works*

Phya pa's discussion of arguments by consequence is carried out in a parallel manner in his two epistemological works in the respective chapters on inference-for-others.<sup>4</sup>

<sup>4</sup> See Hugon 2013: 675 for the place of this discussion in the overall hierarchy of the *Mun sel*. In the *'Od zer*, the excursus precedes Phya pa's explanation of the *prasaṅga* passage of the *Pramānaviścaya*.

Table 1:  
Table of contents of Phya pa's discussion of consequences in the  
*Mun sel* and the 'Od zer

| <i>Mun sel</i> 83a1–95b5   | 'Od zer 145a2–149a5  |
|--|--|
| 1. Correspondence regarding what is put forward as a proving consequence<br>1.1 Correspondence pertaining to the qualification of the subject<br>1.2 Correspondence pertaining to the pervasion<br>1.3 Summing up these two      | 1. Correspondence between the consequence statement and the direct proof it induces<br>1.1 Pertaining to the qualification of the subject<br>1.2 Pertaining to the pervasion   |
| 2. Division of the thirteen consequence formulas into [genuine] consequences and fallacious consequences   | 2. Division of the thirteen consequence formulas into [genuine] consequences and fallacious [consequences]   |
| 3. Division of the six genuine consequences into probans-inducing and non-probans-inducing   | 3. Division of the six [genuine] consequences into probans-inducing and non-probans-inducing   |
| 4. Considering for eighteen formulas whether they can constitute a consequence or not (cf. 'Od zer 6.1)  |  |
| 5. Definition of a consequence<br>5.1 Generic definiens<br>5.1.1 Refutation of the non-acceptance of a generic definiens<br>5.1.2 Actual generic definiens<br>5.1.3 It does not fail to pervade<br>5.1.4 It is not overinclusive | 4. Definition of a consequence statement<br>4.1 Generic definiens<br>4.1.1 Actual definiens<br>4.1.2 It does not fail to pervade<br>4.1.3 It is not overinclusive  |
| 5.2 Definiens of non-probans-inducing consequences   | 4.2 Definiens of non-probans-inducing consequences   |
| 5.3 Definiens of probans-inducing consequences<br>5.3.1 Questions<br>5.3.2 Answers<br>5.3.21 How a consequence functions<br>5.3.22 Definition of a [probans-inducing] consequence (cf. 'Od zer 4.3)                              | 4.3 Definiens of probans-inducing consequences<br>4.3.1 Opponent's position<br>4.3.2 Refutation<br>4.3.3 Our own position<br>4.3.4 Rejecting the objection of failure to pervade   |
|  | 5. How a [consequence] induces a direct proof  |
|  | 6. Division of consequence statements<br>6.1 Division of the eighteen formulas into those that are fit to constitute a consequence and those that are unfit to constitute a consequence (cf. <i>Mun sel</i> 4)<br>6.2 Division of the statements of [consequence] formulas |

In addition to the similar structure of the presentation in the two texts, the contents are also comparable, although some topics are more developed in one text than in the other. Notably, the discussion on the definiens of probans-inducing consequences in *Mun sel* (5.3 in Table 1) is significantly more expanded than in *'Od zer* (4.3). It is also remarkable that in spite of the obvious parallelism in the hierarchy and contents of the two texts, the formulations are rarely literally identical and, in most cases, the examples on which technical discussions are based are different. In other words, Phya pa is not re-using his own textual material literally in this context.

The present paper focuses on sections 1–3 of *Mun sel* and *'Od zer* (see Table 1)(*Mun sel* 87a4–95b5; *'Od zer* 146a9–148a4), supplemented by pertinent elements from the sections in which Phya pa gives definitions, i.e., *Mun sel* 5.1–5.3 and *'Od zer* 4.1–4.3.<sup>5</sup>

## 1.2. Background notions regarding Phya pa's views on argumentation

Before looking at the details of the passages singled out above, it will be useful to review some notions about Phya pa's views on argumentation.<sup>6</sup>

- Direct proofs and consequences are statements presented by a proponent to an opponent in the context of a debate.
- A proponent who wishes to prove a thesis may, in most circumstances, choose freely between the two kinds of statements.<sup>7</sup> For instance, in order to prove that there is fire on a pass, the proponent can use the direct proof statement:

Where there is smoke, there is fire, like in the kitchen; there is smoke on the pass, hence...

<sup>5</sup> In the present paper, I preserve, in all the citations from these texts and other early Tibetan epistemological treatises that are based on manuscripts, the orthographic specificities of the texts in these manuscripts. This includes the palatalization of *ma* by *ya btags* (e.g., *myi*, *myed*, *dmyigs*, etc.), the use of superabundant *'a rjes 'jug* (e.g., *dbye'*, *gnyi'*, etc.), variation from the classical rules for the use of the particle *pa* or *ba* after certain consonants, etc.

<sup>6</sup> These are dealt with in more details in Hugon 2011 [2012] and 2013. The main points are listed also in the introduction of Hugon 2015b.

<sup>7</sup> See Hugon 2013: 679–680 and §2.3.1 below for the exceptions.

or the consequence statement:

Where there is no fire there is no smoke, like in the river; there is (according to you) no fire on the pass, hence...

These examples illustrate the standard two-member form of proof statements and consequence statements:<sup>8</sup> In the case of the direct proof, the formula indicates the pervasion of the logical reason by the property to be proven (together with an example) and the qualification of the subject by the logical reason. In the case of the consequence, the formula indicates the pervasion of the logical reason by the derived property (together with an example) and the qualification of the subject by the logical reason which is accepted by the opponent.

The expression “hence” (which reflects the Tibetan particle *pas/bas*) suggests that a conclusion must be derived from the premises expressed by the two members of the statement: in our example, the conclusion “there is fire on the pass” for the direct proof, the conclusion “there is no smoke on the pass” for the consequence. But the conclusion itself must not be stated.<sup>9</sup> The two kinds of statements are not distinguished by their syntax or terminology. The addressee must rely on the context of the debate to determine whether the proponent’s statement is intended to be a consequence statement or a proof statement.<sup>10</sup>

- A proof statement directly indicates the root logical reason (e.g., “smoke”) and its characteristics (pervasion by the property to be proven and being a property of the subject). A consequence statement directly indicates the logical reason of the consequence (e.g., “absence of fire”) and its characteristics, and indirectly indicates the root logical reason and its characteristics. The addressee must indeed derive the conclusion

<sup>8</sup> The statements can differ from the two-member standard form depending on what the opponent has or has not ascertained, and remembers or does not remember, at the time of the debate. See Hugon 2011 [2012]: 106–121 on the form of proof statements and Hugon 2013: 687–696 on the form of consequence statements.

<sup>9</sup> The conclusion in the case of the direct proof is the thesis, or probandum (*sgrub bya*). In the case of the consequence, it is termed *dam bca*, which I translate “derived conclusion.” See Hugon 2011 [2012]: 109 and Hugon 2013: 693–695 on Phya pa’s prescription that the conclusion must not be mentioned.

<sup>10</sup> See Hugon 2013: 694–695 on this point.

of the consequence (e.g., “there is no smoke on the pass”) and invalidate this conclusion (for instance, via the perception of smoke) in order to ascertain the characteristics of the root logical reason.<sup>11</sup>

- Proof and consequence statements must be distinguished from meta-linguistic references to proof and consequence statements.<sup>12</sup> The latter indicate the qualification of the subject by the logical reason and the conclusion that follows. Thus, for the previous example, the direct proof can be referred to in the form:

Since there is smoke on the pass, there is fire there,

and the consequence statement in the form:

Because there is no fire on the pass, it follows that there is no smoke there.

These formulas have the advantage of involving syntactic markers that allow a clear distinction between a reference to a consequence statement and a reference to a direct proof. Namely, the conclusion in a reference to a consequence involves the use of the verb *thal* (“it follows that”). Instead, in a reference to a direct proof, the particle *te/de/ste* follows the statement of the conclusion when the conclusion is stated before the reason; no particle is used if the conclusion is stated after the reason.

- The “direct proof” (Tib. *rang rgyud*, Skt. *svatantra*)<sup>13</sup> is also called the “reverse form” (Tib. *bzlog pa*, Skt. *viparyaya*) of the consequence, and is said to be “induced” (*'phen pa*) by the consequence in the case of an argument by consequence. Technically speaking, one can always construct the reverse form of a consequence. In our example, the reverse form of the consequence is a correct direct proof. But not every reverse form is a correct direct proof. A consequence statement that does not induce a correct direct proof is not a “proving consequence.” The present paper examines in what way *Phya pa* alternatively identifies such statements as being exclusively fallacious, or as being either fallacious

<sup>11</sup> See Hugon 2013: 688–690.

<sup>12</sup> See Hugon 2013: 675–676.

<sup>13</sup> As explained in Hugon 2013: 678, I adopt the rendering “direct proof” rather than “autonomous [proof]” to reflect the distinction made by *Phya pa* between the direct indication of the characteristics of the root logical reason in such a proof statement and their indirect indication in a consequence statement.

Table 2: Properties and features of consequences and their reverse forms

|  |       | <b>Consequence</b>    |        | <b>Reverse form</b>                      |
|--|-------|-----------------------|--------|--|
| Subject  |       | S                     |        | S  |
| Logical reason   |       | P                     |        | notQ                                     |
| Derived property/<br>Property to be proven                             |       | Q                     |        | notP                                     |
| Qualification of the<br>subject by the logical<br>reason <sup>14</sup> | (I)   | S is P                | (I')   | S is notQ                                |
| Pervasion  | (II)  | P is pervaded<br>by Q | (II')  | notQ is pervaded by notP                 |
| Positive entailment  | (IIa) | P entails Q           | (IIa') | notQ entails notP                        |
| Negative entailment <sup>15</sup>                                      | (IIb) | notQ entails<br>notP  | (IIb') | not-notP entails not-notQ<br>P entails Q |
| Derived conclusion/<br>Thesis  |       | S is Q                |        | S is notP                                |
| Elimination of the<br>conclusion <sup>16</sup>                         | (III) | not (S is Q)          |        |  |

statements or genuine consequences that do not prove anything, but are proper means of refutation.

- For the sake of analysis, I represent as follows the generic form of references to consequence statements and to their reverse form, direct proof statements:

<sup>14</sup> In the section on consequences, the “qualification of the subject by the logical reason” is referred to by Phya pa in terms of the “nature of the logical reason” (*rtags kyi ngo bo*) or simply “the logical reason” (*rtags*), for both the consequence and the reverse form, rather than by using the expression “being a property of the subject” (*phyogs chos*).

<sup>15</sup> Phya pa usually expresses the negative entailment in terms of *gzhi la bkag pa 'i ldog pa*. A passage in the *'Od zer* suggests that the dissimilar instances are the “basis” (*gzhi*) referred to in this expression. See *'Od zer* 90b3: *myi mthun phyogs kyi gzhi la rtags bkag pa ma yin pa 'i phyir gzhi la bkag pa 'i ldog khyab ma yin te*. Hence the expression would be a shortcut for “negative entailment negating the presence of the reason in the locus of dissimilar instances.”

<sup>16</sup> The derived conclusion is intended by the proponent to be something unacceptable for the opponent (i.e., an “absurd conclusion”). The opponent is thus expected to “eliminate the conclusion,” namely, to negate it. The expression “elimination of the conclusion”

Consequence: Because S is qualified by P, it follows that it is qualified by Q.

Reverse form: Since S is qualified by notQ, it is qualified by notP.

The mode of qualification of the subject by the logical reason and the derived property can be existential (“there is P for S,” for instance, “there is fire on the ocean”) or essential (“S is P,” for instance “sound is permanent”). For simplicity’s sake, I use in all cases the expression “S is P” rather than “S is qualified by P.”

In the examples in Tibetan, the properties noted here with the letters P and Q can be properties that are expressed positively (for instance “presence of fire,” “being produced”) or properties that are expressed negatively (for example, “absence of fire,” “void of production”). With the notation “notP” (resp. “notQ”), I refer to a property that corresponds to the negation of P (resp. of Q). The Tibetan formulation sometimes makes this negation explicit. For instance, if P is the property “impermanent,” the property notP can be expressed in terms of “not impermanent,” or “void of impermanence.” But a positive expression is also used, especially when P represents a property that was expressed negatively. For instance, if P is the property “absence of fire,” notP will be expressed as “presence of fire” rather than “void of absence of fire.”

I list in Table 2 the relevant properties and features of consequences and their reverse forms, together with my notation for them. The roman numerals (I, I', etc.) are appended to the features that are related to Phya pa’s discussion of “correspondence.”

## **2. The correspondence between features of a proving consequence and features of its reverse form, the direct proof**

### *2.1. Relevant features of the consequence and of the direct proof*

In the first section of Phya pa’s discussion (No. 1 in Table 1), which I will refer to as “the section on correspondence,” Phya pa considers arguments put forward as proving consequences, namely, arguments by which

(*dam bca' la bsal*) echoes the opposite notion of “absence of opposition (*ma bsal ba*, Skt. *anirākṛta*) of the thesis” in the context of direct proofs.

a proponent aims at proving a thesis “S is notP.”<sup>17</sup> He discusses the “correspondence” (*rtogs pa gnad cig pa*) between features of the consequence and features of its reverse form, which the proponent intends to be a correct direct proof. That is, he establishes under which circumstances these features are jointly verified or jointly not verified. The relevant features are thus here those that warrant the validity of the reverse form as a correct direct proof.

Following standard Dharmakīrtian logic, this means that the logical reason of the direct proof (notQ) must satisfy the three characteristics of a correct logical reason (*tshul gsum*, Skt. *trairūpya*): being a property of the subject, positive entailment and negative entailment. These three characteristics are commonly reduced to two criteria that have to be established by a valid cognition (the roman numerals refer to the features of the reverse form listed in Table 2 above):

I’: The logical reason (notQ) is a property of the subject (S) (*phyogs chos*, Skt. *pakṣadharmatva*).

II’: The logical reason (notQ) is pervaded by the property to be proven (notP) (*khyab pa*, Skt. *vyāpti*).

In the chapter on inference-for-oneself, Phya pa discusses the factual and epistemic conditions for the first criterion (I’) to be established.<sup>18</sup> Among these, Phya pa singles out two conditions in the section on correspondence:

Ia’: The logical reason is indeed established for the subject.

Ib’: There is a “desire to know” (*shes ’dod*) pertaining to the subject. This means that the addressee of the argument has not yet established by a valid cognition that the subject is qualified by the property to be proven (notP), nor has refuted that it is (in the case of the proponent’s thesis being false).

Regarding the second criterion for the reverse form being a correct proof, Phya pa just mentions pervasion (II’) in the summarizing part of the section on correspondence (*Mun sel* 1.3 in Table 1). But in the

<sup>17</sup> *Mun sel* 83a2–b2: *sgrub pa’i thal ’gyur du bkod pa la rtogs pa gnad cig pa’i tshul; ’Od zer* 145a2–b4: *des ’phangs pa’i rang rgyud dang rtogs pa gnad gcig pa’i tshul.*

<sup>18</sup> See *Mun sel* 46a3–47a6 and *’Od zer* 84b6–86b4.

course of the analysis (1.2 in Table 1) he examines, rather, positive entailment (IIa') and negative entailment (IIb'). While Phya pa does not contest Dharmakīrti's claim of their equivalence (one being the contrapositive of the other), he takes into account the possibility that one can be established but not the other. In particular, the positive entailment fails to be established when the logical reason is not instantiated (*shes bya la med pa*), and the negative entailment fails to be established when the negandum is not instantiated (for details, see the APPENDIX). Phya pa asserts that a direct proof is correct as long as the positive entailment (IIa') is established, even if the negative entailment (IIb') fails to be established.<sup>19</sup>

The features that must be fulfilled in order for the reverse form to be a correct proof are thus Ia', Ib' and IIa'. Phya pa establishes the “correspondence” between these three features and three features of the consequence: (III) the elimination of the conclusion, (I) the qualification of the subject by the logical reason (according to the opponent), and (IIb) the negative entailment. Their “correspondence” means that the features in each of the pairs (III, Ia'), (I, Ib'), (IIb, IIa') are either both verified or both not verified.

