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The common Javanese cipher notation (The Kepatihan notation from Solo).

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Guest editor: Wim van Zanten, translation: Jane Harvey.

Guest editor's note

The original article appeared in two parts of the journal *Djawa/Djåwå*. Both parts contain fairly extensive appendices. We have kept the same arrangement in the translation and the order is: Text part 1 – Appendices part 1 [1-13] – Text part 2 – Appendices part 2 [14-29]. The table of contents is given on the last pages, as it was in the original.

Spelling

Since Brandts Buys' article appeared in 1940 the spelling of Indonesian (Dutch Indies) and the three regional languages Balinese, Javanese and Sundanese changed. The 1940 article by Brandts Buys mainly uses – apart from Dutch – Indonesian and Javanese words.

In this translation, for the text we have taken spelling decisions that avoid diacritics as much as possible. In using the modern spelling we more or less followed the rules as formulated in the "Preface to the second edition" of Music in Java, second edition (1948) in Kunst (1973:XV).[*1] However, for proper names, we followed the old spelling of Brandts Buys, when still used these days by libraries. For this we took as our reference the site of Leiden University Libraries (https://www.library.universiteitleiden.nl) that since 2014 includes the library of the KITLV (Royal Netherlands Institute of Southeast Asian and Caribbean Studies). Moreover, like Kunst "to ensure agreement with the spelling of the names of authors and of the titles of their publications – which is necessary when referring to these works – the Netherlands spelling is retained in the Bibliography."

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[1] Prepared for printing by Mrs Anna Brandts Buys-van Zijp.

[*1] [Kunst, Jaap. 1973. *Music in Java, its history, its theory and its technique*, third enlarged edition edited by Ernst L. Heins. The Hague: Nijhoff. W.v.Z.]

In the first column of the following table you may find the vowels, consonants and double consonants as written in Brandts Buys' article and in column 2 the corresponding letter(s) for the English translation.

original	translation
å	o or a *
ḍ	dh
dj	j
é	é
è	è or e
ĕ	e
j	y
oe	u
ṭ	th
tj	c

* Usually written as pronounced in Javanese and Indonesian: 'o', like in Sålå, which becomes Solo. Sometimes written as 'a', because that is how it is pronounced in other parts of Indonesia, like Djåwå that will mostly be written as Djawa (journal's name) or Java.

Singular/plural

Brandts Buys now and then used the plural form that is a mixture of the Indonesian word and Dutch way of making plural forms, like "tembang's geḍé" on page 147 of the original. We follow the Indonesian custom to use the singular form for both the plural and the singular: *tembang geḍé/tembang gedhé*. In Indonesian and regional languages the plural form may also be indicated by repetition of the same word, for instance, *tembang-tembang*.

Cipher notation

Most examples with music notation were taken from the original publication. In some cases the original was of poor quality and then we produced a new picture. The cipher notation systems use dots below and above a cipher and these cannot be avoided. In the Kepatihan notation a dot above a cipher means that it is a note one octave higher than the original one, and a dot below a cipher means a note one octave lower than the original one. In this system we cannot avoid these "diacritics". Similarly with the system used to indicate the relative duration of a

note. Notes last for half of the original duration, if a small line is put over it. This system is similar to the Western way of adding 'flags' to the staff of a note: two lines above a cipher mean that the duration has become ¼ of the original duration, etcetera. These duration signs are also essential for the Kepatihan notation and we have to use them.

Wim van Zanten, Leiden, October 2018

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1. Introduction

– It might seem dry; it is dry – the subject with which I really wanted to perk up "Djåwå" and its readers: "Historical overview, also comparative appreciation, of the existing or possible methods of notation for the indigenous music in Java". (Whew!)

