Anonymous I and *Prologus in tonarium*: Changing Interpretations of Music Theory in Eleventh-Century Germany

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Abbot Bern of Reichenau (d. 1048) stands as a formative influence upon eleventh- and twelfth-century German music theorists. Prologus in tonarium, the longer of his two music treatises, takes the form of a prologue in twelve chapters to an extensive tonary. His pairing of the theoretical prologue with the tonary—a list of chants classified according to mode-emphasizes the fundamental connexion between music theory and singing, which was the salient feature of the ars musica in the monastic and cathedral schools of Germany during the eleventh and twelfth centuries. Abbot Bern dedicated this treatise to Archbishop Pilgrim of Cologne, which implies a date of composition between 1021 and 1036.2 Prologus in tonarium exerted a considerable influence on subsequent generations of south-German music theorists, for it was widely copied during the eleventh and twelfth centuries: today *Prologus* survives in over thirty manuscripts while *Tonarius* survives in seventeen.³ The provenances and origins of the eleventh- and twelfth-century recensions show the treatise to have been widely disseminated in southern Germany. To this total must be added the evidence of library catalogues and known lost copies: the treatise was available in the monasteries of Muri, Reichenau, St Blasien, St Georgen, Tegernsee and Weissenau during the eleventh and twelfth centuries.4

The most recent edition of Bern's musical works is Alexander Rausch (ed.), *Die Musiktraktate des Abtes Bern von Reichenau. Edition und Interpretation*, Musica mediaevalis Europae occidentalis, 5 (Tutzing: Schneider, 1999).

² Albert Hauck, *Kirchengeschichte Deutschlands* 3 (Leipzig, 1906; repr. Berlin, 1953), 994.

Rausch, Die Musiktraktate, 17–24 and 71; Hans Oesch, Berno und Hermann von Reichenau als Musiktheoretiker. Mit einem Überblick über ihr Leben und die handschriftliche Überlieferung ihrer Werke, Publikationen der schweizerischen Musikforschenden Gesellschaft, 9 (Bern: Haupt, 1961), 43–5.

⁴ Oesch, 45–7.

Tracing the dissemination of Abbot Bern's teaching as embodied in *Prologus in tonarium* is not a simple matter, for among the extant copies of the treatise there exists a group of manuscripts containing extensive textual interpolations. These interpolations—which should be seen as the efforts of eleventh-century clerks to explain and understand particular aspects of Bern's music theory—introduce a new level of interpretation that coloured subsequent theorists' approaches to *Prologus in tonarium*. An instructive case study in this regard is the interrelation of Abbot Bern's original text, the interpolated text, the short treatise generally known today as 'Anonymous I' (also called *De mensurando monochordo*) and the lengthy treatise *Breviarium de musica* by the learned monk Frutolf of Michelsberg (d. 1103).⁵ The connexion of these treatises is an illustration not only of the often-complex nature of eleventh-century source filiations, but also of the important contributions to music theory of the many monks and clerks whose identities remain hidden to posterity.⁶

Anonymous I or De mensurando monochordo

The treatise called either Anonymous I or *De mensurando monochordo* is known from three sources. Martin Gerbert presented it as the first of a number of short anonymous treatises (mainly devoted to the measurement of the monochord and organ pipes) in the first volume of *Scriptores ecclesiastici de musica*; from this it has become known as Anonymous I.⁷ Gerbert used a twelfth-century manuscript from the library of St Blasien for his edition. This manuscript is no longer extant, as it was destroyed by fire

Frutolf of Michelsberg, *Breviarium de musica*, ed. Cölestin Vivell, 'Frutolfi Breviarium de musica et Tonarius', *Akademie der Wissenschaften in Wien. Philosophische historische Klasse, Sitzungsberichte* 188/2 (1919).