In the course of the analysis, Phya pa also establishes the correspondence between features that are not directly relevant to the validity of the reverse form: the correspondence between the positive entailment of the consequence (IIa) and the negative entailment of the reverse form (IIb') and between “the absence of concomitance of the logical reason with dissimilar instances” – a weaker form of the negative entailment – in both the consequence and the reverse form (IIc, IIc').<sup>20</sup>

<sup>19</sup> Note that this point does not stand out in Phya pa's definition of a correct logical reason in the chapter on inference-for-oneself, which, on the contrary, highlights negative entailment as the necessary condition. See *Mun sel* 60a7–8: *rtsod gzhi la mthong pa'i phyogs chos* [em. *phyogs chos* : Ms *phyogs*] *dang mi mthun phyogs la 'jug mi srid par nges pa'i ldog pa gnyis kho na rtags kyi mtshan nyid yin no* /

<sup>20</sup> In the 'Od zer Phya pa only analyzes the correspondence for the positive and the negative entailments. In the *Mun sel*, he first analyzes the “elimination of the concomitance of the logical reason with dissimilar instances” (IIc, IIc'), then, when this feature is verified, he considers whether the logical reason is instantiated or not, which corresponds to 'Od zer's analysis of the positive and negative entailments.

Table 3: Corresponding features of a consequence and its reverse form

The features that must be verified for the reverse form to be a correct direct proof, and hence for the consequence to be a “proving consequence,” are indicated in bold.

| Consequence |   | Reverse form |   |
|-------------|---|--------------|---|
| (III)       | <b>not (S is Q)</b><br>(elimination of the conclusion by a valid cognition)   | (Ia')        | <b>S is notQ</b><br>(qualification of the subject by the logical reason)  |
| (I)         | <b>(S is P) accepted</b><br>(qualification of the subject by the logical reason accepted by the opponent [based on an erroneous cognition]) | (Ib')        | <b>(S is notP) not yet established by a valid cognition</b><br>(desire to know whether S is actually P or notP) |
| (II)        | P pervaded by Q<br>(pervasion)  | (II')        | notQ pervaded by notP<br>(pervasion)  |
| (IIb)       | <b>notQ entails notP</b><br>(negative entailment)   | (IIa')       | <b>notQ entails notP</b><br>(positive entailment)   |
| (IIa)       | P entails Q<br>(positive entailment)  | (IIb')       | not-notP entails<br>not-notQ = P entails Q<br>(negative entailment)   |
| (IIc)       | no concomitance of P with notQ  | (IIc')       | no concomitance of notQ with<br>not-notP = no concomitance of notQ with P                                       |

Phya pa discusses consequences and their reverse forms on the basis of examples rather than abstract formulas. This may be the reason why he seems to have found the correspondence between certain features of these two forms so fascinating and discusses it in such detail. When looking at their generic form, the corresponding points (the features that are either both verified or both not verified) highlighted by Phya pa in his inquiry stand out clearly, as do the potential exceptions, to which I come back below in §2.3.

## 2.2. Distinction between genuine and fallacious consequences

When all the relevant features, i.e., those of the pairs (III, Ia'), (I, Ib') and (IIb, IIa'), are verified, the reverse form is a correct direct proof and the consequence qualifies as a “genuine consequence” (*thal ba rnal ma*), or more precisely, as a “genuine proving consequence” (*bsgrub pa'i thal*

'gyur rnal ma). In the summarizing section of the *Mun sel* (1.3 in Table 1), Phya pa refers to the six verified features as the three “qualities” (*yon tan*) of the consequence and the three “qualities” of the direct proof.<sup>21</sup> The “genuine” character of the consequence is also linked with the impossibility for the opponent to retort. Namely, since feature (I) is verified, he cannot retort “the logical reason is not established.” Since feature (II) is verified, he cannot retort “the pervasion is not established.” And since feature (III) is verified, he cannot retort “the conclusion is accepted.”

Conversely, if the features of any pair are not verified, they generate “faults” (*skyon*) that disqualify the reverse form from being a correct direct proof. What is the status of the consequence in such a case? In the section on correspondence, Phya pa classifies such consequences as “fallacious” (*thal 'gyur ltar snang/thal ba ltar snang*). The opponent may retort with one of the three abovementioned objections.

### 2.3. Exceptions

The summarizing part of the section on correspondence in the *Mun sel* (1.3 in Table 1) takes up a standard and unproblematic example to illustrate the corresponding features (I, Ib'), (II, II'), and (III, Ia'), namely, the inference of fire from smoke:

| Consequence  | Direct proof  |
|--|---|
| Because there is no fire on the pass, it follows that there is no smoke there. | Since there is smoke on the pass, there is fire there.  |
| (I) The opponent accepts that there is no fire on the pass.                    | (Ib') The opponent has not yet established by a valid cognition that there is fire on the pass. |
| (II) Smoke is pervaded by fire.  | (II') The absence of fire is pervaded by the absence of smoke.                                  |
| (III) It is not the case that there is no smoke on the pass.                   | (Ia') There is smoke on the pass.   |

<sup>21</sup> Note that in this summarizing section, Phya pa refers to the pair (II, II') for pervasion, not to the more specific pair (IIb, IIa').

In this summarizing section, Phya pa does not pick up on potential failures in the correspondence between these features. But he acknowledges exceptions in the course of the analysis of correspondence, albeit not all that are conceivable.

### 2.3.1. Failure of correspondence between “acceptance of the logical reason” (I) and “desire to know” (Ib’)

In Phya pa’s analysis, the correspondence between the opponent’s acceptance of the logical reason and the desire to know is actually restricted to two scenarios, in both of which the logical reason is not in reality a property of the subject:

- (i) The opposite of the logical reason is established to qualify the subject by both debaters (for instance, the presence of fire in the kitchen when the proponent states “Because there is no fire in the kitchen...”). In such a case the opponent will not accept the logical reason (e.g., “absence of fire in the kitchen”) and there is no desire to know because the presence of fire in the kitchen (the proponent’s thesis) is already established. Neither of the two features is verified.
- (ii) The opponent accepts the logical reason of the consequence based on an erroneous cognition (e.g., he accepts that there is no fire on a pass although there is in reality fire there). He thus accepts the logical reason (e.g., when the proponent states “Because there is no fire on the pass...”), but whether fire is present (the proponent’s thesis) or absent remains unproven by a valid cognition, hence there is also a “desire to know.” Both features are verified.

Phya pa acknowledges that scenarios in which the opponent has another mental state than a valid cognition of the opposite of the logical reason (i) or than an erroneous cognition pertaining to the logical reason (ii) constitute exceptions:

[When the proponent intends to prove that there is fire on a pass where smoke is perceived by the consequence “Because there is (according to you) no fire on the pass, it follows that there is no smoke”], in the three following cases:

- (a) there is doubt (*the tsom*) with regard to [the presence of] fire,
- (b) [the presence of] fire has been determined by a presumption (*yid dpyod*),
- (c) there is indifference (*blo kha ma phyogs*) regarding [the presence of] fire,

the opponent does not accept the absence of fire, therefore the logical reason of the consequence would be unestablished. However, since [the presence of] fire is neither established nor eliminated [by a valid cognition], there is a desire to know in the reverse form of the argument [“Since there is smoke on the pass, there is fire”].

In such cases, one [should] exclusively put forward the formula of a direct proof, not the formula of a consequence.<sup>22</sup>

The proponent is thus not expected to subscribe to the false premise “S is P” when he is in doubt or does not care whether S is P or notP, or when he has the presumption that “S is notP.” However, as long as the opponent does not have a valid cognition that “S is notP,”<sup>23</sup> there still is a “desire to know.” Hence the feature Ib’ is verified, but not the feature I. In such a case, Phya pa prescribes the exclusive use of a direct proof, since the direct proof is correct whereas the consequence is not.

As noted above, Phya pa only takes into account for the analysis of correspondence between (I) and (Ib’) scenarios in which the logical reason is not established in reality for the subject. In other words, he does not consider cases where a proponent intends to prove, via a consequence statement, a thesis that is actually false. He thereby fails to point out

<sup>22</sup> *Mun sel* 83a8–9: *me la the tsom za ba dang me yid dpyod kyis nges pa dang me la blo kha ma phyogs pa gsum la phyir rgol gyis me med du khas blangs pa med pas thal ba’i rtags ma grub par ’gyur yang me la grub bsal med pas bzlog pa la shes ’dod yod pa yin te / de lta bu dag la rang rgyud kyi sbyor ba kho na<sup>a</sup> ’god kyi thal ’gyur gyi sbyor ba ’god pa ma yin no //* <sup>a</sup> The expression *kho na*, which I translate by “exclusively,” is added under the line. Although the sentence makes sense without it, I take it to represent a correction rather than an addition to the original text. The same expression occurs in the parallel passage in *’Od zer* 145a6–7: *sgra mi rtag par yid dpyod kyis nges pa dang myi rtag pa la the tsom dang ldan pa dang blo kha phyogs pa myed pa la myi rtag pas stong bas yod pas stong par thal zhes rjod na pha rol po thal ba’i rtags khas myi len yang rang rgyud la shes ’dod yod pas de dag la rang rgyud kyi ngag kho na sbyar bar bya ba yin no //* “When stating [the consequence] ‘Because [sound] is (according to you) void of impermanence, it follows that it is void of existence’ in the following cases: (a) sound is determined to be impermanent via a presumption, (b) there is doubt whether sound is impermanent or (c) there is indifference, the opponent does not accept the logical reason of the consequence, but there is a desire to know in the direct proof. Therefore in such cases one should exclusively use direct proof statements.” On this point see Hugon 2013: 679–680.

<sup>23</sup> In the scenarios considered there cannot be a valid cognition that “S is P” since this premise is false.

another conceivable exception that could occur between (I) and (Ib') when the logical reason is established in reality.

Consider for example the consequence "Because there is no fire on the ocean, it follows that there is no smoke there." If the logical reason, which is established in reality, is also determined by the opponent based on a valid cognition, the opponent would accept that the logical reason qualifies the subject (feature I). But there would be no desire to know pertaining to the subject (feature Ib'). Actually, Phya pa mentions in this section consequences with a true premise but he does not point out an exception to the correspondence between (I) and (Ib') in these cases. For the consequence "Because there is no fire on the ocean, it follow that there is no smoke," he notes that both (III), the elimination of the conclusion, and (Ia'), the establishment of the logical reason in the reverse form, fail to be established. For the consequence "Because the sound of the stream is void of being produced by effort, it follows that it is void of impermanence," he highlights the lack of positive and negative entailments in both the consequence and the reverse form. All the examples of consequences with a true first premise in this section end up being fallacious, but Phya pa does not link this fallacy with the opponent's acceptance of the true premise and the potential lack of "desire to know" that would ensue if this acceptance is based on a valid cognition.

### 2.3.2. Failure of correspondence between "pervasion" in the consequence (II) and in the reverse form (II')

The correspondence between the subordinate features of II and II' – (IIa/IIb'), (IIb/IIa'), (IIc/IIc') – counts no exception. In particular, there is no exception to the correspondence between the negative entailment of the consequence (IIb) and the positive entailment of the reverse form (IIa'), which are identified as the decisive features in the course of the analysis.

But are there exceptions to the correspondence between II and II', the general features of pervasion? Although Phya pa does not state this explicitly, II and II' would fail to correspond when a non-instantiated logical reason is involved. In the case of a non-instantiated reason, the positive entailment fails to be established. And according to Phya pa's explanation, this failure is due to the fact that there is no pervasion of a

non-instantiated reason by the property to be derived, or that this pervasion cannot be determined. In other words, the failure of feature (IIa) to obtain is linked with the failure of (II) to obtain. But, according to Phya pa, provided that the negative entailment of the consequence (IIb) is verified, the positive entailment of the reverse form (IIa') is verified. If, on this ground, the pervasion of the reverse form (II') also counts as verified, this would be a case where feature II does not obtain, but feature II' does.<sup>24</sup>

| Consequence        | Reverse form        |
|--------------------|---------------------|
| (II) not verified  | (II') verified      |
| (IIa) not verified | (IIb') not verified |
| (IIb) verified     | (IIa') verified     |

Now Phya pa holds that such a consequence is genuine and hence immune to potential retorts of the opponent. But if feature II – the pervasion – is not verified, what can prevent the opponent from retorting that “the pervasion is not established”? The trick here is that although there is no pervasion of P by Q because the logical reason (P) is not instantiated, the opponent cannot invoke this reason to contest the pervasion. This is because, by agreeing to the premise that the logical reason of the consequence qualifies the subject (i.e., that “S is P”), he admits that the logical reason (P) is instantiated. He also cannot object to the pervasion by invoking a counter-example, namely, an example of the logical reason instantiated in dissimilar instances, because negative entailment (IIb) stands as established.<sup>25</sup>

<sup>24</sup> Phya pa does not spell out the connection between the establishment of the positive entailment and that of the pervasion. But it is unlikely that he would hold the position that a correct direct proof could fail to have an established pervasion. Phya pa's successors are more explicit on this point, see below §2.4. So is the author of the *Tshad bsdus* (see below n. 28), who mentions as an exception to the correspondence between II and II' the case where IIa and IIb' are established, but not IIb and IIa'. In such a case, II is said to be established, II' not established (see *Tshad bsdus* 332,4–9).

<sup>25</sup> This question of a potential retort is not addressed in the section on correspondence, but is dealt with in the chapter on inference-for-oneself when discussing the proof of emptiness. Phya pa introduces in this context the issue of consequences with a non-instantiated reason, giving as an example the consequence “Because there is permanent smoke

2.3.3. What about the failure of correspondence between “elimination of the conclusion” (III) and “establishment of the qualification of the subject by the logical reason” (Ia’)?

The symbolic formulation used in Table 3 reveals a potential problem regarding the correspondence between III and Ia’ which may go unnoticed when using natural language. Indeed, feature III involves an external negation – not (S is Q) = “it is not the case that S is Q” – and feature Ia’ an internal negation – S is notQ = “S is qualified by the opposite of Q.” This has an important consequence: these two features do correspond when the subject is real. In such a case indeed, the subject is either qualified by Q or by notQ, so that the negation of the option “S is Q” implies the other option, namely, “S is notQ.” But a problem arises when the subject is not real. One may still be able to *negate* the attribution of a property to this subject, but the possibility of *attributing* a property to such a subject is debatable. According to Phya pa, one cannot establish the qualification of such a subject by any property, even a negative one.<sup>26</sup>

Phya pa discusses the case of the unestablished subject in the chapter on inference-for-oneself and in the context of the thirteenfold typology of consequences (see below §3.2.3.1). But it is worth noting that in the section on correspondence this issue is not raised in the *Mun sel*. In the *’Od zer*, it appears in a marginal note that I consider likely to be a later addition to the text.<sup>27</sup>

on the ocean, it follows that there is fire.” See *Mun sel* 53a2: *rjes ’gro med pa de la ’ang pha rol pos khyab pa ma grub ces brjod mi nus te / rtag pa’i du ba me med la zhugs pas mes ma khyab pa tshad mas khegs la shes bya la mi srid pas mes ma khyab par smra na mtsho’ la yod par khas len pa dang ’gal ba’i phyir ro /* “Even though there is no positive entailment, the opponent cannot say ‘pervasion not established.’ Indeed, that there is no pervasion [of permanent smoke] by fire because permanent smoke occurs where there is no fire is rejected by valid cognition; and if one says that [permanent smoke] is not pervaded by fire because it does not exist among what is knowable, it would be contradictory with accepting that it exists on the ocean.”