Thus they know, the readers, what they have escaped from. Moreover, the editors would still have been there in any case, and the board; together clever enough and to spare for an appeal to the statutes (art. 2 and 3, shortened): "The aim of the Java Institute Society is the development of the indigenous culture of Java. The society endeavours to reach this goal: among other things, through the collecting and making accessible of as complete as possible information concerning all expressions of the Javanese culture, both in the present and in the past", to be answered graciously with the recognition that the means by which the Javanese secure their culture for later, are undoubtedly of importance from a cultural viewpoint. And with what is available, "Oh, have you already written a piece on it? Even better! That's easier to read!", – putting the collected material with it in the institute's library (and museum), therefore accessible to anyone who should ask for it. (!)

Well, it's good that the board and the editors are there, to prevent excesses. Because when an author, a specialist, has just been working on a particular technical subject for a stiff three months, i.e. has ground up and swallowed everything that can be found of and concerning Javanese musical notations, then after initially having sat dawdling over his unusual diet – and perhaps not even accepting it out of free choice – with reluctance, he will have felt his appetite building while doing it, even if that was only out of a healthy instinct of self-preservation, or at least protection of his own mental health. And, if by chance his memory is short, afterwards maintain with the most honest conviction that he really had always found it to be such tasty material. Thus one keeps an eye on them, the specialists in such badly controllable subjects of study as musicology.

However it probably – alternately believably – may or may not be, in a certain sense I have always found them interesting, those indigenous musical notations. This here is then absolutely not the first time that I have written about it in *Djawa*/

Djåwå. – The first time, that was in 1924[2]. – The second time was in 1934[3]. – And who is going to say that now, in 1940, is the last time?

But on those earlier occasions there was really nothing else at stake than actual indigenous staff notation systems. And since then I have had the feeling that at some time I would have to deal seriously with the cipher notation systems for music as well.

2. That feeling has become reality

– And … how!

The more than perfunctory marital compassion through which my unsurpassable loyal assistant and counsellor has heard me groan over the chore, and – yes indeed! – has seen me toiling away at it, before I finally had the taste for it, that empathy was, not sparingly, spiced with surprised irony: "You? Defend a cipher notation for music? – That's the limit!"

Yes – there is reason for wonderment among those who are familiar with my profuse objections to the Western cipher notation for music as used in schools. At the time in "Holland", between 1890 and 1900 I could still see that common cipher method coming.

Along with practically all musicians then, I was irritated by that whole "schoolmasters" business. They all found that unnecessary. They were too much persuaded by their experience of the unusual qualities, yes one may well say of the wisdom, that had concentrated a historical process of many centuries in the Western staff notation. As music masters they had never essentially had any difficulty in teaching this notation to children of a normal intellect and normal musicality. They did not wish it to be suggested to them (by the said schoolmasters!) that it was really too difficult for general usage or specially for usage in schools.

3. Daniël de Lange,

musician, was much blamed for promoting the revolt of the school pedagogues. Moreover, he was also really late in doing so, just when those in big European countries began to have more than enough of those ciphers, and had started to drop them. (Over a large area in the northwest of Germany, Heinroth, b. 1780 d.

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[2] Brandts Buys, Johann Sebastian. 1924. "Uitslag van de Prijsvraag inzake een Javaansch muziekschrift." Namens de jury ... [Result of the contest as regards a notational system for Javanese music. On behalf of the jury. ...] *Djåwå*, 4: 1-17. From here on referred to as: B.B.1.

[3] Brandts Buys, J. S. and Anna Brandts Buys-Van Zijp. 1934. "Omtrent notaties en transcripties en over de constructie van gamelanstukken" [Concerning notations and transcriptions and about the construction of gamelan pieces]. *Djåwå* 14: 127-165. From here: B.B.2.

1846, had succeeded in replacing the cipher notation in use in the elementary schools by a simplified staff notation. See Rieman's Musik-Lexikon.)

As far as I'm concerned, that whole cipher notation for music as used in schools there in "Holland" and thus also in the European school in this country, could have stayed away! And on my part it can also disappear again quickly.

The clean-up will be quite an art!

Because someone said, not without bitterness, that the cipher notation for music as used in schools has cultivated whole hordes of musical illiterates! And if one wants to remove their only security – however lame – in the vocal music lessons, then …[◊]

However, as yet a consistent and persistent campaign among Dutch educators to achieve the abolition of the cipher notation has still not been started. It has stayed at the level of skirmishes and oblique curses.