For the sake of clarity this discussion will not consider the role of the anonymous treatise *Si regularis monochordi divisionem*. This short work from the early eleventh century is a source for Frutolf of Michelsberg's monochord measurements in *Breviarium de musica* 11; Michael Bernhard, 'Zur Überlieferung des 11. Kapitels in Frutolfs "Breviarium", in Michael Bernhard (ed.), *Quellen und Studien zur Musiktheorie des Mittelalters* 1, Veröffentlichungen der Musikhistorischen Kommission, 8 (Munich: Bayerische Akademie der Wissenschaften, 1990), 37–67. See also Matthias Hochadel, 'Zur Stellung des pseudo-bernonischen Traktats *De mensurando monochordo* und seinem Verhältnis zu Frutolf's *Breviarium*', in Walter Pass and Alexander Rausch (eds), *Beiträge zur Musik, Musiktheorie und Liturgie der Abtei Reichenau. Bericht über die Tagung Heiligenkreuz 6.–8. Dezember* 1999, Musica mediaevalis Europae occidentalis, 8 (Tutzing: Schneider, 2001), 41–68, whose useful discussion includes *Si regularis* and other manuscript sources.

Martin Gerbert (ed.), Scriptores ecclesiastici de musica sacra potissimum. Ex variis codicibus manuscriptiis collecti a M. Gerberto, 1 (St Blasien, 1784), 330–8.

in 1768. In Gerbert's version the treatise comprises eight sections without introduction, conclusion or headings.

The treatise also appears in the early twelfth-century manuscript preserved in the Österreichische Nationalbibliothek, Vienna (*A-Wn*), Cod. 51, fols 52v–55r. This recension is more elaborate than the St Blasien version. It occurs in a part of the codex given over to works by Bern of Reichenau. Fols 49r–52r transmit Abbot Bern's *Prologus in tonarium*. This is followed in the left-hand column of fol. 52v by a diagram of the two-octave note system and a paragraph on the relationship of this to the modes. The scribe must have understood this diagram and paragraph to belong to *Prologus in tonarium*, for the following is written in rubricated capitals at the end of the paragraph:

Explicit liber primus regularum venerabilis Bern abbatis in artem musicam. Incipit secundus eiusdem de mensurando monochordo.⁹

What follows in the second column of fol. 52v is the more elaborate version of Gerbert's Anonymous I. It begins with a large decorated initial and display capitals, typical of the style used at the beginnings of treatises in the Vienna codex. The main differences between the St Blasien and Vienna recensions are the inclusion in the latter of a prologue in rhyming prose; the inclusion of a list of chapters; the addition of headings at the beginning of each chapter; and the addition of a section at the end entitled 'Recapitulatio operum'. At the end of this recapitulation on fol. 55r the scribe has written 'Explicit musica domni abbatis Bern'. The attribution of this version to Bern of Reichenau is, therefore, very clear.

The third and final source for this treatise is the fifteenth-century manuscript Karlsruhe, Badische Landesbibliothek (*D-KA*), L. 100, where it appears in fragmentary form (§§ 2.3–4.2) as a front-cover pastedown (the pastedown dates from the late eleventh or early twelfth century).¹⁰

The varied transmission of Anonymous I has resulted in a number of different interpretations by modern scholars. Hans Oesch believed it to date from the late tenth

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⁸ For descriptions see *RISM Series B* 3/1, 33–6; and Dolores Pesce, *Guido d'Arezzo's Regule rithmice, Prologus in antiphonarium and Epistola ad Michahelem: a Critical Text and Translation* (Ottawa: Institute for Mediaeval Music, 1999), 198–202.

⁹ *A-Wn*, Cod. 51, fol. 52v.