<sup>26</sup> See Hugon (forthcoming) for a detailed analysis of Phya pa’s position on consequences with an unestablished subject.

<sup>27</sup> The note is added to the passage establishing the joint non-establishment of III and Ia’: “When there is no elimination of the conclusion of the consequence by a valid cognition, the nature of the logical reason of the direct proof is not established. For instance if one states ‘Because sound is void of momentariness, it follows that it is void of being visible,’ since there is no elimination by a valid cognition regarding the acceptance of the

One can note that in the *Tshad bsdus*, a 12<sup>th</sup>- or 13<sup>th</sup>-century epistemological treatise of unknown authorship,<sup>28</sup> the section on correspondence, which is parallel to Phya pa's presentation, includes the exception generated by the case of the unestablished subject (*Tshad bsdus* 329–333).

#### 2.4. *A precedent for the analysis of correspondence*

There is indirect evidence that some scholars, most likely pre-dating Phya pa, developed an analysis of correspondence that did not take any exception into account. Several of Phya pa's successors who discuss "correspondence" in their own works – among them Phya pa's students gTsang nag pa brTson 'grus seng ge (?–after 1195) and mTshur ston gZhon nu seng ge (ca. 1150–1210), as well as the later gSang phu scholar Chu mig

latter (i.e., that sound is not visible), the logical reason [of the reverse proof induced] from this consequence, 'Since it is visible, it is momentary' would not be established."

The additional note (which I indicated by <sup>a-a</sup> in the Tibetan text cited below) reads: "In such a case there is no elimination [of the conclusion] whatsoever and the logical reason [of the reverse form] is not established. And when stating to someone who accepts that an ultimate entity is produced 'Because it is produced, it follows that it is impermanent' or '[Because it is produced], it follows that it is knowable,' even though there is elimination [of the conclusion] via the establishment of the pervasion of impermanent and knowable by emptiness, the nature of the logical reason is not established for this basis because this [kind of] valid cognition does not apply to an ultimate entity." ('*Od zer* 145a3: *thal ba'i dam bca' la tshad ma'i bsal pa myed na rang rgyud kyi rtags kyi ngo bo myi 'grub ste / sgra skad cig mas stong pas mig gi gzung byas stong par thal zhes rjod na de'i 'dod pa la tshad ma'i bsal pa myed pas thal ba las mig gi gzung bya yin pas skad cig yin zhes pa'i rtags ma grub par 'gyur ba<sup>a</sup>ltar bsal pa ye med la rtags ma grub pa dang / don dam pa'i dngos po byas par khas len pa la byas pa'i phyir mi rtag par thal ba 'am / shes byar thal ba brjod na mi rtag pa dang shes bya la stong pa nyid khyis khyab pa grub pas bsal yang / tshad ma de don dam pa'i dngos po la mi 'jug pas gzhi' de la rtags kyi ngo bo ma grub pa<sup>a</sup> bzhin no l).*

The first example adduced in the note is the same as the one given in '*Od zer* 146a6–7 and *Mun sel* 85b5 for case No. 11b in the thirteenfold classification (see §3.2.3.1).

<sup>28</sup> The *Tshad bsdus* is a work similar to Phya pa's epistemological summary (*Mun sel*) with regard to its internal organization and contents. Its authorship is ascribed to Klong chen Rab 'byams pa (1308–1364). However, this work does not illustrate any of the developments that characterize the epistemological systems of Phya pa's followers such as gTsang nag pa and does not identify the views of any scholars post-dating Phya pa. On the other hand, its author displays an extensive knowledge of the positions of Phya pa, his predecessors and contemporaries. It is thus more likely that it was composed in Phya pa's time or soon after. For an introduction to this work see van der Kuijp 2003.

pa Seng ge dpal (13<sup>th</sup> c.) – start with criticizing an analysis in which the three features of the consequence (III, I, II) and the three features of the reverse proof (Ia', Ib', II') correspond *in every case*.<sup>29</sup> All three refute this overall-correspondence model, arguing that three exceptions must be accounted for:

- (i) The opponent's mental state pertaining to the reason of the consequence involves doubt, inattention or presumption of the opposite. In this case, the logical reason of the consequence is not established, but there is a desire to know in the direct proof.
- (ii) The subject is not established by a valid cognition. In this case, the conclusion of the consequence can be eliminated, but the qualification of the subject in the direct proof is not established.
- (iii) The nature of the logical reason is not instantiated. In this case, the pervasion is not established but its contrapositive (and hence the pervasion in the direct proof) is.

gTsang nag pa ascribes the overall-correspondence model to “previous [scholars]” (*snga rabs*); mTshur ston to “great minds of the past” (*sngon gyi blo gros chen po dag*); Chu mig pa ascribes it to Phya pa (*chos kyi seng ge*). These authors' accounts of the overall-correspondence model closely reflect the summarizing paragraph of Phya pa's *Mun sel* (1.3 in Table 1),<sup>30</sup> which indeed does not mention any exception. However, as discussed above, Phya pa's texts are not representative of an overall-correspondence model. In particular, the exceptions (i) and (iii) are explicitly taken into account in the course of Phya pa's analysis of correspondence.

gTsang nag pa's refutation of the overall-correspondence model indicates that he was well aware of the passages where Phya pa discusses the

<sup>29</sup> *bsDus pa* 160b1–162b1 (*thams cad du gnad gcig par dgod pa'i tshul dgog pa dang / de sun dbyung pa dang / [em. de sun dbyung pa dang / : Ms om.] mi cig pa la skyon spang pa gsum*); *sGron ma* 63b9–65a5 (*thams cad du thal ba dang bzlog pa'i chos drug gnad cig par 'dod pa'i lugs brjod pa dang / de sun dbyung pa dang / mi cig pa la rtsod pa spang pa gsum*); *rNam rgyal* A63a6–b5/B71b4–72a4. Note that if his objections to the previous model are similar, Chu mig pa's own position differs from that of gTsang nag pa and mTshur ston.

<sup>30</sup> The illustrations are the same, and the expressions *skyon drug ni gzhi gsum la 'byung pa* and *yod tan drug gzhi cig la 'du ba* (*bsDus pa* 160b6–7), respectively *skyon drug ni gzhi' gsum la 'du ba* and *yon tan drug ni gzhi' cig la 'du* (*sGron ma* 64a3–4, *rNam rgyal* A63b4–5/B72a3–4), significantly match *skyon drug gzhi gsum la 'du* and *yon tan drug gzhi cig la 'du ba* in *Mun sel* 84a6–b1.

exceptions and there are even some literal echoes of them in his *bsDus pa*. In particular, gTsang nag pa's (and mTshur ston's) discussion of (i) actually reflects almost literally Phya pa's mention of this exception in the course of his analysis (see §2.3.1). gTsang nag pa's analysis of the exception (iii) takes into account the view that non-instantiated reasons can satisfy negative entailment but not positive entailment. This is a view which Phya pa seems to have been the first to hold, against the position of "previous scholars" (who deemed both entailments in such a case as being unestablished) and of his own *bla mas* (who considered both to be established) (see the APPENDIX).<sup>31</sup>

One would thus have to discard Chu mig pa's nominal identification of the proponent of the overall-correspondence model as Phya pa. Was it a careless substitution for the more vague designation used by gTsang nag pa and mTshur ston? This would indicate that Chu mig pa was not consulting Phya pa's works when mentioning (or identifying) his views, but relying on later texts mentioning Phya pa's views or on oral teaching.<sup>32</sup>

It is improbable that the "previous scholars" being incriminated by gTsang nag pa postdate Phya pa. If they did, their overall-correspondence model would probably have included a refutation of the exceptions pointed out by Phya pa, which gTsang nag pa would have had to take into account. They are more likely authors who predated Phya pa and

<sup>31</sup> gTsang nag pa's discussion of exception (ii) also arrives at the same conclusion pointed out in the marginal note in the 'Od zer and in the context of the thirteenfold typology (see §3.2.3.1): if the logical reason is not established by a valid cognition, III may be verified but not Ia'. gTsang nag pa and mTshur ston however diverge from Phya pa regarding the interpretation of the examples they take up to illustrate such a case. Indeed, they consider that III is verified but not Ia' in the consequences (a) "it follows that the demon's permanent pot is impermanent" (*bsDus pa*'s reading "demon's pot" [*bsDus pa* 161a1: *sha za'i bum pa*] should be corrected to "demon's permanent pot" as in *sGron ma* [64b7: *sha za'i bum pa rtag pa*] and *rNam rgyal* [A64a2/B72b1: *rtag pa sha za'i bum pa*]), (b) "it follows that the singular universal is multiple," and (c) "it follows that sound that is a property of the ether is not produced." It is unclear whether Phya pa would agree on (c), but he considers that in (a) and (b) both III and Ia' are verified (see Hugon forthcoming). Phya pa's example for a case that verifies III but not Ia' is "it follows that an ultimate entity is impermanent."

<sup>32</sup> I could find seven other nominal identifications of Phya pa in the *rNam rgyal*. The views they are associated with all correspond to those of Phya pa. See *rNam rgyal* A3a8/B4a3; A7a6/B9a1; A10b1/B13a1; A13a4/B16a2; A31a3/B35b6; A41b3/B46b8; A46a3/B51b5.

were known to him. But instead of refuting their overall-correspondence model in the way gTsang nag pa did, Phya pa updated it, while retaining the “basic version” in the summarizing paragraph of the *Mun sel*.

### 3. Phya pa’s thirtefold typology of consequences

In the two sections that follow the sections on “correspondence,”<sup>33</sup> Phya pa initiates a different analysis of consequences. He considers the status of the two premises – (S is P) and (P is pervaded by Q) – and of the derived conclusion (S is Q) and establishes a typology of thirteen kinds of consequences through successive divisions.<sup>34</sup>

Table 4: Phya pa’s thirtefold typology of consequences

Abbreviations:

- I = Qualification of the subject by the logical reason (*rtags*)
- II = Pervasion (*khyab*)
- III = Elimination of the conclusion (*dam bca’ la bsa*)
- IV = Retort (*lan thebs*)
- V = Status of the subject (*gzhi*)
- F. = Fulfilled
- N.F. = Not fulfilled
- Tsh. = Established by a valid cognition (*tshad ma*)
- Kh. = Merely accepted (*khas len*)

In column 1, numbers in regular font are used for fallacious consequences, numbers in italics for genuine consequences, and underlined italics for the category of genuine probans-inducing consequences (see below §3.2 for the identification of these categories).

<sup>33</sup> These are the sections numbered (2) and (3) in Table 1. *Mun sel* 84b2–85b7 (*sbyor ba bcu gsum la thal ’gyur dang thal ’gyur ltar snang du dbye ba; thal ’gyur rnal ma drug la sgrub byed ’phen pa dang mi ’phen pa’i dbye ba*); *’Od zer* 145b4–146a9 (*sbyor ba bcu gsum la thal ba dang thal ba ltar snang dbye ba; thal ba’i ngag drug la bsgrub byed ’phen pa dang myi ’phen par dbye ba*).

<sup>34</sup> An earlier discussion of this classification was provided by Shunzō Onoda (Onoda 1986), who, however, did not have access to Phya pa’s own works at the time. Onoda’s presentation is based on Sa skya Paṇḍita’s presentation of an opponent’s position in the *Rigs gter* and on the classification found in the *bsDus pa* by Phya pa’s student gTsang nag pa. I discuss in §4 the difference between Phya pa’s typology and the two typologies considered by Onoda.

|    | I           | II          | III  | IV                               | V | Examples   |
|----|-------------|-------------|------|----------------------------------|---|--|
| 1  | N.F.        | N.F.        |      | “Logical reason not established” |   | To a Buddhist: <i>Because sound is permanent, it follows that it is not an object of examination</i>   |
| 2  | N.F.        | F.          |      | “Logical reason not established” |   | To a Buddhist: <i>Because sound is permanent, it follows that it is not produced</i>   |
| 3  | F.          | N.F.        |      | “Pervasion not established”      |   | To a Buddhist: <i>Because sound is an object of examination, it follows that it is permanent (Mun sel)</i><br>or<br>To a Buddhist: <i>Because sound is impermanent, it follows that it is not an object of examination ('Od zer)</i> |
|    | <b>F.</b>   | <b>F.</b>   |      |                                  |   |  |
|    | <b>Tsh.</b> | <b>Tsh.</b> |      |                                  |   | To a Buddhist: <i>Because sound is produced, it follows that it is impermanent</i>   |
| –  | Tsh.        | Tsh.        | Tsh. |                                  |   |  |
| –  | Tsh.        | Tsh.        | Kh.  |                                  |   |  |
| 4  | Tsh.        | Tsh.        | –    | “Conclusion accepted”            |   |  |
|    | <b>Kh.</b>  | <b>Kh.</b>  |      |                                  |   | To someone who accepts that sound is visible and that what is visible is pervaded by permanence: <i>Because sound is visible, it follows that it is permanent</i>  |
| 5  | Kh.         | Kh.         | Tsh. | –                                |   | If the opponent establishes by a valid cognition that sound is impermanent   |
| 6  | Kh.         | Kh.         | Kh.  | –                                |   | If he determines by presumption that sound is impermanent  |
| 7  | Kh.         | Kh.         | –    | “Conclusion accepted”            |   | If he does not determine that sound is impermanent   |
|    | <b>Tsh.</b> | <b>Kh.</b>  |      |                                  |   | To someone who accepts that what is produced is pervaded by permanence: <i>Because sound is produced, it follows that it is permanent</i>  |
| 8  | Tsh.        | Kh.         | Tsh. | –                                |   | If the opponent establishes by a valid cognition that sound is impermanent   |
| 9  | Tsh.        | Kh.         | Kh.  | –                                |   | If he determines by presumption that sound is impermanent  |
| 10 | Tsh.        | Kh.         | –    | “Conclusion accepted”            |   | If he does not determine that sound is impermanent   |

|      |            |                                    |      |                       |          |   |
|------|------------|------------------------------------|------|-----------------------|----------|---|
|      | <b>Kh.</b> | <b>Tsh.</b>                        |      |                       |          | A: To someone who accepts that sound is permanent: <i>Because sound is permanent, it follows that it is not produced</i><br>B: To someone who accepts that ultimate sound is produced: <i>Because ultimate sound is produced, it follows that it is impermanent</i> |
| 11   | Kh.        | Tsh.                               | Tsh. | –                     |          | A, and the opponent establishes by a valid cognition that sound is produced   |
| 11a  | Kh.        | Tsh.                               | Tsh. | –                     | Tsh.     | = example for 11  |
| 11a' | Kh.        | Tsh.<br>(positive entailment only) | Tsh. | –                     | Tsh.     | C: <i>Because what exists as sound is void of impermanence, it follows that it is not something that exists as sound</i><br>or<br><i>Because sound is void of impermanence, it follows that it is void of existence as something audible</i>                        |
| 11b  | Kh.        | Tsh.                               | Tsh. | –                     | not Tsh. | B and the opponent negates by a valid cognition the conjunction of “ultimate sound” and “impermanent”   |
| 12   | Kh.        | Tsh.                               | Kh.  | –                     | Tsh.     | A and the opponent determines by presumption that sound is produced   |
| 13   | Kh.        | Tsh.                               | –    | “Conclusion accepted” | Tsh.     | A and the opponent does not determine that sound is produced  |

### 3.1. Division criteria

#### 3.1.1. Fulfillment of the premises from the point of view of the opponent

In the first stage of the subdivision, Phya pa considers whether each of the two premises is “fulfilled” (*tshang pa*) or not (F./N.F. in Table 4). “Fulfilled” means here established for the opponent (*pha rol la grub pa*), or, in other words, accepted by the opponent (*khas len, 'dod*).<sup>35</sup>

<sup>35</sup> In the *Mun sel* Phya pa specifies that what is considered is the “mere establishment for the opponent” independent of a potential establishment by the proponent. He opposes this “mere mental determination” to an establishment relying on a valid cognition. *Mun sel* 84b2–3: *blo tsam gyis nges pas grub par 'gyur gyi tshad ma'i blo la ltos pa ma yin la de 'ang pha rol la grub pa tsam yin gyi rang la ltos pa na grub pa ma yin na...*

3.1.2. Establishment of the premises by a valid cognition

The second division only applies provided that both premises are accepted by the opponent. There are two options for each premise: it is either established by a valid cognition (*tshad mas grub*, *tshad mas nges*, or *tshad ma'i yul du tshang pa*) or merely accepted by the opponent (*khas blangs pa*, *'dod pa*). This generates four possibilities (Tsh./Tsh., Kh./Kh., Tsh./Kh., Kh./Tsh. in Table 4).