4. But now the Javanese.

What about the question of musical notation for the rest, the native schools in this country?

In general vocal music teaching is carried out "by ear". To aid the memory of the teachers, there are a few songbooks in a cipher notation, or rather, in various cipher notations. These demonstrate such great differences, that there are some that number the tones from "low" to "high" (in the Western sense) while for the same tones, others have cipher series from "high" to "low" (thus the other way round). To say nothing of other defects, which can confuse the simple teachers even more, if they are not originally music connoisseurs.

5. To curb the anarchy in this field

a committee was set up the year before last by the Director of Education, with the intention of studying the notation possibilities of the Javanese melodies and suggesting a suitable and simple notation to the Department that can be introduced in the indigenous schools.

The chairman of this committee is the Inspector of Native Education in the Central Javanese Principalities. Four Javanese experts in the field of Javanese music were invited to become members, as well as the writer of this article.

◊ Such a cipher notation is less fortunate, mainly due to the lack of an immediate graphic overview, which a good staff notation possesses, so that it is quite unsuitable for the application of modern educational ideas (e.g. in teaching reading) which are more and more gaining the upper hand. One cannot start from a fairly big whole (globally observed) in order to come down to the elements. There is not too much else to begin with, other than starting with the individual cipher.

Thus may that usual cipher notation system for music disappear as soon as possible from the schools in the Netherlands, and the European schools here in the country.

When the committee set about its task, it had to bear in mind that with the question of that notation system for music for the Javanese schools it had not started with absolute and abstract desires, and should not work as though there was a void, without previous history. Of course one had to start with the factual situation formed by history, the achieved degree of intellectual maturity now shown by the Javanese teaching staff regarding this question. That in this regard they would be further than their Dutch colleagues was unlikely. One may regret it, or not, inquiring of these Javanese, that one receives a fairly stereotype answer, that the ciphers (naturally!) are much easier.

For the European members of the committee there was only morally responsible work left to do, when they, effacing personal preferences and suppressing any tendency to experiment with their own inventions or fabrications, carefully considered only that which was raised by the Javanese members.

One must understand, that if it had not gone against the conscience of the European committee members, it would have been very simple to impose Western staff notation on the Javanese experts as the most preferable. However, the European committee members thought they should stay with the notion that cipher notations of *all* Javanese notation systems for music, in ciphers as well as in notes, are the only ones which have proved to possess enough vitality and germinative capacity, and for the Javanese, sufficient immediate intelligibility, which of their own accord could provide support and growth, before any kind of booklet was brought into the schools.

6. Just under 20 years ago,

I also found myself placed in a similar situation to the present. Requested by Governor-General Fock to study the vocal music education in Javanese schools and re-organize it if necessary, I already had the strong feeling that it would not make sense, being a Westerner, to impose Western methods on the Javanese. Moreover I had only been in the country for a short time, much too short to assume the right to intervene in Javanese affairs.

And nonetheless, it would have been easy enough, behaving to a small extent as a know-it-all and with some official pressure.

7. However, the low extent of Javanese compliance,

when official pressure is not applied and advice is merely given in good faith, could be observed in the *gendhing* contest, held in 1939 on the occasion of the 200-year anniversary of the Kraton of Solo. This was about 15 years after a music notational system contest, organized in 1924 by the Java Institute. In their summary the jury, in which I also took part 15 years ago, advised keeping to the so-called “chequered notation”, a notation system of Javanese invention very suitable for setting out rhythmic complexities, for new notations. Now, in the spring of 1939, taking my

place in the jury for the above-mentioned *gendhing* competition in Solo, I had the opportunity to observe that none of the entrants had applied the intended "chequered notation". All the entrants used a cipher notation, and at that, a particular cipher notation. Later (in section 44), I will come back to this *gendhing* competition in Solo in more detail.