Felix Heinzer and Gerhard Stamm, Die Handschriften der badischen Landesbibliothek in Karlsruhe 11. Die Handschriften von Lichtenthal (Wiesbaden: Harrassowitz, 1987), 245.

century or early eleventh century, before Guido of Arezzo's treatises. 11 Joseph Smits van Waesberghe took the attributions in A-Wn, Cod. 51 at face value and assigned the treatise to Bern of Reichenau: he re-edited it after the Vienna recension, using the title De mensurando monochordo. 12 In support of his interpretation Smits van Waesberghe adduced the testimony of the chronicler and historian Sigebert of Gembloux who, in his early twelfth-century Liber de viris illustribus, mentioned that Bern had not only written 'concerning the rules of the symphonies and of the modes' but also concerning 'the measurement of the monochord upon the rules of Boethius'. 13 Smits van Waesberghe identified this comment as an attribution of *De mensurando monochordo* to Abbot Bern.¹⁴ He supported this opinion with reference to various medieval library catalogues. In the case of the twelfth-century catalogue from the monastery of Michelsberg in Bamberg, for example, he suggested that in the listing '...Tonarius, musica Bernonis...', 'tonarius' meant Bern's Prologus in tonarium and Tonarius, while 'musica Bernonis' meant another work by Bern, namely De mensurando monochordo. 15 He advocated a similar interpretation in the case of a number of other library catalogues dating from between 1500 and 1700.¹⁶

This interpretation has been challenged by Alexander Rausch, the editor of the most recent edition of Bern's musical works. He has given little weight to Smits van Waesberghe's interpretation of Sigebert's testimony, arguing that Sigebert cannot have intended *De mensurando monochordo* because it is too conservative a source to mention Guido of Arezzo. Furthermore, Rausch has rejected Smits van Waesberghe's reliance upon library catalogues, showing that *De mensurando monochordo* cannot be identified

¹² Joseph Smits van Waesberghe, Bernonis Augiensis abbatis De arte musica disputationes traditae. Pars A: Bernonis Augiensis de mensurando monochordo, Divitae musicae artis, A/6a (Buren: Knuf, 1978).

¹¹ Oesch, 90.

Sigebert of Gembloux, *Liber de viris illustribus* 157, ed. Robert Witte, *Catalogus Sigeberti Gemblacensis monachi de viris illustribus*, Lateinische Sprache und Literatur des Mittelalters, 1 (Bern: Lang, 1974), 98: 'Berno abbas Augiensis, in humana et divina scientia claruit. Praetero ea quae de humana scientia scripsit, in quibus eminet hoc quod in arte musica praepollens de regulis symphoniarum et tonorum scripsit, et quod in mensurando monochordo ultra regulam Boetii, sed assensu minoris Boetio Guidonis supposuit unum tonum tetrachordohypaton, et contra usum majorum in ipso tetrachordohypato inseruit utiliter synemmenon...'

Joseph Smits van Waesberghe, Bernonis Augiensis abbatis De arte musica disputationes traditae. Pars B: Quae ratio est inter tria opera De arte musica Bernonis Augiensis, Divitae musicae artis, A/6b (Buren: Knuf, 1979), 14–18.

¹⁵ Smits van Waesberghe, Bernonis Augiensis Pars B, 20.

¹⁶ Smits van Waesberghe, Bernonis Augiensis Pars B, 21–2.

with mentions of music treatises by Bern.¹⁷ In place of Smits van Waesberghe's theory, Rausch has suggested that *De mensurando monochordo* is an anonymous compilation derived from a number of sources: the short anonymous monochord-treatise *Si regularis monochordi divisionem*, Frutolf of Michelsberg's *Breviarium de musica* and one of the interpolations, which was attributed to Bern of Reichenau, in the text of that author's *Prologus in tonarium*.¹⁸ Consequently, he has revised the dating of *De mensurando monochordo* to *c*1100, almost one hundred years later than that suggested by Hans Oesch.¹⁹