Does the “establishment by a valid cognition” refer here to the mental state of the opponent or is it a factual criterion that amounts to saying that the premise is true?

The two options are equivalent when the opponent has established a true premise by a valid cognition (i) (both the factual and the epistemic criteria obtain), or when the opponent accepts a false premise based on an erroneous cognition (ii) (both criteria do not obtain).

The two options are not equivalent if one considers that a premise may be fulfilled, i.e., accepted, based on a presumption (*yid dpyod*) (iii). A presumption is the correct assessment of a premise that is actually established, but it does not constitute a determination by a valid cognition. If the criterion of “establishment by a valid cognition” in Phya pa’s typology is factual, premises that are accepted based on presumption would still qualify as “established by a valid cognition” because they are true; but if the criterion is epistemic, they would qualify as “merely accepted” because the opponent does not have a valid cognition.

|                            | “established by a valid cognition”  | “merely accepted”  |
|----------------------------|---|--|
| <b>Factual criterion</b>   | <b>True premise</b><br>Opponent’s mental state = valid cognition (i) or presumption (iii) | <b>False premise</b><br>Opponent’s mental state = erroneous cognition (ii)   |
| <b>Epistemic criterion</b> | <b>Opponent’s mental state = valid cognition</b><br>True premise (i)                      | <b>Opponent’s mental state = not a valid cognition</b><br>– <b>Erroneous cognition</b><br>False premise (ii)<br>or<br>– <b>Presumption</b><br>True premise (iii) |

The difference between the two options is critical when it comes to the identification of No. 11 as probans-inducing (see §3.2.2). In Phya pa’s

typology, the first premise of No. 11 (illustrated by “sound is permanent”) is characterized as “merely accepted” and the second premise of No. 11, pervasion (illustrated by “permanent is pervaded by not produced”), is characterized as “established by a valid cognition.”

If the ‘epistemic’ option applies, the first premise could consist in a true premise whose acceptance is based on presumption (= iii). But this contradicts the requirement that, in order for No. 11 to be probans-inducing, the first premise must be false and accepted by the opponent (ii).

If the ‘factual’ option applies, the pervasion could be a true pervasion determined by a presumption (= iii). But this contradicts the requirement that, in order for No. 11 to be probans-inducing, the pervasion must be true and determined by a valid cognition (i).

The difference between the two options is less crucial in the case non-probans-inducing consequences; these consequences remain non-probans-inducing according to either option. But even then, *Phya pa* seems to leave no place for presumption, even though presumption is listed as a case in which premises qualify as “fulfilled” (*Mun sel* 87b1). Cases that are “merely accepted” are always illustrated by scenario (ii), and premises that are “established by a valid cognition,” must be assumed, like in No. 11, to have been established by a valid cognition by the opponent (i).<sup>36</sup>

### 3.1.3. Elimination of the conclusion

For each of the cases distinguished in the second stage of the division (except No. 4, on which see below), *Phya pa* considers three options pertaining to the elimination of the conclusion (*dam bca' la bsal pa*). All the examples (except No. 4) illustrate cases where the conclusion is actually false, e.g., “it follows that sound is permanent” and “it follows that sound is not produced.”

#### **(1) Elimination, or invalidation by a valid cognition (*tshad mas bsal pa, tshad mas gnod*) – Nos. 5, 8, 11**

“Elimination” is achieved by the determination of the opposite of the conclusion by a valid cognition, i.e., by perception or inference. For

<sup>36</sup> Notably, *Phya pa* says about the “establishment by a valid cognition” of the accepted premise “sound is produced” of Nos. 8 and 9 that it entails the absence of “desire to know” (see below §3.2.2). This could not be the case if the acceptance of this premise was based on presumption (= iii), for presumption does not prevent the “desire to know.” Hence *Phya pa* considers that this premise is established through a valid cognition by the opponent (= i).

instance the conclusion “it follows that there is no smoke” is eliminated by the perception of smoke; the conclusion “it follows that sound is permanent” is eliminated by the inferential determination that sound is impermanent. Obviously, this kind of elimination can only apply when the derived conclusion is false.

**(2) Elimination by the opponent’s own words (*rang tshig gis bsal pa*) or by what the opponent accepts (*khas blangs kyis bsal pa*) (both expressions are used indifferently) – Nos. 6, 9, 12**

Phya pa illustrates all the relevant cases by examples in which the opponent has determined by a presumption (*vid dpyod kyis nges*) the opposite of the conclusion. Here also, this presumption can only apply if the opposite of the conclusion is true, hence when the conclusion is false.

**(3) Absence of elimination (*bsal ba med pa, bsal ba ye med pa, bsal ba gtan med pa*) – Nos. 4, 7, 10, 13**

There is no elimination of the conclusion when the opponent has not determined the opposite of the conclusion. This concerns four cases:

- (i) The opponent is in a state of doubt about the conclusion (*the tsom za ba*).
- (ii) The opponent is indifferent (*blo kha ma phyogs*).
- (iii) The opponent mistakenly believes (*log par rtogs pa*) that a false conclusion is actually true.
- (iv) The conclusion is true (illustrated only in No. 4).

In these four cases, the opponent is entitled to retort “I accept the conclusion,” because of his mistaken belief in case (iii) and by default in the other cases in which he does not or cannot eliminate the conclusion. I come back in §4 to the disputable case of the true conclusion.

### 3.2. *Categories of consequences identified on the basis of the thirteenfold typology*

#### 3.2.1. Genuine and fallacious consequences

Within the thirteenfold typology Phya pa identifies seven cases as fallacious (*ltar snang*): Nos. 1–4, 7, 10, 13. He gives the reason that in these seven cases the opponent has the possibility of offering a retort (*Mun sel: lan thebs par 'gyur bas; 'Od zer: lan gtab par nus pas*), as indicated in column IV in Table 4:

(i) “Logical reason not established” (*gtan tshigs ma grub*) if he does not subscribe to the qualification of the subject by the logical reason of the consequence (column I) – Nos. 1 and 2.

(ii) “Pervasion not established” (*khyab pa ma grub*) if he does not subscribe to the pervasion of the logical reason by the derived property (column II) – No. 3 (the pervasion is not accepted in No. 1 either, but in this case the retort “logical reason not established” has the priority).

(iii) “Conclusion accepted” (*dam bca’ ’dod pa yin/’dod pa yin/’dod pa grub*) if there is no elimination of the conclusion (column III) – Nos. 4, 7, 10, 13.

The six remaining cases (Nos. 5, 6, 8, 9, 11, 12 – in italics in Table 4) qualify as genuine (*rnal ma*) because, contrary to the previous seven cases, there is no possibility of a retort (*Mun sel: lan gdab par mi nus pa’i phyir; ’Od zer: srog lkog mar phyin pa ’chin bdag gi pho nya ltar bzlog par bya ba ma yin pas*):

(i) The retort “logical reason not established” is not possible for all cases in which the qualification of the subject by the logical reason is fulfilled, whether it is established by a valid cognition (Nos. 8, 9) or merely accepted by the opponent (Nos. 5, 6, 11, 12).

(ii) The retort “pervasion not established” is not possible for all cases in which the pervasion is fulfilled, whether it is established by a valid cognition (Nos. 11, 12) or merely accepted by the opponent (Nos. 5, 6, 8, 9).

(iii) The retort “conclusion accepted” is not possible if the conclusion is eliminated, whether it is eliminated by a valid cognition (Nos. 5, 8, 11) or by the opponent’s own words (Nos. 6, 9, 12).

### 3.2.2 Probans-inducing and non-probans-inducing consequences

The six genuine consequences distinguished above (Nos. 5, 6, 8, 9, 11, 12) are further divided into consequences “that induce probans” (*sgrub byed ’phen pa*) and “that do not induce probans” (*sgrub byed mi ’phen pa*), or alternatively “that induce a [correct] direct proof” (*rang rgyud ’phen pa*) and “that do not induce a [correct] direct proof” (*rang rgyud mi ’phen pa*). The expression “inducing probans” possibly finds its origin in Dharmottara’s commentary on the *prasaṅga* passage of Dharmakīrti’s *Pramāṇa-viniścaya*. Dharmottara indeed rejects the option that the statement of a consequence is not a statement of something relevant to the probans (*nāpy*

*asādhānāṅgavacanam*), arguing that “it induces (*ā-kṣip*, Tib. *'phen*) the valid cognition that establishes the relation of pervaded and pervader for the root logical reason [i.e., the reason for the proponent’s intended thesis].”<sup>37</sup> Probans-inducing consequences are also called “proving consequences” (*sgrub pa'i thal 'gyur/sgrub pa'i thal ba*) by Phya pa, while non-probans-inducing consequences correspond to “refuting consequences” (*sun 'byin pa'i thal 'gyur/sun 'byin pa'i thal ba*).<sup>38</sup>

The analysis that grounds this distinction relies on the same features that were identified in the section on correspondence to characterize genuine proving consequences (see §2.1): the reverse form must be such that the pervasion is established by a valid cognition (II'), that the qualification of the subject by the logical reason is established by a valid cognition (Ia') and that there is a desire to know pertaining to the subject (Ib').

Five of the six genuine consequences, Nos. 5, 6, 8, 9, 12, are classified as “non-probans-inducing” due to the failure of II' or Ia' to obtain in the reverse form:

- When the conclusion is eliminated by the opponent’s own words but not by a valid cognition (Nos. 6, 9, 12), the qualification of the subject by the logical reason in the reverse form is not established by a valid cognition.
- When the pervasion is merely accepted but not established by a valid cognition (Nos. 5, 6, 8, 9), the pervasion of the reverse form is not established by a valid cognition.

In the *'Od zer* Phya pa adds that the reverse forms of Nos. 8 and 9 also do not verify Ib':

- When the qualification of the subject in the consequence is established by a valid cognition (Nos. 8, 9) there is no desire to know, and therefore the qualification of the subject of the reverse form is not fulfilled.<sup>39</sup>

<sup>37</sup> PVinT-Skt 10b1: *vyāpyavyāpakabhāvasādhanapramāṅkṣepāt maulasya hetor*; Tib. D11a6: *rtsa ba'i gan tshigs kyi khyab par bya ba dang khyab par byed pa'i dngos po sgrub bar byed pa'i tshad ma ni 'phen pa'i phyir ro //*

<sup>38</sup> See Hugon 2013: 685–687 for more details on the function of “refuting consequences.”

<sup>39</sup> As noted in §2.3.1, this case constitutes an exception to the correspondence between I and Ib', which was not addressed by Phya pa in the section on correspondence. Examples

This leaves No. 11 – a consequence in which the qualification of the subject by the logical reason is merely accepted (column I Kh. = feature I), pervasion is established by a valid cognition (column II Tsh. = feature II), and the conclusion is eliminated by a valid cognition (column III Tsh. = feature III) – alone as a candidate for being probans-inducing.

The mere acceptance of the qualification of the subject by the logical reason (rather than the establishment by a valid cognition) in the consequence guarantees that there is a desire to know in the direct proof (= feature Ib’), the establishment of the pervasion by a valid cognition guarantees the establishment of the pervasion in the reverse proof (= feature II’), and the elimination of the conclusion by a valid cognition guarantees that the logical reason of the reverse proof qualifies the subject (= feature Ia’).

### 3.2.3. Additional criteria for probans-inducing consequences

The category of probans-inducing consequences, which consists so far of the single case No. 11 is narrowed down further by appealing to two additional criteria:

#### (1) The establishment of the subject

As already evoked in §2.3.3, the elimination of the conclusion of the consequence – not (S is Q) – and the establishment of the qualification of the subject of the reverse form – S is notQ – fail to correspond when the subject is not established (*gzhi gtan myed pa, gzhi tshad mas nges pa med pa, gzhi tshad mas ma grub pa*). Indeed in such a case it may be possible to determine the elimination of the conclusion, but not to attribute a property (even a negative one) to the unestablished subject.

Phya pa gives as an example the consequence:

Because an ultimate entity is produced, it follows that it is impermanent, addressed to an opponent who accepts that an ultimate entity (*Mun sel: don dam pa’i dngos po; ’Od zer: yang dag pa’i dngos po*) is produced.

with a true first premise were classified as “fallacious” based on other criteria, just like in the section on the thirteenfold typology in the *Mun sel* No. 8 and 9 are classified as “non-probans-inducing” without referring to feature Ib’.

In such a case it is possible to eliminate the conclusion “ultimate entity is impermanent” by negating the association of “ultimate entity” and “impermanence” (*tshogs pa la bsal*).<sup>40</sup> But one cannot establish that “ultimate entity is void of impermanence” because the basis, “ultimate entity,” is not established.

This exception to the correspondence between III and Ia' was not mentioned in the section on correspondence in the *Mun sel*. In the 'Od zer, it only appeared in a marginal note (see n. 27). But in the context of the thirteenfold typology the establishment of the subject is highlighted in both texts as a necessary condition for the consequence to be probans-inducing.<sup>41</sup>

This additional criterion leads to the division of No. 11 into two sub-categories. In the *Mun sel*, *Phya pa* consequently counts five-and-a-half (*phyed dang drug*) non-probans-inducing types (Nos. 5, 6, 8, 9, 12, 11b) and one half (*phyed*) probans-inducing type, i.e., No. 11a.

## (2) The establishment of negative entailment

Another specification is the establishment of the negative entailment, which is only noted in the 'Od zer in the framework of the thirteenfold typology. It echoes the conclusions of the discussion on consequences involving a non-instantiated logical reason in the section on correspondence (cf. §2.3.2): in order for a consequence to be probans-inducing, the negative entailment must be determined, not merely the positive entailment.

*Phya pa* consequently distinguishes in the 'Od zer No.11a, which is the only probans-inducing consequence, from a subtype whose negative entailment is not established (No. 11a'), which is a non-probans-inducing consequence, called here also a “refuting consequence” (*sun 'byin pa'i thal ba*).

### 3.3. Definitions

The definitions of the various types of consequences are only provided after the analysis of correspondence and the divisions based on the thirteenfold typology (*Mun sel* 5 and 'Od zer 4 in Table 1).

<sup>40</sup> This is done by determining that impermanence occurs exclusively for what is empty (*Mun sel* 85b4–5: *mi rtag pa stong pa nyid kho na la yod par nges pas...*).

<sup>41</sup> For more details about what exactly counts as an “unestablished basis” see Hugon (forthcoming).

### 3.3.1. Definition of fallacious and genuine consequences

Phya pa does not give a formal definiens for fallacious consequences and no further attention is paid to the cases that were identified as such in the thirteenfold typology.