The fact in itself, that all the twelve entrants utilized the same cipher system, be it also in all kinds of stages, gained sufficient attention. It was not more than fair, that the merits of that notation be further investigated.

The committee for the notation of Javanese melodies mentioned above in section 5, set up in February 1938 by the Director of Education, has also duly done so. On the grounds of these investigations and extensive discussions, held prior to the jury assembling for the *gendhing* competition in Solo, it unanimously decided to recommend to the Director of Education that the particular cipher notation chosen by the entrants to the *gendhing* competition, the simplest and the most widely disseminated, be introduced to music education in the Javanese schools.

In this article I propose to explain in great detail on what this advice from the committee is based. To this end, after giving some examples of the use of the notation, I shall first give a historical overview of the development of the cipher notation that the committee has recommended, from which it will emerge how this notation has already demonstrated its usefulness over a long period of years. Then I shall discuss the other existing cipher systems, to show in what way, in my opinion, they rank below the chosen cipher notation.

8. The intended cipher system,

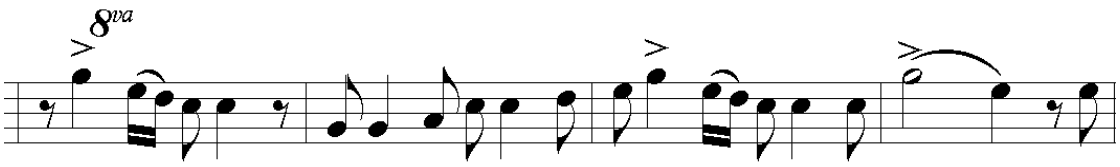
that has found its origin and development in the Kepatihan palace in Solo[*2], as one will see in the historical overview that follows below, we shall from now on refer to as the "Kepatihan cipher notation".

By way of making preliminary acquaintance, I will give a few music examples in this notation. This will show that all kinds of rhythmical and metric complexities can be very satisfactorily expressed in it.

Let us take as the first example a simple tune, borrowed from the large monograph [Music in Java] of Mr Kunst, called *Mupu Kembang*: On page 435 of part II[*3] we find:

[*2] [The *kepatihan* is the residence of the chief minister to a king, or another high-ranking government official. W.v.Z.]

[*3] [See also Volume 2, p. 537 of Jaap Kunst, 1973. *Music in Java, its history, its theory and its technique*, third enlarged edition, edited by Ernst L. Heins. The Hague: Nijhoff. In his example Kunst used *E*-flat, *A*-flat and *D*-flat instead of respectively *E*, *A* and *D*. W.v.Z.]



In the “Kepatihan cipher notation” that becomes:

0 5 32 1 1 0 | 5 5 6 1 1 2 | 3 5 32 1 1 1 | 5 . 3 03 |

The reader can see, it is childishly simple. A second example follows here in transcription in the intended notation, a piece from the *gendhing Glendeng* – below once more included in the appendices, no. 6, in an overview of different Javanese notation systems for music. The double notation that appears under it, known as “Trappenschrift” or ladder notation, that has ciphers with the notes as well as a line graphic that connects the notes with each other, uses the same ciphers for this as the “Kepatihan notation”.

This excerpt is first transcribed in the usual Western staff notation, then in the cipher notation under consideration here, but provided with bar lines, and with the quaver lines used in the same way as the Western school music cipher system habitually does, and equally the Javanese cipher notations have finally learned to do.[◊◊]

[◊◊] With the transcriptions given here, the marks, which are inserted where appropriate to determine the octave in which a tone factually or ideally lies, have not been taken into account, amongst other things. Those marks are placed approximately above the noteheads or next to the ciphers. But the excerpt is from a typical *gendhing sabetan*. In practical terms one thus hears the cantus firmus, hammered very strongly by the *saron*, within their one-octave range. The indication, how that theme could be (have been) unfolded by a *rebab*, for example, is thus actually not very important. What the “Pratélan” in our manuscript informs about the octave levels of this particular form of notation is, moreover, interesting in itself.