The *Prologus* interpolations

The interpolated version of Bern's *Prologus in tonarium* is transmitted in six manuscripts: Karlsruhe, Badische Landesbibliothek (*D-KA*), 504, fols 1r–14v; Melk, Stiftsbibliothek (*A-M*), 950, fols 113r–126v; Munich, Bayerische Staatsbibliothek (*D-Mbs*), Clm 14663, fols 29v–33v; Rochester, NY, Eastman School of Music, Sibley Music Library (*US-R*), ML 92/1100, pp. 143–73; Trier, Stadtbibliothek (*D-Trs*), 1897/18, fols 46v–81r; Vienna, Österreichische Nationalbibliothek (*A-Wn*), Cod. 2502, fols 37v–38v.²⁰ Of these six codices, Karlsruhe, Rochester and Trier are the earliest and most similar; all have been connected with the monastery of Michelsberg in Bamberg.²¹ *D-KA*, 504, which was compiled by Frutolf of Michelsberg and his colleague Thiemo of Michelsberg, ²² probably served as the archetype for the Rochester and Trier versions. A study of the textual variants between these manuscripts shows that Karlsruhe and Rochester exhibit greater similarity with each other than with Trier, which in various instances gives slightly different wordings. Sometimes this involves the substitution of a similar word, such as 'instructione' for 'constructione' in the following example:

 \dots et per seriem uocum in totius monochordi constructione alternatim dispositas \dots^{23}

...et per seriem uocum in totius monochordi instructione alternatim dispositas...²⁴

²⁰ Rausch, Die Musiktraktate, 24.

¹⁷ Rausch, Die Musiktraktate, 118–20.

¹⁸ Rausch, Die Musiktraktate, 123.

¹⁹ As note 18; Oesch, 90.

²¹ Rausch, *Die Musiktraktate*, 124.

Karin Dengler-Schreiber, *Scriptorium und Bibliothek des Klosters Michelsberg in Bamberg*, Studien zur Bibliotheksgeschichte, 2 (Graz: Akademische Druck- und Verlagsanstalt, 1979), 36–7.

²³ D-KA, 504, fol. 5r.

Sometimes, however, it results in mistakes when different note names are substituted, obscuring the meaning of a passage. Examples of this are 'prima diapason species in his duabus speciebus ab A in A' (which makes no sense) for the correct 'ab A in a'.

Quia enim diapason ex diapente et diatessaron consistit...prima diapason species ab A in a contineatur...[fol. 5v]...septima a paranete yperboleon ad lychanos meson remittitur.²⁵

Quia enim diapason ex diapente et diatessaron consistit...prima diapason species in his duabus speciebus ab A in A contineatur...septima a lychanos meson ad paranete yperboleon remittitur. 26

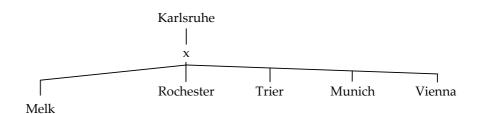
The text in Karlsruhe and Rochester differs only on minor points—for example 'ratio' for 'oratio' below—that do not affect the meaning of the text greatly.

...in quibus octo modorum diuersa fit positio, quod sequens expediet oratio.²⁷

...in quibus octo modorum diuersa fit positio, quod sequens expediet ratio.²⁸

The spread of the interpolated version, therefore, unfolds along the lines indicated by Alexander Rausch, with Rochester being closer to Karlsruhe than Trier (*Fig.* 1):²⁹

Fig. 1



²⁴ *D-Trs*, 1897/18, ed. Rausch, 43.

²⁵ *D-KA*, 504, fol. 4v.

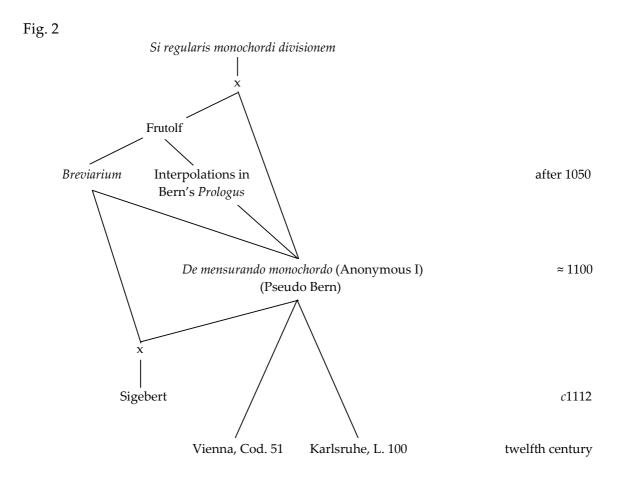
²⁶ *D-Trs*, 1897/18, ed. Rausch, 43.