Genuine consequences were identified in the thirteenfold typology by a negative criterion: the absence of the possibility of a retort by the opponent. This is rephrased in the “generic definiens” (*spyi'i mtshan nyid*) in positive terms that echo the features represented in columns I, II and III of Table 4:

*Mun sel*: The generic definiens of a consequence is positing as a motive [a logical reason such that] the nature of the logical reason [i.e., its being a property of the subject] and pervasion are established from the point of view of the opponent, which establishes a conclusion that [the opponent] does not accept.

(87a9: *rtags rang gi ngo bo dang khyab pa pha rol pa'i blo ngor grub pa rgyu mtshan du bkod de dam bca' mi 'dod pa sgrub pa*)

*'Od zer*: The definiens of a consequence statement is the indication of a logical reason such that the logical reason [i.e., its being a property of the subject] and pervasion are fulfilled from the point of view of the opponent and the conclusion is strictly not accepted.

(146b1: *rtags dang khyab pa pha rol pa'i blo ngor tshang la dam bca' myi 'dod pa kho na'i rtags ston pa*)

### 3.3.2. Definition of non-probans-inducing and probans-inducing consequences

Phya pa defines non-probans-inducing consequences in terms of genuine consequences whose reverse form fails to be a correct proof.<sup>42</sup>

Proving consequences, or probans-inducing consequences, are defined as follows:

The indication of a logical reason pertaining to a relevant subject such that the pervasion is determined by a valid cognition and the direct conclusion is eliminated by a valid cognition.

<sup>42</sup> *Mun sel* 87b4: *spyi'i mtshan nyid kyi steng du bzlog na tshul gsum ma tshang pa dang bcas pa*; *'Od zer* 146b3–4: *snga ma'i steng du bzlog na tshul gsum ma tshang pa dang tshogs pa yin no*. See §3.3.1 for the “generic definiens” (*spyi'i mtshan nyid*) of a genuine consequence.

*skabs su bab pa'i chos can la dngos kyi dam bca*<sup>43</sup> *la tshad mas bsal pa dang / khyab pa tshad mas nges pa'i rtags ston pa* (*Mun sel* 90a9–b1 = 'Od zer 146b6)

This definition makes the criteria that are represented in column II and column III in Table 4 explicit. These criteria match features II and III from the section on correspondence. The criterion represented in the first column (mere acceptance of the qualification of the subject by the logical reason), which matches feature I, must be understood from the expression “subject in the context” (*skabs su bab pa'i chos can*), which I have translated as “relevant subject.” The “context” is, Phya pa explains, the “context of a consequence,” which is determined to be a situation in which the opponent entertains an erroneous cognition based on which he subscribes to the opposite of the proponent’s probandum. Only under this condition does the consequence fulfill both of its functions: establishing the proponent’s thesis and refuting the opponent’s erroneous view (*Mun sel* 90b1–4; 'Od zer 146b6–7).<sup>44</sup>

What about the additional criteria that led to the subdivision of No. 11 (see above §3.2.3), which are not explicit in this definition either?

The specification pertaining to the establishment of the negative entailment is found in Phya pa’s explanation of the expression “pervasion determined by a valid cognition:” it must be understood in the sense of the determination of the negative entailment, but not that of the positive entailment (*Mun sel* 90b5–91a7; 'Od zer 146b7–147a2).

<sup>43</sup> *Mun sel* has the variant *sgrub bya*, which should be emended to *dam bca'*, in agreement with the reading of the 'Od zer. Indeed, when explaining the terms of the definition, Phya pa cites the relevant criterion *Mun sel* in terms of *dngos kyi dam bca' la tshad mas bsal pa* (*Mun sel* 90b4).

<sup>44</sup> This condition eliminates the three exceptions regarding the correspondence between features I and Ib' that were pointed out in the section on correspondence (cf. cases (a), (b) and (c) in §2.3.2) by invoking a different argument, namely, that a consequence statement is improper in such a case because the refuting function of the consequence (which applies conjointly to its probative function) would not apply. In case (b) – determination of the intended thesis by a presumption – the opponent has a correct understanding of the proponent’s thesis, although it is not yet established by a valid cognition; there is no erroneous view to be refuted. In cases (a) – doubt – and (c) – indifference – the opponent does not have a thesis, i.e., a personal belief that the proponent could want to refute; there is no view to be refuted at all. See *Mun sel* 90b3: *blo kha ma phyogs pa dang the tshom za ba la dam 'cha' med cing yid dpyod kiyis nges pa la dam bca' yod kyang rang dang mihun pas sun dbyung pa'i 'os ma yin pas sun 'byin pa'i byed pa mi 'jug pa'i phyir ro /*

The specification regarding the establishment of the subject is not found in Phya pa's explanation of the words of the definition. But in a later section, Phya pa claims that it is implicit in the expression "subject," or more literally "property-possessor" (*chos can*), which implies that the basis is established by a valid cognition.<sup>45</sup>

Although Phya pa ends up taking all the necessary criteria into account, his version of the definition was criticized by some of his successors, such as gTsang nag pa, who preferred to make all criteria explicit in their definitions.<sup>46</sup>

### 3.3.3. A previous definition of proving consequences criticized by Phya pa

Phya pa's definition for proving consequences follows the line of the definition of rNgog Blo ldan shes rab (1059–1109) (hereafter: rNgog Lo).<sup>47</sup> Both authors mention and refute a previous definition:

Pervasion established by a valid cognition and qualification of the subject imagined/accepted by the opponent.<sup>48</sup>

This definition is also mentioned by the author of the *Tshad bsdus*, who attributes it to sNa chung ston pa.<sup>49</sup> Contrary to the definition of rNgog

<sup>45</sup> This is pointed out in a subsequent passage on the way a consequence induces its reverse form. The example dealt with in both texts involves a real subject, "pass" in the *Mun sel* (91a7–8), a perceived basis (*gzhi mthong ba*) in the 'Od zer (148a4).

<sup>46</sup> See *bsDus pa* 159a5–8 and the parallel passage in mTshur ston's *sGron ma* 63b2–4.

<sup>47</sup> Cf. *dKa' gnas* 385,15–17: *khyab pa tshad mas nges pa dang / dngos su brjod pa'i bsgrub bya* [em. *bya* : *bya* /] *skabs su bab pa'i rtsod gzhi chos can la tshad mas gnod pa'o* [Ms *pa'o* : ed. *pa'i*] //

<sup>48</sup> *dKa' gnas* 385,10–11: *kha cig khyab pa tshad mas nges pa dang phyogs kyi chos phyir rgol* [Ms *rgol* : ed. *rgal*] *bas brtags pa tsam brjod pa'o zhes zer ro* // *Mun sel* 90a7: *khyab pa tshad mas nges la phyogs chos phyir rgol gyis khas blangs pa ston pa*. 'Od zer 146b4: *phyogs chos phyir rgol gyis khas blangs pa dang khyab pa tshad mas nges pa'i rtags ston pa*.

<sup>49</sup> *Tshad bsdus* 352,18–19: *sna chung ston pa na re phyogs phyir rgol gyis khas blangs shing khyab pa tshad mas nges pa'i rtags ston byed ces bya ba yin no* // *zhes zer ro* // A person with a similar name is Zhang sna chung ston pa, mentioned in the *Blue Annals* (I–233) as a teacher of Mon ston byung gnas shes rab (1075–1160) (he taught him the *Uttaratantira*, *Sūtrālaṃkāra*, *Madhyāntavibhāṅga* and *Dharmadharmatāvibhāṅga*, *Yogācārabhūmi*, *Mahāyānasamgraha* and *Abhidharmasamuccaya*). Mon ston also studied with rNgog Lo's uncle rNgog legs pa'i shes rab. Thus this Zhang sna chung ston pa could have been a senior contemporary of rNgog Lo.

Lo and Phya pa, it highlights the acceptance of the first premise by the opponent, but does not mention the elimination of the conclusion. But in Phya pa's view, eliminating the conclusion is necessary for the statement to qualify as a genuine consequence in the first place. Indeed, an argument by consequence is not pertinent if the opponent accepts the conclusion. Further, the elimination by a valid cognition is a necessary condition for establishing the logical reason in the reverse proof.

The example pointed out by rNgog Lo and Phya pa to reject the alternative definition is the consequence:

Because a demon's pot is existent, it follows that it is impermanent.

Given an opponent who accepts the existence of demons' pots, this consequence satisfies the criteria of the alternative definition. But due to the non-establishment of the subject, there can be no elimination of the conclusion by a valid cognition and no establishment of the qualification of the subject in the reverse proof:

Since a demon's pot is void of impermanence, it is not existent.

In a follow-up on this discussion, rNgog Lo and Phya pa show, each with his own method, how their own definition does not discard, on the same grounds, the similar consequence:

Because a demon's permanent pot is existent, it follows that it is impermanent.

It would indeed be problematic to discard the latter from the range of "proving consequence" because it involves the same features as Dharmakīrti's example of a proving consequence involving the subject "singular universal." The details of Phya pa's strategy and the difference between subjects such as "the demon's pot" and "the demon's permanent pot" are discussed in Hugon (forthcoming).

#### **4. The case of the true conclusion**

##### *4.1. Phya pa's position – A true conclusion cannot be eliminated*

All the cases of the thirteenfold typology other than No. 4 are illustrated by an example with a false conclusion, i.e., a conclusion that is not established in reality (for instance, "it follows that sound is permanent").

It is a *bona fide* “absurd conclusion” but not necessarily an “unacceptable conclusion:” if the absurd conclusion concords with the views of a mistaken opponent, the latter will fail to reject it. Acceptance of a false conclusion is also granted by default whenever the opponent does not actively determine a true state of affairs opposite to the conclusion (by a valid cognition or a presumption), namely, in cases of doubt or indifference (see §3.1.3.3).

Case No. 4 stands as an exception insofar as it is the only one that is illustrated by an example with a true conclusion, e.g., “it follows that sound is impermanent.” This scenario can be envisaged for other types as well.<sup>50</sup> In case No. 4, both premises are fulfilled and established by a valid cognition. The derived conclusion can only be true (like the thesis in the case of a valid direct proof). The example that illustrates this case is a consequence addressed to a Buddhist:

Because sound is produced, it follows that it is impermanent.

Buddhist followers of Dharmakīrti would certainly agree that a true conclusion – and in particular a true conclusion that can be established by an inference – cannot be eliminated by a valid cognition. Indeed, there cannot be two valid cognitions establishing contradictory states of affairs.<sup>51</sup> Doubt and indifference would be as powerless to eliminate a true conclusion as they are to eliminate a false conclusion. In Phya pa’s example, it is further evident that there is no elimination by means of the opponent’s own words, because Buddhist debaters do not generally hold the mistaken view that sound is permanent.

But suppose the same consequence was addressed to an idiosyncratic thinker who accepts the two true premises – sound is produced, and what is produced is impermanent – but also holds the mistaken view that sound

<sup>50</sup> A true conclusion can also be arrived at if one or both premises are false. For instance the false premises “sound is not an object of examination” and “not being an object of examination is pervaded by being audible” lead to the true conclusion that “sound is audible.” Such cases are not exemplified by Phya pa or his successors. Note that it would not change the number of consequences in the typology, since for these cases the three possibilities regarding the elimination of the conclusion are already counted.

<sup>51</sup> On Dharmakīrti’s rejection of the possibility of antinomic reasons (*viruddhāvya-abhicārin*), see Tillemans 2000: 93–94.

is permanent. Wouldn't the conclusion "sound is impermanent" be eliminated by what he accepts?

Phya pa clearly rejects this option: he specifies that a true conclusion cannot be eliminated whatsoever and in particular that elimination by means of one's own words is impossible.<sup>52</sup> Case No. 4 is thus exclusively fallacious and liable to the retort "conclusion accepted."

Phya pa's only explicit argument for the absence of elimination in case No. 4 is that the conclusion is true (*bden pa*). This justifies the absence of elimination by a valid cognition as well as the absence of elimination by presumption. Indeed, the opponent cannot have a presumption of the opposite since the opposite would be wrong. But this does not explain the absence of elimination based on the opponent's erroneous view that is opposite to the conclusion.

The author of the *Tshad bsdus* attributes to Phya pa a more precise argument against the possibility of "elimination by means of one's own words" in case No. 4:

According to Phya pa, this (i.e., the possibility of elimination by means of one's own words) is not correct, because a valid cognition eliminates what is accepted, but acceptance cannot eliminate a valid cognition.<sup>53</sup>

The background of this argument, which distinguishes between the capacity of a valid cognition of a state of affairs and that of the erroneous

<sup>52</sup> *Mun sel* 84b6: *dang po ni sangs rgyas pa la gzhan gyis sgra byas pa'i phyir mi rtag par thal zhes pa ste byas pa dang de la mi rtag pas khyab pa gnyi ga tshad mas nges pa'i phyir ro / de'i bsgrub bya ni bden pa yin pas de la bsal pa med pa kho na ste / de la rnam dbye med do /* "An instance of the first [i.e., of a case where both premises are established by a valid cognition] is the statement 'Because sound is produced, it follows that it is impermanent' made by others at the attention of a Buddhist, because [sound's being] produced and the pervasion of this [i.e. being produced] by impermanence are both determined by a valid cognition. Its probandum is true, hence it can only lack elimination; there are thus no subdivisions of this case." The parallel in the *'Od zer* specifies that "elimination by one's own words is impossible." *'Od zer* 145b7: *dang po ni bde bar gshegs pa ba la sgra byas pa'i phyir myi rtag par thal zhes brjod pa gnyi' ga tshad mas nges pa lta bu ste / de ni bsal pa gtan myed pa yin gyi rang tshig gis bsal pa'ang de la myi srid do /*

<sup>53</sup> *Tshad bsdus* 333,17–19: *phya pa na re 'thad pa ma yin te khas blangs la tshad mas sel gyi tshad ma la khas blangs kyis sel ma nus pas so // des na 'di ni thal 'gyur du ming btags kyang rang rgyud nyid yin no //* It is not clear whether the last sentence "Thus, this case is called 'consequence' but it is actually a direct proof" is to be included in Phya pa's statement or is a comment by the author of the *Tshad bsdus*.

acceptance of the opposite when they are confronted with one another, can be traced back to Dharmakīrti's discussion about the criterion "not opposed" (*anirākṛta*, Tib. *ma bsal ba*) included in Dignāga's definition of the thesis. More precisely, in the *Pramāṇavārttika* (4.98–99, see also PVin 3.32), Dharmakīrti argues that the Scriptures or one's own words can be an impediment (*pratibandhaka*, Tib. *gegs pa*) with regard to a thesis bearing on objects that are not ultimately inaccessible (*atyanta-parokṣa*), but cannot, properly speaking, be something that invalidates (*bādhaka*, Tib. *gnod pa*) this thesis (see Tillemans 2000: 133ff.). To summarize this: Two contrary statements merely impede one another. But if one of them is supported by a valid cognition, then it becomes an invalidator of the other.<sup>54</sup>

Phya pa follows Dharmakīrti when discussing the definition of a thesis and the criterion of "absence of opposition."<sup>55</sup> So he could have agreed with the line of argumentation cited in the *Tshad bsdus*. But in discussing case No. 4, this argument is not invoked in the works available to us.

A similar argument is mentioned in Śākya mchog ldan (1428–1507)'s description of Phya pa's position regarding consequence No. 4:

In the case where both [qualification of the subject and pervasion] are established by a valid cognition, [he, i.e., Phya pa] asserts (*bzhed*) that there is only complete absence of elimination. The reason for this is said (*gsungs*) to be that elimination by what is accepted does not apply to a conclusion which is a state of affairs established by a valid cognition.<sup>56</sup>

Keeping in mind that Śākya mchog ldan had access to Phya pa's texts, the fact that he uses different verbs for the claim that "there is only complete absence of elimination" (the honorific *bzhed*) – which is attested in Phya pa's works – and for the reason for this claim (the non-honorific

<sup>54</sup> Several statements in the PVin echo the formulation of the argument cited in the *Tshad bsdus*. For instance PVin 3 5,9–10: *na cābhyupagamo yuktibādhane samartha iti vakṣyāmaḥ* "And we will explain that acceptance is unable to invalidate reasoning," which refers to the discussion on the elimination of the thesis later in the chapter. See also within this discussion, statements such as PVin 3 34,1: *pramāṇenāpramāṇasya bādhanāt* "Because there is invalidation of what is not a valid cognition by a valid cognition."

<sup>55</sup> See *Mun sel* 78b1–7.

<sup>56</sup> *Rigs gter pham byed* 156b7–157a1 (pp. 352–353): *gnysis ka tshad mas grub pa la bsal pa ye med cig pur bzhed la / de'i rgyu mtshan yang / dam bca' tshad mas grub pa'i don la / khas blangs kyi bsal pa mi 'jug pas / shes gsungs /*

*gsungs*), suggests that the second is either a subsequent attribution of this argument to Phya pa, or that this argument was put forward by another scholar.<sup>57</sup>

Table 5: Elimination of the conclusion in relation to the opponent's mental state when C is established in reality

|     | Opponent's mental state       | Elimination of the false conclusion<br>notC = determination of C | Retort          | Elimination of the true conclusion C | Retort       |
|-----|-------------------------------|--|-----------------|--------------------------------------|--------------|
| i   | Valid cognition of C          | yes  | –               | no                                   | “C accepted” |
| ii  | Presumption of C              | yes  | –               | no                                   | “C accepted” |
| iii | Erroneous cognition that notC | no   | “notC accepted” | no                                   | “C accepted” |
| iv  | Doubt whether C or notC       | no   | “notC accepted” | no                                   | “C accepted” |
| v   | Absence of interest           | no   | “notC accepted” | no                                   | “C accepted” |

#### 4.2. *A true conclusion can be eliminated – The fourteenfold typology of Phya pa's successors*

Phya pa's strict position of rejecting any elimination of a true conclusion was adopted for instance by Phya pa's student mTshur ston.<sup>58</sup> Other

<sup>57</sup> One finds this argument used by gTsang nag pa (see below n. 67). Śākya mchog ldan himself cites the *Pramānavārttika* (4.98bc1) to criticize this case. Cf. *Rigs gter rol mtsho* 142b6: *de 'dod mi nus te / ji skad du / bstan bcos dang 'gal brjod na yang // gnod pa ma yin / zhes gsungs pa dang 'gal bas so /* “This needs not be accepted, because it is contradictory to the statement that ‘Even when one says something contradictory to the Scriptures, there is no refutation [by the Scriptures]’.”

<sup>58</sup> *sGron ma* 63a6: *de la phyogs chos khyab pa gnyis ka tshad ma'i ngor tshang pa'i rtags kyi bsgrub bya la bsal pa 'bab mi srid la / phyi ma gsum gyi bsgrub bya 'dod pa la tshad ma bsal pa'i skabs gsum dang khas blangs kyi bsal pa'i skabs gsum dang bsal pa ye med pa'i skabs gsum ste dgur 'gyur la sngar gyi bzhi ste bcu gsum kho nar nges so //* The author of the *Tshad bsdus* mentions alternative positions (see below), but adopts himself Phya pa's thirteenfold typology (*Tshad bsdus* 334).

scholars included the elimination of a true conclusion “by means of one’s own words” or “by what is accepted” in their classification, leading to the adoption of a fourteenfold typology. As Onoda (1986) pointed out, the typology mentioned by Sa skya Paṇḍita under the “opponent’s views” in the *Rigs gter* is such a fourteenfold typology.<sup>59</sup> Some commentators of the *Rigs gter* – namely Glo bo mkhan chen and Go rams pa – mistakenly ascribe this view to Phya pa.<sup>60</sup> Śākya mchog ldan gives a more accurate picture in his commentary: he explains that the first step of the division is common to Phya pa and his followers (*slob dpon rigs pa’i dbang phyug phya pa rjes ’brang dang bcas pa*), but that when it comes to the case where the two premises are established by a valid cognition (No. 4), Phya pa’s position is that there is no elimination of the conclusion whereas his followers accept two options, no elimination at all and elimination by what is accepted, and thus subscribe to a fourteenfold typology.<sup>61</sup>

Śākya mchog ldan’s lack of specificity regarding Phya pa’s “followers” and the use of the plural (*rjes brangs rnams*) indicates that this classification was not restricted to a single individual. In addition to Sa skya Paṇḍita’s source (which remains unidentified),<sup>62</sup> the fourteenfold typology is attested

<sup>59</sup> *Rigs gter* 11 360,27–361,3: *sangs rgyas pa la sgra byas pa’i phyir mi rtag par thal zhes brjod pa lta bu ’dod pas lan thebs pa ltar snang dang / ’ga’zhig rtag par khas len pa la thal ba de rtags dang khyab pa gnyi ga tshad ma dam bca’ la khas blangs kyi bsal* [em. *bsal : gsal*] *ba’i thal ba yang dag de gnas skabs gnyis*. Sa skya Paṇḍita’s criticism of the opponent’s view does not address this last case in particular.

<sup>60</sup> See *Rigs gter nyi ma* 252,7: *slob dpon cha pa la sogs pa’i bod rnams; Rigs gter gsal byed* 137a4 and *Rigs gter rab gsal* 321b6: *rigs pa’i dbang phyug phya pa’i bzhed pa la*.

<sup>61</sup> See *Rigs gter pham byed* 156b5–157a4 (pp. 352–353) and in particular 157a1–2: *rjes ’brangs rnams / ’di la yang khas blangs kyi bsal pa dang / bsal pa ye med gnyis su phyen nas bcu gcig / ma grub gsum dang bcu bzhi’o zhes ’dod /* “The followers, by dividing this case into two – elimination by what is accepted and no elimination at all – accept that there are fourteen kinds: eleven sorts [for which both premises are established for the opponent] plus the three non-established ones [i.e., the three kinds where one or the other premise is not fulfilled for the opponent].” This passage was pointed out in Onoda 1986: 70–71. The mention of a fourteenfold typology in Śākya mchog ldan’s *dGa’byed* (19b5–6) must accordingly be understood to refer to Phya pa’s followers and Sa skya Paṇḍita’s opponent rather than to Phya pa himself. In the *Rigs gter rol mtsho* Śākya mchog ldan does not identify by name the author of the view criticized by Sa skya Paṇḍita (*Rigs gter rol mtsho* 141a5: *bod gangs can gyi rtog ge pa dag*; “the logicians of Tibet, the land of snows”).

<sup>62</sup> Onoda (1986: 71) suggests a possible influence of brTsegs ston dBang phyug seng ge, one of Phya pa’s “Eight great lions” with whom Sa skya Paṇḍita had studied. brTsegs ston is not known to have composed an epistemological work of his own.

in several available early epistemological works, for instance those by gTsang drug rdo rje (12<sup>th</sup> c. ?)<sup>63</sup> and Chu mig pa.<sup>64</sup> I have noted elsewhere (Hugon 2015a: 459) the indirect link between one of Phya pa's "Eight Great Lions," Dan 'bag pa, and Chu mig pa via gNyal zhiḡ 'Jam pa'i rdo rje and sKyel nag Grags pa seng ge. There might have been precedents among these authors for the adoption of a fourteenfold typology.

While Śākya mchog ldan only credits Phya pa's successors with the acceptance of elimination of a true conclusion "by means of one's own words," this may have already been the position held by some of Phya pa's predecessors. According to the *Tshad bsdus*, the argument cited in the previous section was put forward by Phya pa against the view of a scholar identified as "rGya," who accepted that a true conclusion is eliminated when the opponent holds the opposite erroneous view.<sup>65</sup> The abbreviation "rGya" may refer to Phya pa's senior contemporary rGya grags pa bSod nams (see van der Kuijp 2003: 417) or to Phya pa's teacher rGya dmar ba Byang chub grags (also known as sTod lung rGya dmar ba).

#### 4.3. *gTsang nag pa's middle way*

Phya pa understands "elimination" in a strong sense: "elimination" only takes place when there is a determination of the opposite, correct state of affairs. But this determination is not necessarily a valid cognition – it may be a presumption – and thus "elimination" does not strictly correspond

<sup>63</sup> *Rigs pa'i gsal byed sgron ma* 72a7–8: *dang po ni [= gnyis ka tshad ma'i lam du tshang ba] sgra byas pa'i phyir mi rtag par thal ces pa lta bu ste sngar sgra rtag par khas blangs na 2 ka tshad ma'i lam du tshang dam bca' la khas blangs kyi bsal pa 'bab pa'i thal 'gyur dang / khas ma blangs na 2 ka tshad ma'i lam du tshang yang dam bca' la bsal pa ye med kyi thal ba ltar snang dang 2 su 'gyur ba yin /* On this text see Hugon 2011 [2012]: 122, n. 49 and Hugon 2013: 674.

<sup>64</sup> *rNam rgyal A61b8–62a1/B70a2–3: dang po ni [= 2 ka tshad mas grub] sgra byas pa'i phyir mi rtag par thal zhes bkod pa lta bu 'o // 'di la 2 las / sngar sgra rtag par khas blangs na rtag dang khyab pa tshad ma dam bca' la khas blangs kyi bsal pa 'bab pa'i thal 'gyur yang dag rung ngo // khas ma [em. ma : Ms om. ma] blangs na rtags dang khyab pa tshad ma dam bca' la bsal pa ye med kyi thal ba 'gyur ltar snang 2 so // and rNam rgyal A62a4/B70a6–7: de ltar thal 'gyur du bkod tshad la dbye' na bcu 4 po de las mi 'da' ba yin no //*

<sup>65</sup> *Tshad bsdus* 333,16–17: *rgya na re sgra rtag par khas blangs pas bsal lo zhes zer ba ni* "According to rGya, [there can be] an elimination because [the opponent] accepts that sound is permanent."

to Dharmakīrti's "invalidation" (*gnod pa*). Proponents of the fourteenfold typology, on the other hand, may be accused of taking "elimination" (*bsal ba*) in a weak sense, which threatens Dharmakīrti's claim that statements not backed by a valid cognition are powerless to oppose in any way statements supported by a valid cognition. On the other hand, they capture the intuition that an opponent who believes "notC" may not be willing to assert that "C is accepted," at least not before he has himself acquired the valid cognition that C is the case.

In case No. 4 the understanding of the conclusion C by the opponent is technically speaking an inferential knowledge, since it is derived from true premises accepted by the opponent. But because the context is that of a consequence statement, not a direct proof statement, the opponent might not realize that he has acquired an inferential knowledge and could thus still refuse to accept C.

In Phya pa's view, it does not matter whether the opponent actually gives up his erroneous view "notC" in favor of "C." Insofar as he lacks the proper means to counter C, the opponent is not merely entitled, but forced to state "C is accepted."

The solution adopted by Phya pa's student gTsang nag pa offers an interesting middle way.

On the one hand, gTsang nag pa agrees with Phya pa that there can be no genuine "elimination" by what is accepted in the case of a true conclusion and claims that there are only thirteen cases in the typology.<sup>66</sup> His argument against elimination by what is accepted recalls the argument attributed to Phya pa in the *Tshad bsdus*: gTsang nag pa invokes Dharmakīrti's discussion on the impossibility for words to invalidate (*gnod*) or even impede (*gegs*) what is established by a valid cognition.<sup>67</sup> But he

<sup>66</sup> *bsDus pa* 158b5: *bzhi las dang po la* [= *tshul gnyis ka tshad ma'i ngor tshang pa*] *bsal ba mi srid la / phyi ma gsum gyi 'dod pa la tshad mas bsal ba dang khas blangs kyis bsal ba dang bsal ba myed pa'i skabs gsum gsum sbyar bas dgu ste snga ma bzhi dang bcu gsum las mi 'da'o* // Cf. Onoda 1986: 69.

<sup>67</sup> *bsDus pa* 158b6: *gnyis ka tshad mas grub pa'i bsgrub bya la pha rol gyi khas blangs dang 'gal ba srid na yang tshad mas grub pa la tshig gis gnod pa dang gegs mi nus pas bsal par mi brjod do* // "Even though a contradiction with what the adversary accepts is possible for the probandum [i.e., the conclusion] in the case both [premises] are established by a valid cognition, since words are unable to invalidate or impede what is established by a valid cognition, one does not speak of elimination."

concedes that there is a contradiction (*'gal ba*) between the conclusion and what the opponent accepts. The opponent does not necessarily abandon his erroneous view in favor of the conclusion. This provides the possibility of another option, which gTsang nag pa formulates as follows:

If one accepts that due to this the opponent incurs a point of defeat, this case also qualifies as a [correct] consequence. Therefore there are six cases that are correct, seven that are fallacious, and one case that can be either.<sup>68</sup>

gTsang nag pa's statement is rather elliptic. Why exactly does the opponent incur a point of defeat? One possibility is that the point of defeat results from the contradiction between his erroneous view and the conclusion which he fails to eliminate and hence must accept because it derives from premises that he accepts. Another possibility is that the point of defeat results from the opponent's inability to retort. Such a point of defeat is listed by gTsang nag pa when discussing the function of refuting consequences: one aspect of this function is that refuting consequences defeats the opponent because the latter is not in the position to retort to a conclusion (which he does not accept) that is derived from the premises he subscribes to.<sup>69</sup> In case No. 4, the opponent would be prevented from stating "conclusion accepted" due to his holding the opposite erroneous view.

In summary, either the opponent retorts "conclusion accepted," but thereby acknowledges a contradiction in his views, or he does not retort "conclusion accepted" and is defeated due to his silence. The second option seems more likely, since the opponent's retort would make the consequence fallacious, whereas gTsang nag pa indicates that if the occurrence of a point of defeat is accepted, case No. 4 qualifies as genuine (in gTsang nag pa's terminology, "correct").

While gTsang nag pa mentions this option, he does not seem to adopt it himself. When dividing correct consequences into proving and refuting

<sup>68</sup> *bsDus pa* 158b7: *ci ste des kyang pha rol tshar chod par 'dod na de yang thal bar 'gyur bas thal ba yang dag drug dang ltar snang drug dang gnyis kar srid pa cig yin no /*

<sup>69</sup> *bsDus pa* 163a5–6: *byed pa ni dngos dang bzlog pas sgrub byed mi ston yang spyir sun 'byin pa tsam gyis pha rol gyi log rtogs sel la / khyad par thal ba brjod pas mi 'dod pa 'i thal ba la lan gdab par ma zhus pas pha rol tshar gcad pa 'i sgo nas log rtogs sel bar byed pa yin no //*

consequences, he only considers six correct cases, leaving the potentially “genuine” version of No. 4 out of the picture.

One can mention for the record that debates on case No. 4 did not stop there. In particular, Śākya mchog ldan had much to say on the idea of a putative “contradiction” between an opponent’s erroneous cognition and a true conclusion, and in general about “points of defeat resulting from the admission of contradictory things” (*dnegos ’gal khas blangs pas tshar bcad kyi gnas*).<sup>70</sup>

## 5. The case of true premises

The successive divisions achieved in the thirteenfold typology draw clear distinctions that support the identification of genuine and fallacious consequences, and, among the former, of probans-inducing and non-probans-inducing ones. However, this seemingly exhaustive typology leaves some questions open regarding cases that match the specifications of a given type but represent a different scenario than the one illustrated in Phya pa’s example. Among them, the problematic scenario of true premises accepted based on a presumption has been mentioned in §3.1.2. In this section, I examine another scenario that is not exemplified by Phya pa: the non-fulfillment of (i.e., refusal to accept) true premises.