²⁷ *D-KA*, 504, fol. 5v.

²⁸ US-R, ML 92/1100, ed. Rausch, 43.

²⁹ Rausch, Die Musiktraktate, 25.

The interpolations in Bern's *Prologus in tonarium* were identified systematically by Hans Oesch in the 1950s, who believed that they belonged to the second half of the eleventh century.³⁰ Smits van Waesberghe's discussion of the relationship between *De mensurando monochordo* and Frutolf of Michelsberg contains the latent suggestion of a link between Frutolf and the *Prologus* interpolations.³¹ This aspect comes to the fore in Rausch's research, where it is argued that the *Prologus* interpolations originated with Frutolf; the association of the Karlsruhe, Rochester and Trier manuscripts with Michelsberg must have strengthened this opinion.³² Linking this with his research on *De mensurando monochordo*, Rausch suggested the following reconstruction (*Fig.* 2):



³⁰ Oesch, 91.

³¹ Smits van Waesberghe, Bernonis Augiensis Pars B, 12–14.

³² Rausch, Die Musiktraktate, 124–5.

The source connexions

Rausch's rejection of a link between Abbot Bern and De mensurando monochordo is probably correct. Smits van Waesberghe's attribution of De mensurando monochordo to Bern on the basis of medieval library catalogues seems to be based upon little more than tenuous semantics and wishful thinking. Rausch has more than adequately countered it with plausible alternatives.³³ Sigebert of Gembloux's testimony can be understood in a number of ways. Whether it can be taken to infer that Sigebert believed Bern to have written two treatises (one on the rules of the symphonies and modes, the other on the measurement of the monochord), as Smits van Waesberghe argued, is a very tenuous point. It may just be a reference to Prologus in tonarium. Sigebert may, on the other hand, have seen another treatise attributed to Bern and naturally assumed it to be genuine. Bern of Reichenau was a much copied theorist who was held in high regard by eleventh- and twelfth-century German clerks. Sigebert, though a reliable and well-informed author, was writing in the early twelfth century, some sixty years after Bern's death. There was thus plenty of time for inconsistencies to creep into the transmission of Bern's works (the interpolations are the most prominent example), inconsistencies that Sigebert could not possibly have appreciated. Such distortion is doubtless behind Sigebert's desire to link Bern and Guido of Arezzo;34 it is only we today who are aware that Bern did not know of Guido's work. Sigebert's testimony is more useful for gauging Abbot Bern's fame among later generations than for providing a reliable guide to the textual tradition of his works. Bern's reputation as a learned musician may well explain the solitary attribution of Anonymous I to him in the Vienna codex. Two of the three sources—the Karlsruhe fragment (D-KA, L. 100) and the burnt St Blasien manuscript used by Gerbert—do not mention Bern. Only the recension in A-Wn, Cod. 51 attributes the treatise to Bern. Such an attribution is not in itself unusual, for treatises were frequently misattributed in this period: Dialogus de musica to Odo of Cluny and a set of organ-pipe measurements in Munich, D-Mbs, Clm 4622, to the theorist Aribo, for example.35

A-Wn, Cod. 51 provides an important piece of evidence to back up Rausch's suggestion that Anonymous I may have circulated in manuscripts attributed to Bern. The question that remains is whether it dates from the early eleventh century or is a

³³ Rausch, *Die Musiktraktate*, 118–19. Hochadel (as note 6) agrees with Rausch's interpretation in this respect.

³⁴ Sigebert of Gembloux, *Liber de viris illustribus* 157, 98.

³⁵ *D-Mbs*, Clm 4622, fol. 178v.

composite work from *c*1100. To answer this it will be necessary to analyse its relationship with the *Prologus* interpolations and Frutolf of Michelsberg's *Breviarium de musica*.

Anonymous I does not seem like a work of the early twelfth century. It is too oldfashioned. The diagram given before the recension in A-Wn, Cod. 51, fol. 52v gives the fifteen-note system derived from Boethius: A B C D E F G H K L M N O P Q.³⁶ This manner of labelling the notes is rather archaic: eleventh-century theorists from Herman of Reichenau onwards were using $\Gamma ABCDEFGabcdefg_a^{a}$. absence of Γ and of $\frac{a}{a}$ also dates it. The Boethian note system is used throughout the treatise (as it is in *Prologus in tonarium*, though Bern always used the full Greek names for the notes). The only authority cited in the treatise is Boethius; there are no mentions of Bern or Guido, names that could reasonably be expected to occur in a treatise of the early twelfth century. The tetrachordal system given in §5 of Anonymous I presents a conjunction of the first two tetrachords at E; the synemmenon tetrachord (a b-flat c d) third; and a conjunction of the fourth and fifth tetrachord at e. This would not have sufficed by the late-eleventh century, for Abbot Bern's pupil Herman of Reichenau (1013-54) had by then definitively established the neat system of four tetrachords conjunct at D and d. 38 Furthermore, the synemmenon tetrachord would never have been numbered three: it was seen as a substitute called upon only when a chant required a b-flat. Similarly, § 7 of Anonymous I says that there are three species of diatessaron, four of diapente and seven of diapason. Though this was the view held by Abbot Bern, in the second half of the eleventh century it was generally held that there were four species of diatessaron, four of diapente and eight of diapason, largely due to the reordering of the species and tetrachordal system undertaken by Herman of Reichenau in his treatise Musica.³⁹

It is unlikely, therefore, that Anonymous I is a compilation of *c*1100, for its subject-matter is too old-fashioned to have been of use to a clerk writing at this time. The treatise *Quaestiones in musica*, a compilation of eleventh-century works produced at a Lotharingian centre in the early twelfth century, uses both Bern of Reichenau and

³⁶ The series given in the Vienna manuscript seems to be an unique variation on this.

³⁷ Hochadel, 52–8.

This system is one of a number of possibilities given by Hucbald of St Amand (*c*840–930). See Claude V. Palisca (ed.) and Warren Babb (trans.), *Hucbald, Guido and John: Three Medieval Treatises* (New Haven and London: Yale University Press, 1978), 8.

Herman of Reichenau, *Musica* 5–8, ed. and trans. Leonard Ellinwood, *Musica Hermanni Contracti* (Rochester, NY: University of Rochester, 1936), 27–32.

Anonymous I among its many sources. But it only uses a passage on the diatonic and enharmonic genres of music from Anonymous I, and steers clear of Bern's teaching on the gamut, the tetrachords and the species. For these subjects the author—possibly Rudolf of St Trond—got his information from more up-to-date sources. To have repeated the theory of Bern's time in his own treatise would have been pointless. The character of Anonymous I, therefore, dates it to the first half of the eleventh century, as Oesch thought. Oesch thought.

There is a connexion between *Prologus in tonarium* and Anonymous I through the *Prologus* interpolations: some of these are taken from Anonymous I. The following example compares the interpolation in *Prologus* 5 with § 7 of Anonymous I:

Interpolation in *Prologus* 5 (ed. Rausch, 43)

Diapente vero species prima, sicut et supra dictum est, continetur D E F G a tono semitonio ditono; secunda E F G a b semitonio et tribus tonis, ab ypate meson scilicet ad paramese; tercia F G a b c, tribus tonis et semitonio, a parypate meson ad trite diszeugmenon; quarta G a b c d, ditono, semitonio et tono, a lichanos meson ad paranete diezeugmenon.

Anonymous I § 7 (ed. Gerbert, 335)

Diapente vero, quae unam plus vocem, unam plus habet et speciem: quarum prima est D E F G H. Secunda E F G H M. Tertia F G H M N. Quarta G H M N O.