Phya pa’s examples for the cases of the thirteenfold typology in which the premises are “fulfilled,” i.e., accepted by the opponent, illustrate both true and false premises (see Nos. 4–13).<sup>71</sup>

But Phya pa’s examples for cases in which one or both premises are “not fulfilled” exclusively illustrate the unfulfilled premises with false premises that the given opponent does not even accept based on an erroneous cognition: “sound is permanent” (No. 1 and 2), “permanence is pervaded by not being an object of examination” (No. 1), “object of

<sup>70</sup> See *Rigs gter pham byed* 203a4ff. (p. 407). To make a long (possibly forthcoming) story short, Śākya mchog ldan assimilates “contradiction” to “invalidation” and thus does not accept that there is a “contradiction” when the opponent believes something contrary to the true conclusion. There would only be a contradiction if, after the true conclusion has been established by a valid cognition, he takes up the erroneous belief again.

<sup>71</sup> As discussed in §3.1.2, true premises are accepted based on a valid cognition, and false premises are accepted based on an erroneous cognition. True premises accepted based on presumption are left out of the typology.

examination is pervaded by permanence” (No. 3 *Mun sel*), “impermanence is pervaded by not being an object of examination” (No. 3 *'Od zer*).

This leaves open the question whether true premises can ever be unfulfilled, whether they are liable to a retort.<sup>72</sup>

Consider, for instance, the consequence:

Because sound is produced, it follows that it is permanent.

This is indeed a consequence of type No. 8, 9 or 10 when the (true) premise “sound is produced” and the (false) premise “being produced is pervaded by being permanent” are both accepted by the opponent. But suppose it is addressed to an opponent who holds the view that sound is not produced. Wouldn't such an opponent refuse to accept the first premise and retort that “the logical reason is not established”? Or is he bound to accept the first premise insofar as it is true? What about an opponent who is doubtful about or indifferent to the question whether sound is produced or not produced?

If we relate these questions to the case of the true conclusion, it would be tempting to consider that the two cases are parallel. Namely, even if the opponent is doubtful, is indifferent, or mistakenly believes in the opposite of a true premise, he is bound to accept a true premise by default because he is unable to eliminate it.

However, Phya pa's views regarding the rejection of false premises suggest another answer. When dealing with the feature corresponding to the first premise – the qualification of the subject by the logical reason – in the section on correspondence, Phya pa counts four mental states that do not allow this feature to be established: valid cognition of the opposite of the false premise, presumption of the opposite of the false premise, doubt, and indifference (see (i) and (a), (b), (c) in §2.3.1). These cases are also discarded in Phya pa's gloss of the definition of probans-inducing consequences (see §3.3.2 and n. 44).

The inclusion of “doubt” and “indifference” in this list indicates that what grounds the premise's fulfillment is an “active acceptance” of the false premise, rather than the mere failure to determine the opposite, true

<sup>72</sup> I could also not locate an illustration of this scenario in the works that postdate Phya pa.

state of affairs. “Active acceptance” of a false premise thus only takes place when the opponent has the corresponding erroneous view. There is no “acceptance by default” in the case of doubt and indifference. Rather, the “default” is the retort “premise not established” whenever there is a lack of active acceptance of the premise.

If the case of true premises follows the same rule as the case of false premises, true premises would only count as “fulfilled” when the opponent has the corresponding presumption or a valid cognition. In other cases, namely, doubt, indifference and erroneous cognition of the opposite, the opponent lacks an active acceptance of the true premise and is liable to reject it in spite of its truth (of which the opponent is not aware). Although this remains a hypothesis, it seems to me more likely that the rejection of true premises should follow the rules of the rejection of false premises rather than the rules of elimination of the conclusion.

Table 6: Fulfillment of a premise in relation to the opponent’s mental state when M is established in reality

|     | <b>Opponent’s mental state</b> | <b>Fulfillment of a false premise notM = active acceptance of notM</b> | <b>Retort</b>          | <b>Fulfillment of a true premise M = active acceptance of M</b> | <b>Retort</b>       |
|-----|--------------------------------|--|------------------------|---|---------------------|
| i   | Valid cognition of M           | no   | “notM not established” | yes   | –                   |
| ii  | Presumption of M               | no   | “notM not established” | yes   | –                   |
| iii | Erroneous cognition notM       | yes  | –                      | no  | “M not established” |
| iv  | Doubt whether M or notM        | no   | “notM not established” | no  | “M not established” |
| v   | Absence of interest            | no   | “notM not established” | no  | “M not established” |

The option represented in Table 6 reflects a dissymmetry between the acceptance/rejection of the premises and the conclusion: a doubtful or indifferent opponent *accepts* the conclusion by default, but *rejects* the premises by default. Premises are liable to the retort that they are unestablished

unless there is an active acceptance by the opponent, while the conclusion is liable to the retort that it is accepted unless there is an active elimination by the opponent. In both cases, the opponent is given the opportunity to retort to the premises and the conclusion ‘by default’ if the active acceptance, respectively the active elimination, is lacking. In particular, a mistaken view can prevent the opponent’s active acceptance of a true premise.

Considering the practice of debate, one may remark that these ‘defaults’ put the burden on the proponent because, in order for his consequence to be ‘genuine,’ he must avoid the possibility of a retort by the opponent.

In the case of a direct proof, a retort contesting the establishment of a true premise would lead to a point of defeat, because the opponent would be pointing out a fault where there is none. But does the same rule apply to a consequence statement? This is unlikely, because otherwise one should also accept that failure to point out the non-establishment of a false premise is also a point of defeat, whereas the opponent’s mistaken acceptance of the first premise is a basic condition for presenting a proving consequence.

Phya pa’s discussion on the way to present a proving consequence statement offers the proponent a way to escape the burden bound to the opponent’s potential rejection of the premises ‘by default,’ in particular with regard to the true premise of pervasion in the statement of a proving consequence (No. 11). Phya pa prescribes that whenever the opponent has not yet established the (true) pervasion by a valid cognition, the proponent should include in the consequence statement a formal proof of this pervasion (see Hugon 2013: 690–692). This way, an opponent who is in a mental state other than a valid cognition arrives at this mental state in the course of hearing the consequence statement. The proponent can thus avoid the retort “pervasion not established” when the opponent’s mental state regarding the pervasion is (iii), (iv) or (v) (see Table 6 above). The inclusion of a proof of the pervasion in his consequence statement also allows the proponent to secure the establishment of the pervasion by a valid cognition of the opponent when the latter only has a presumption in this regard (ii) (see §3.1.2 on this problematic scenario, which is not illustrated by Phya pa in the thirteenfold typology).

This solves the proponent's problem for proving consequences (case No. 11). But what about genuine refuting consequences that involve the acceptance of a true premise, such as Nos. 8, 9 or 12? Should a proof of the true premise also be included in the consequence statement? Unfortunately Phya pa does not discuss the details of the form of such statements, and when he himself resorts to such types of consequences in his epistemological and Madhyamaka works, he does not use a formal consequence statement but refers to the consequence with the formula "Because S is P it follows that Q." But when stating a refuting consequence in this form, he adds a statement that grounds the characterization of the consequence as a refuting consequence. This statement makes explicit which premise is true (established by a valid cognition) and which is merely accepted, and in some cases what grounds the elimination of the conclusion. Supposing that such a statement is also presented in a debate, an opponent that has not himself established the true premise by a valid cognition would be informed that any attempt to retort to this premise is in vain. Such a statement could also prevent the opponent's acceptance of the (false) conclusion 'by default' of 'by mistake,' since it indicates in what way the conclusion is eliminated.

However, when it comes to the proper form of consequence statements, one should remember that Phya pa is strictly opposed to the statement of the conclusion, and also does not prescribe including the mention of the means of eliminating the conclusion in a consequence statement (see Hugon 2013: 693–696). He thus leaves the door open for fallacious consequences such as Nos. 7, 10 or 13. Those of Phya pa's followers who included the statement of the elimination of the conclusion in their consequence statements (Hugon 2013: 695–696) could potentially avoid the fallacy brought about by scenarios Nos. 7, 10, 13. Another option, which is illustrated in later texts that use the method of argumentation by "chains of consequences" (*thal phreng*) – which is absent in Phya pa's works – is that the acceptance of the conclusion does not generate a fallacy for the proponent and bring about the end of the debate, but provides the proponent a fulfilled premise to be used in a subsequent consequence against the opponent, and so on until reaching a point where the opponent does not agree with the conclusion.

In Phya pa's view, in case No. 4 the proponent cannot avoid the opponent's acceptance of the true conclusion. But he could easily transform his consequence statement in order to avoid this problem. The opponent correctly believes that sound is produced and incorrectly believes that sound is permanent, and accepts the true pervasion of "produced" by "impermanent." In such a case, instead of the problematic consequence of type No. 4:

Because sound is produced, it follows that it is impermanent,

the proponent should use the consequence:

Because sound is permanent, it follows that it is not produced,

which is probans-inducing.

## 6. Conclusion: Remarks on the constitution of the text

Phya pa's discussion on correspondence and his classification based on the thirteenfold typology are representative of two different frameworks, one that only considers consequences as potential means of proof and another that extends the use of consequences to refutation.

The first framework, represented in the portion on correspondence, can be termed a "Dharmakīrtian framework." Dharmakīrti focuses on probative arguments consisting in inferences based on logical reasons whose characteristics are established in reality, also known as "autonomous arguments" (*svatantra*). However, he also accepts the use of arguments drawing absurd consequences from an opponent's position (*prasaṅga*). But these owe their legitimacy solely to their ability to indicate, indirectly, a probative logical reason on which the reverse form of the argument (*prasaṅgaviparyaya*), which amounts to an autonomous argument, is based.

There are only two options in this framework: a consequence is genuine or it is fallacious, that is, either it proves a thesis through its reverse form or it does not prove a thesis.

Phya pa's analysis of the relevant features of the consequence and its reverse proof only takes into account a limited number of scenarios in terms of the actual state of affairs and the opponent's mental state, which reflects the model's focus on the features of the 'ideal' genuine case:

| State of affairs  | Opponent's mental state  |
|---|--|
| The logical reason does not qualify the subject   | Erroneous cognition → Qualification of the subject by the logical reason accepted  |
|   | Valid cognition of the opposite → Qualification of the subject by the logical reason not accepted, retort “logical reason not established” |
| The logical reason qualifies the subject (Subsumed under “Pervasion not established in reality” or “Derived conclusion established in reality”) |  |
| The pervasion is established  | Pervasion accepted and established by a valid cognition  |
| The pervasion is not established  | Pervasion not accepted, retort “pervasion not established”   |
| The derived conclusion is not established   | Invalidation of the conclusion by a valid cognition  |
| The derived conclusion is established   | Conclusion accepted, retort “conclusion accepted”  |

In summary: the establishment of a feature in reality is a sufficient condition for its being accepted by the opponent. The opponent exclusively objects to premises and eliminates conclusions that are not established in reality. In the case of a conclusion that is not established in reality, the invalidation exclusively relies on a valid cognition. All the scenarios involving fallacious reasons also allow for the possibility of a retort by the opponent. This rules out the option that the consequences that do not qualify as “genuine proving consequences” could still be effective as refutations.

Significantly, the second framework, developed on the basis of the thirteenfold typology, takes into account additional options regarding the premises and the opponent's mental state pertaining to the premises and the conclusion. This allows for a new category of consequences: consequences to which the opponent cannot retort but whose reverse form is not valid. Such consequences merely refute the opponent, but are still considered to be “genuine” rather than “fallacious.” I term this framework the “proof-or-refutation framework.” Although the thirteenfold typology it is based on gives the impression of being exhaustive, we have seen that a number of scenarios are not illustrated or discussed by

Phya pa, in particular the case of the proponent accepting true premises based on a presumption, and the case of the proponent refusing to accept a true premise.

Table 7: Summarizing table of the classification of consequences in the two frameworks

|  | <b>Dharmakīrtian framework</b> | <b>Proof-or-refutation framework</b> |                |
|--|--------------------------------|--------------------------------------|----------------|
| – qualification of the subject by the logical reason not established in reality but accepted based on an erroneous cognition<br>– pervasion established in reality and accepted based on a valid cognition | <b>Genuine</b>                 | <b>Genuine probans-inducing</b>      | No. 11         |
| – subject established by a valid cognition   | (criterion not considered)     |                                      | No. 11a        |
| – qualification of the subject by the logical reason established in reality and accepted (and pervasion not established in reality but accepted)   | (not considered)               | <b>Genuine non-probans-inducing</b>  | No. 8, 9       |
| – pervasion not established in reality but accepted  |                                |                                      | No. 5, 6, 8, 9 |
| – false conclusion eliminated by presumption   |                                |                                      | No. 6, 9, 12   |
| – subject not established by a valid cognition   |                                |                                      | No. 11b        |
| – positive pervasion established, negative pervasion not established   | <b>Fallacious</b>              | <b>Genuine non-probans-inducing</b>  | No. 11a'       |
| – qualification of the subject by the logical reason not established in reality and not accepted   | <b>Fallacious</b>              | <b>Fallacious</b>                    | No. 1, 2       |
| – pervasion not established in reality and not accepted  |                                |                                      | No. 3          |
| – true conclusion not eliminated   |                                |                                      | No. 4          |
| – false conclusion not eliminated  | (not considered)               |                                      |                |

|   |                  |  |  |
|---|------------------|--|--|
| – qualification of the subject by the logical reason established in reality but not accepted<br>– pervasion established in reality but not accepted                                       | (not considered) | (not mentioned explicitly, most likely fallacious, see §5) |  |
| – qualification of the subject by the logical reason established in reality and accepted based on a presumption<br>– pervasion established in reality and accepted based on a presumption | (not considered) | (not considered)   |  |

“Genuine consequences” of the Dharmakīrtian framework correspond exactly to the category of “genuine probans-inducing” consequences of the proof-or-refutation framework.

In the Dharmakīrtian framework, a “fallacious consequence” is a consequence that fails to prove, whereas in the proof-or-refutation framework, a “fallacious consequence” is a consequence that neither proves nor refutes. One would have expected all the cases that are “non-probans-inducing” in the proof-or-refutation framework to qualify as “fallacious” in the Dharmakīrtian framework. But instead, apart for a single case (No. 11a’), such scenarios are simply ignored in the Dharmakīrtian framework. Also ignored in the Dharmakīrtian framework are consequences with a false conclusion that is not eliminated, that qualify as “fallacious” in the proof-or-refutation framework (No. 7, 10, 13). Other “fallacious” cases are the same in both frameworks, and the fallacy is linked in both with the opponent’s ability to reply.

Significantly, the features that determine the distinction between fallacious and genuine proving consequences in the Dharmakīrtian framework correspond to the criteria that define non-probans-inducing and probans-inducing consequences in the proof-and-refutation framework. Case No. 11a’ illustrates well the difference of perspective between the two frameworks, as it is characterized differently in these two:

Because sound is permanent, it follows that it is void of audible existence.

In the section on correspondence representative of the Dharmakīrtian framework this consequence is classified as “fallacious” (see *'Od zer*

145a9–b2 and 145b4) because it lacks negative entailment; hence its reverse form, which lacks positive entailment, is not valid. But in the context of the thirteenfold typology, this case is classified as a “refuting consequence” (*sun 'byin pa'i thal ba*) (*'Od zer* 146a7–8) (No. 11a'), in other words, as a “genuine non-probans-inducing consequence,” but is not identified as a fallacious consequence: its reverse form is not valid, but insofar as the opponent accepts the premises, it qualifies as genuine.

The juxtaposition of these two frameworks in Phya pa's works is not problematic as such. The title of the section on correspondence specifies that it concerns arguments put forward in order to prove something. Thus strictly speaking it does not exclude the possibility of refuting consequences. Still, the analysis of correspondence is restricted to the “Dharmakīrtian framework” rather than addressing the broader range of cases dealt with in the thirteenfold typology.