The two texts are very similar. There are, however, important differences. The first line of the *Prologus* interpolation contains the extra phrase 'sicut et supra dictum est'. This refers the reader back to Bern's description of the first species of *diapente* in *Prologus* 5. It is not in Anonymous I because there is no need for this cross-reference. The text in the *Prologus*-interpolation provides the Greek names for the boundary notes of each species unlike Anonymous I, which gives only the letter-names following Boethius. Where the letters are given in the *Prologus* interpolation they are modernized. Hence 'D E F G H' of Anonymous I becomes 'D E F G a' in the interpolation.

Quaestiones in musica 25, ed. Rudolf Steglich, Die Quaestiones in musica. Ein Choraltraktat des zentralen Mittelalters und ihr mutmaßlicher Verfasser Rudolf von St. Trond (1070–1138) (Leipzig, 1911; repr. 1971), 22–3, 27–9, 37–9, 59–62 and 68.

⁴¹ A point that is also implicit in Hochadel, 67–8.

Anonymous I and Prologus in tonarium

The implication of this is that the *Prologus* interpolations are based upon Anonymous I and not, as Rausch argues, the other way round. It would have made little sense for a clerk of c1100 deliberately to have rendered the note-names in the interpolations in an arcane manner. It would have also made little sense for him to have produced such a *recherché* work based upon out-dated music theory; *Quaestiones in musica* is a case in point against that practice. Anonymous I and the interpolations, therefore, must date from around the same time, with Anonymous I coming first. Further proof for the existence of Anonymous I well before c1100 is to be found in Frutolf's *Breviarium de musica* and in the eleventh-century treatise commonly known as the 'Wolf Anonymous'.⁴²

Frutolf of Michelsberg's Breviarium de musica

Frutolf of Michelsberg used many sources for his *Breviarium de musica*, among them Bern of Reichenau and Anonymous I. Frutolf's writing style makes it possible to identify an important and distinguishing characteristic of his reliance upon other works. *Breviarium de musica* shows that where Frutolf copies from another author he rarely does so slavishly. He tends to introduce textual differences by way of comment and qualification upon the source text.⁴³ He also splits up sentences, inserting his own connecting sub-clauses. This is the case with his copying from Herman of Reichenau and Abbot William of Hirsau (d. 1091). It is also the case when he copies from Anonymous I:

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⁴² Johannes Wolf (ed.), 'Ein anonymer Musiktraktat des elften bis zwölften Jahrhunderts', Vierteljahrschrift für Musikwissenschaft 9 (1893), 186–234.

⁴³ T. J. H. McCarthy, *The Study of Music Theory in Germany from the Second Half of the Eleventh Century to the Early Twelfth Century* (D.Phil diss., University of Oxford, 2004), 115–27.

Frutolf, Breviarium 4 (ed. Vivell, 43)

Nemo autem existimet, idem esse diatessaron quod sesquitertium vel diapente quod sesqualterum, sive diapason quod duplum; sed, quod arithmetici sesquitertium dicunt, musici diatessaron vocant, quod sonat de quatuor quia sub quaternis voculis talis proportio continetur, et quod illi dicunt sesqualterum, isti diapente quod sonat de quinque, quia sub totidem chordis constituitur. Quod vero illi duplum, isti vocant diapason, quod dicitur de omnibus...

Anonymous I § 6 (ed. Gerbert, 335)

Nemo autem existimet, idem esse diatessaron, quod sesquitertium, diapente quod sesquialterum, diapason quod duplum. Nam quod arithmetici sesquitertium dicunt, Musici diatessaron, quod sonat de quatuor: quod sub quaternis voculis talis proportio contineatur. Diapente de quinque, quod sub totidem contineatur. Diapason de omnibus...

The question should be asked whether Frutolf took this Anonymous I material directly from Anonymous I or from the *Prologus* interpolations that copy Anonymous I. The fact that he used parts of Anonymous I not used in the *Prologus* interpolations indicates that he had access to an independent copy of that treatise. The following textual comparison shows the differences between the three sources:

Frutolf, *Breviarium* 8 (ed. Vivell, 60)

Quintus modus intenditur ad triten hyperbolaeon quae est f, raro ad g, remittitur vero ad parhypaten meson quae est F, aliquando ad E; continens inter F et f sextam vel potius juxta tropicam constructionem tertiam diapason speciem, supra et infra assumens vocum. Cujus cantus inceptiones et distinctiones sunt E F G a b c.

Anonymous I § 8 (ed. Gerbert, 337)

Quintus modus intenditur ab E ad Q raro autem ad R continens sextam inter F et O diapason speciem, supra vero et infra vocem: cuius cantus principia et distinctiones sunt sex, E F G H M N.

Interpolation in *Prologus* 6 (ed. Rausch, 47)

Quintus modus intenditur ad f, quae est trite hyperboleon, raro autem ad g, et remittitur ad E, hoc est ad ypate meson, continens inter F et f sextam diapason speciem, supra vero et infra vocem. Cuius cantus principia et distinctiones sunt sex: E F G a b c, ab ypate meson ad trite diezeugmenon.

Anonymous I is one of the sources used by the 'Wolf Anonymous'. This theorist also used Abbot Bern (without interpolations) and Herman of Reichenau, but no subsequent German theorists. He found Abbot Bern useful chiefly for his teaching on the melodic patterns in chants. He used Anonymous I for its description of the modal ranges, though—like the author of the *Prologus* interpolations—he updated its arcane note-naming. His description of the tetrachords, however, is based upon Herman of Reichenau's later method. This restricted range of reference suggests a relatively early date of composition, *c*1060, as most scholars have agreed. It also suggests that even by this date the anonymous author was aware of what was considered current and what out-of-date; hence the discrimination in his use of the sources. The implication is that Anonymous I must have been in existence by the time he was writing.

From the above the following conclusions may be drawn. Bern of Reichenau is not the author of Anonymous I (*De mensurando monochordo*), as Smits van Waesberghe believed. The recension of this treatise in *A-Wn*, Cod. 51 is mistakenly attributed to him. Anonymous I was not written *c*1100 as Rausch has suggested: its content renders that highly improbable. It was, more likely, written shortly after Bern of Reichenau produced *Prologus in tonarium*, that is to say in the 1030s or 1040s. Such a date accounts for both its old-fashioned characteristics and the steps it takes towards outlining the theory of the gamut that would be stated coherently in Herman of Reichenau's *Musica* (probably written between 1048 and 1054). Anonymous I seems to have been used as a source for the production of the interpolations in Bern's *Prologus in tonarium*. The clerk or clerks responsible for these interpolations, therefore, probably worked from a copy of Anonymous I, adapting certain passages to the sense of Bern's treatise. Anonymous I was also known to the author of the 'Wolf Anonymous' of *c*1060, who similarly adapted and updated parts of it to suit his purposes. Finally, Frutolf of Michelsberg copied from Anonymous I as he did from other sources.

⁴⁵ Wolf, 207–11.

⁴⁴ Wolf, 200–4.

⁴⁶ Wolf, 217–24.

⁴⁷ David Hiley, *Western Plainchant: a Handbook* (Oxford: Clarendon Press, 1993), 472. See, however, Alexander Rausch, 'Bern von Reichenau und sein Einfluß auf die Musiktheorie', in Walter Pass and Alexander Rausch (eds), *Mittelalterliche Musiktheorie in Zentraleuropa* (Tutzing: Schneider, 1998), 139, who dates the 'Wolf-Anonymous' to *c*1100.

Hochadel, 67–8 proposes the ingenious suggestion that Anonymous I itself may have been compiled from a number of sources.

Anonymous I of Gerbert's *Scriptores ecclesiastici de musica sacra* stands, therefore, as an important influence upon the eleventh-century reception of Abbot Bern's *Prologus in tonarium*. The study of Abbot Bern's influence is, in one sense, the study of the different layers of interpretations of his music theory. The fact that numerous theorists and clerks devoted time to developing their understanding of the teaching set out in *Prologus in tonarium* is a hint of the high regard in which its author was held.