My hypothesis is that this is due to the fact that Phya pa's discussion on consequences builds upon the presentations of his predecessors, in particular, those presentations that focused on a Dharmakīrtian version of consequences and included an analysis of correspondence. As discussed in §2.4, there appears to have been a precedent for Phya pa's analysis of correspondence, but a precedent representative of an overall-correspondence model. The restricted amount of available early material makes it impossible to surmise the identity of its author. But we may only note that those of Phya pa's predecessors who only accepted “proving consequences” (rNgog Lo's disciple Gangs pa she'u apparently was one of them, see Hugon 2013: 686) would be candidates for supporting an analysis of consequences limited to a Dharmakīrtian framework.

Phya pa did not subscribe to the Dharmakīrtian framework as such, but his re-use of a previous analysis of correspondence would explain why he considers this restricted framework in the first sections, whereas he develops his own system, the proof-or-refutation framework, in the next part of his works. The Dharmakīrtian framework still left its mark on the proof-and-refutation framework. It is significant in this regard that the scenarios illustrated at the first level of division in this typology (Nos. 1–4) are precisely the cases dealt with in the Dharmakīrtian framework: fulfilled premises are only illustrated by true premises, unfulfilled premises by false premises.

Another stage in the constitution of the text is suggested by the way exceptions and problematic cases are dealt with by Phya pa. As noted in §2.4, Phya pa does not refute the overall-correspondence model, but instead upgrades it by taking exceptions (albeit not all exceptions) into consideration. The same issues that generate exceptions in the analysis of correspondence are taken up in the proof-or-refutation framework, but these relevant additional criteria for defining a proving consequence are not involved in the establishment of the typology. They do not generate extra “types” in addition to the thirteen cases of the typology, but are introduced when dealing with case No. 11 (see §3.2.3). Further, these same criteria are not explicit in the definition of proving consequences given by Phya pa (see §3.3.2), which is the same as the definition of rNgog Lo. Phya pa introduces these criteria when he comments on the respective terms of the definition. This strongly suggests that these criteria have been added at a later stage to supplement a pre-existing thirteen-fold typology, a pre-existing definition, and (although incompletely) a pre-existing analysis of correspondence.

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#### PVin 3

*Dharmakīrti’s Pramānaviścaya, Chapter 3.* Ed. P. Hugon and T. Tomabechi. Sanskrit Texts from the Tibetan Autonomous Region, 8. Beijing/Vienna: China Tibetology Publishing House/Austrian Academy of Sciences Press, 2011.

#### PVinṬ

Dharmottara, *Pramānaviścayaṭīkā*. PVinṬ-Skt = copy of the Sanskrit manuscript. PVinṬ-Tib = Tibetan translation in D4227.

*Tibetan works**'Od zer*

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*bKa' gdams gsung 'bum*

*bKa' gdams gsung 'bum phyogs bsgrigs thengs dang po/gnyis pa/gsum pa*. Ed. dPal brtsegs bod yig dpe nying zhib 'jug khang. Chengdu: Si khron mi rigs dpe skrun khang. Vols. 1–30, 2006; vols. 31–60, 2007; vols. 61–90, 2009.

*bsDus pa*

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*dGa' byed*

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*Rigs pa'i gsal byed sgron ma*

gTsang drug pa rdo rje 'od zer, *Yang dag rigs pa'i gsal byed*. In *bKa' gdams gsung 'bum*. Vol. 47, 11–165.

*Rigs gter nyi ma*

Glo bo mkhan chen bSod nams lhun grub, *sDe bdun mdo dang bcas pa'i dgongs 'grel tshad ma rigs pa'i gter gyi 'grel pa'i rnam bshad rigs lam gsal*

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*Rigs gter pham byed*

gSer mdog pañ chen Śākya mchog ldan, *Tshad ma rigs pa'i gter dgongs rgyan lung dang rigs pa'i 'khor los lugs ngan pham byed*. In Kunzang Tobgey, ed., *The Complete Works (gSung 'bum) of gSer mdog pañ chen Śākya mchog ldan*. Vol. 9 (Ta). Timphu, 1975. [Reprint: Nagwang Topgyal, Delhi, 1988.]

*Rigs gter rab gsal*

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*rNam rgyal*

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### Appendix: Phya pa on non-instantiated logical reasons

In order to understand Phya pa’s discussion about consequences and their reverse form whose logical reason is not instantiated (*shes bya la med pa*) (see in particular §2.3.2), it is helpful to consider first Phya pa’s treatment of such reasons in the chapter on inference-for-oneself of his epistemological summary.

The non-establishment of the subject of an inference is a well-known issue when it comes to establishing the characteristic of “being a property of the subject” (*phyogs chos*, Skt. *pakṣadharmatva*) of the logical reason. According to Phya pa, the non-establishment of the logical reason affects this characteristic in the same way and causes the reason to be “unestablished” (*ma grub pa*, Skt. *asiddha*). Thus the list of the seven cases that do not satisfy the characteristic of “being a property of the subject” includes the “impossible nature of the logical reason” (*gtan tshigs kyi ngo bo mi srid pa*), illustrated by the logical reason “being ultimately existent” (*don dam par yod pa*) (*Mun sel* 46a3–5).

Provided that the logical reason is established as “being a property of the subject” another question that arises is whether it is instantiated in any locus other than the subject, and to what extent this instantiation or absence of instantiation can be ascertained. This issue is dealt with when discussing the fulfillment of the characteristics of positive and negative entailments, and in particular in the discussion on inconclusive (*ma nges pa*, Skt. *anaikāntika*) logical reasons that are “uncommon” (*thun mong ma yin*, Skt. *asādhāraṇa*).

The standard example of an uncommon reason, which goes back to Dignāga and Dharmakīrti, is the logical reason “audibility” (*mnyan bya*, Skt. *śrāvyaṇatva*).<sup>73</sup> It is not accepted as being valid to prove sound’s impermanence because the pervasion of audibility by impermanence (although it obtains in reality) cannot be established due to the lack of an example, namely, something audible other than the subject “sound.”<sup>74</sup>

After presenting this classical example (*Mun sel* 50a6–9), Phya pa takes up another case: the logical reason “audible existence” (*mnyan bya’i yod pa*).<sup>75</sup> Phya pa explains that “ancient scholars” (*snga rabs pa’i mkhas pa dag*) consider this case to be identical to that of “audibility:” it simply cannot be observed in an example other than sound, thus both positive and negative entailments cannot be established before the case of the subject (“sound”) is settled.

Phya pa also recounts the position of his “own *bla mas*” (*bdag cag gi bla ma dag*) who consider instead that “audible existence” is a correct logical reason. Their argument is that part of the reason, namely “existence,” can be observed in an example other than sound. By establishing that impermanence pervades existence (unqualified) on this basis, one eliminates the doubt that impermanence does not also pervade existence qualified by audibility, i.e., audible existence.<sup>76</sup>

<sup>73</sup> On the difference between Dharmakīrti’s understanding of this case (which Tibetan logicians adopt) and that of Dignāga see Tillemans 1999: 103–106.

<sup>74</sup> Although audibility is in fact present in sound, which is impermanent, this cannot be known until one knows that sound is impermanent; and although it is in fact not present in what is not impermanent, it cannot be ascertained to be absent in what is not impermanent until one knows that sound (which is audible) is not something permanent.

<sup>75</sup> The relevant passage covers folios 50a9–53b9 in the *Mun sel*.

<sup>76</sup> *Mun sel* 50b2–3. The *Tshad bsdus* (207) notes that “rGya” supports this view. See further *Mun sel* 51a1–52b8 for the presentation and the refutation of the view of some of Phya pa’s *bla mas* (*bdag cag gi bla ma kha cig*).

Phya pa adopts his *bla mas'* solution, but only partially. He agrees that negative entailment can be established this way, namely by resorting to an example where a generic, unqualified version of the logical reason (i.e., “existence”) occurs. He contests, on the other hand, that the same method enables one to ascertain positive entailment. Thus according to Phya pa, one can establish the negative entailment of the logical reason “audible existence,” but not its positive entailment. Phya pa does not contest Dharmakīrti’s equivalence between positive and negative entailments. He just argues that the establishment of one does not necessarily imply that the other *can be* established. “Audible existence” is thus an unestablished uncommon reason.

Let us now turn to consequences and their reverse form. Phya pa focuses in this context on the question of positive and negative entailments when a non-instantiated logical reason is involved in the consequence or in its reverse form (which is the case when the negandum of the consequence is non-instantiated).

He mentions among his examples the properties: “permanent entity which is devoid of fire” (*me med kyi rtag pa'i dngos po*), “permanent smoke” (*rtag pa'i du ba*), “existent ultimate entity” (*don dam pa'i dngos po yod pa*), and “existent as sound” (*sgra'i yod pa*).

The last example is a variation on the logical reason “audible existence” (*mnyan bya'i yod pa*) dealt with in the chapter on inference-for-oneself. The first three are impossible reasons, that is, they do not qualify the subject in reality, nor are they instantiated in any other locus.

As mentioned above, according to Phya pa, “audible existence” satisfies negative entailment, but not positive entailment (with regard to the property “impermanence”). The same conclusion applies to the other three cases. Phya pa’s argument against the fulfillment of positive entailment is that a property that does not exist among knowable things (*shes bya la med pa*) cannot be pervaded by any other property. For instance, “permanent smoke” cannot be pervaded by “fire;” nor can it be pervaded by “void of a permanent entity devoid of fire” even though this property pervades every knowable instance. It is the same if the property cannot be established to exist among knowable things (*shes bya la yod par ma nges pa*), like “audible existence:” one cannot establish that it is pervaded by any other property.

In view of the correspondence between the features of the consequence and that of its reverse form, the positive entailment of the consequence (P entails Q) corresponds to the negative entailment of the reverse form, and the negative entailment of the consequence (notQ entails notP) corresponds to the positive entailment of the reverse form.

The non-instantiation of property P causes a failure of the positive entailment of the consequence and of the negative entailment of the reverse form. The non-instantiation of property notQ causes a failure of the positive entailment of the reverse form and of the negative entailment of the consequence.

As an example of the second case (notQ is not instantiated), in the case of the consequence

Because there is no fire (P) on the ocean, there is no permanent smoke (Q)  
and its reverse form

Since there is permanent smoke (notQ) on the ocean, there is fire (notP)

the positive entailment of the reverse form and the negative entailment of the consequence (permanent smoke entails fire) are not established, but the negative entailment of the reverse form and the positive entailment of the consequence (absence of fire entails absence of permanent smoke) are established.

One should observe that Phya pa differentiates between the establishment of the negative entailment and the mere negation of conjunction (*tshogs khegs pa*) of the logical reason and dissimilar instances. The latter is not affected by the involvement of a non-instantiated property.

For instance in the example above the negative entailment of the consequence (permanent smoke entails fire) is not established because there can be no pervasion of permanent smoke by anything. Still, one can establish the negation of the conjunction of the logical reason “absence of fire” and dissimilar instances, i.e., things endowed with “permanent smoke:” in the absence of fire, there can be no smoke whatsoever (*du ba tsam med*), and hence also no smoke that is characterized as permanent.

There are altogether four options when considering the instantiation of the respective logical reasons of the consequence (P) and of the reverse

proof (notQ) (or in other words, of the logical reason and the negandum of the consequence):

|   | Consequence        |                  |                     |                     | Reverse form          |                  |                     |                     |
|---|--------------------|------------------|---------------------|---------------------|-----------------------|------------------|---------------------|---------------------|
|   | logical reason (P) | negandum (notQ)  | positive entailment | negative entailment | logical reason (notQ) | negandum (P)     | positive entailment | negative entailment |
| 1 | instantiated       | instantiated     | yes                 | yes                 | instantiated          | instantiated     | yes                 | yes                 |
| 2 | non-instantiated   | non-instantiated | no                  | no                  | non-instantiated      | non-instantiated | no                  | no                  |
| 3 | instantiated       | non-instantiated | yes                 | no                  | non-instantiated      | instantiated     | no                  | yes                 |
| 4 | non-instantiated   | instantiated     | no                  | yes                 | instantiated          | non-instantiated | yes                 | no                  |

Case 1 obviously fulfills the criterion of pervasion; case 2 obviously does not fulfill it.

Case 3 would entail a reverse form whose reason has the same characteristics as the reason “audible existence,” which is considered to be “inconclusive” by Phya pa in the chapter on inference-for-oneself. Therefore a consequence such as case 3, whose logical reason (P) is instantiated but whose negandum (notQ) is not, does not qualify as a proving consequence.

On the other hand, Phya pa considers case 4 to constitute a proving consequence; its reverse form is regarded as correct. For instance the consequence

Because there is permanent smoke (P) on the ocean, it follows that there is fire (Q)

induces the correct proof

Since there is no fire (notQ) on the ocean, there is no permanent smoke (notP).

The qualification of the subject by a reason with an impossible nature such as “permanent smoke” would be problematic in the case of a direct proof, but this is not the case in a consequence: the premise of “qualification of the subject by the logical reason” is fulfilled provided the opponent accepts that there is permanent smoke on the ocean (i.e., according to the

opponent, it is not a non-instantiated logical reason). As discussed in §2.3.2, since the positive entailment is not actually established, technically speaking this consequence lacks pervasion, but the opponent cannot adduce the retort “pervasion not established.”

In the reverse form, the characteristic of “being a property of the subject” is unproblematic because the logical reason (“absence of fire”) is instantiated (the non-instantiated property (P) has taken the place of the negandum). And Phya pa considers that such a proof is correct even though the negative entailment cannot be established.

Unsurprisingly, what is most at stake here are not consequences based on logical reasons such as “audible existence” or “permanent smoke.” Rather this discussion is linked to issues arising in the proof of emptiness relying on the “neither-one-nor-many” argument, because when this proof is stated in the form of a consequence, it involves the non-instantiated logical reason “being an ultimate entity:”

Because an entity is an ultimate entity (*yang dag pa'i dngos po*), it follows that it is established as being ultimately one or many.

In view of the above conclusions, even if this consequence lacks positive entailment, it nevertheless satisfies the requirements for being a proving consequence, because it is a genuine consequence that induces the correct reverse direct proof:

Since entities are neither one nor many (/since they are void of being ultimately one or many), they are void of being ultimate entities.<sup>77</sup>

#### ABSTRACT

This paper is part of a series of articles on the theory of argumentation proposed by the Tibetan thinker Phya pa Chos kyi seng ge (1109–1169), and in particular on his views on argumentation “by consequence” (Tib. *thal 'gyur/thal ba*). I examine in detail the sections of Phya pa’s epistemological summary and of his

<sup>77</sup> *Mun sel* 52b9 uses the formulation *dngos po 'di yang dag pa'i dngos po yod pa'i phyir yang dag pa'i cig dang du mar 'grub par thal zhes* for the consequence. In the context of the discussion of consequences, one finds the formulation: *yang dag gi dngos po yin pas cha med pa'i cig dang du mar thal zhes pa*, but the reverse form is given in terms of *yang dag pa'i cig dang du mas stong pas yang dag pa'i dngos pos stong* (*Mun sel* 90b5–6).

commentary on Dharmakīrti's *Pramāṇaviniścaya* that deal with the identification and definition of various kinds of consequences: fallacious consequences, genuine consequences and, among the latter, proving consequences and refuting consequences. I highlight the existence of two distinct frameworks in Phya pa's discussion. In the first, Phya pa exclusively deals with consequences that fulfill a probative function. In the second, more extended framework, he establishes a thirteenfold typology of consequences that also includes consequences that fail to prove the proponent's thesis but still succeed in refuting the opponent. I examine Phya pa's criteria for proving consequences, and discuss the specific cases of consequences with a true conclusion and consequences with a true premise. I argue that the juxtaposition of the two frameworks reflects a gradual process of composition in which an earlier model was integrated and updated.