The series of tones or keys is indicated in its “Explanation” with names as follows: *barang alit*, *nem*, *lima*, *pélok*, *tengah*, *gulu*, *penunggul*. – At the beginning of the quasi note stave these seven intervals are one by one further indicated by a sign. Like this:

B 6 5 P T G P –

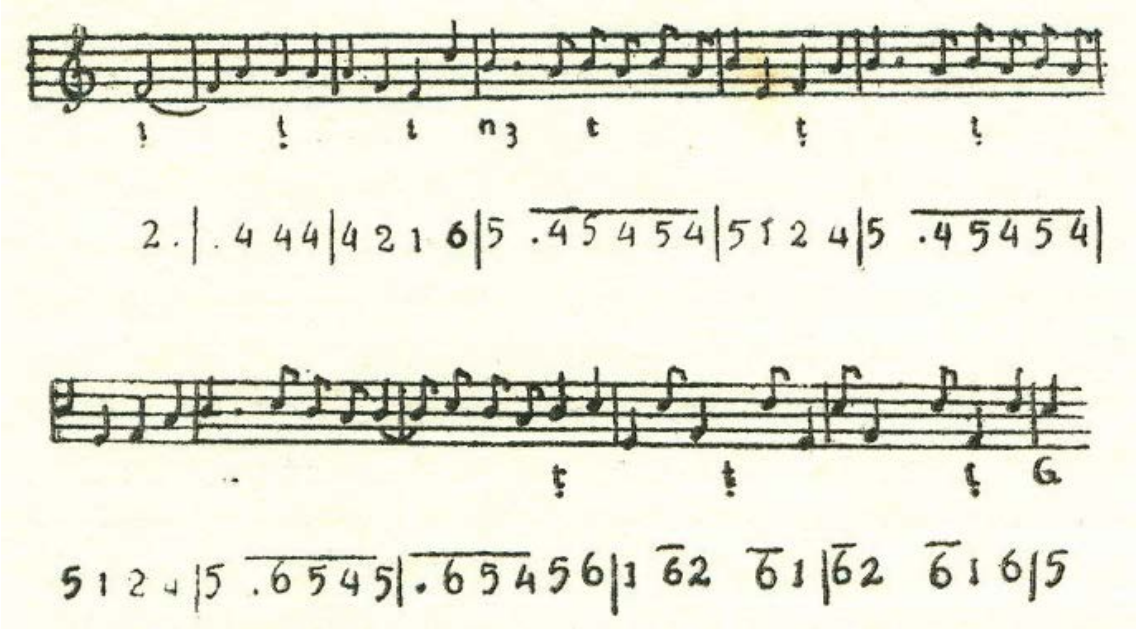
They subsequently get the numbers:

– 6 5 4 3 2 1 –

But now comes the curious part, that at least according to the “Pratélan”, the octave and its indication do not, in accordance with the cipher system, jump with the 1, the *bem* or *penunggul*, deepest tone of the *demung*, or the *saron barung* etc.

A jump should always be made with a 5 – And thus the ciphering of the *demung* becomes -. 6. 5. 4 3 2 1 –. Because otherwise the *barang*, *nem* and *lima* would end up below.

But why? Because the *lima* does not occur as the lowest tone of any important instrument. And moreover, the *lima* can only be regarded as the tonic in *pélog* – *barang*, if one so wishes. Further, it is still the question whether the practice of this form of notation confirms those theories. Not long after the start of this excerpt, one after all finds the following series of ciphers: 4. 2. 1. 6 5 4 5 4 (etc.) And then, according to those statements, there should thus be a downwards jump between that 1. and that 6 over (more than) an octave.



Because the chosen excerpt in *Trappenschrift* has been transcribed twice, i.e. not only in the usual Western staff notation, but also in full cipher music notation, one can test its suitability for reproducing these syncopated mixtures of “crotchets” and “quavers” against this example.

For testing whether the “Kepatihan notation” lends itself to usable notations of *sekar ageng*, I refer to appendix 12.

After having pointed to notations of children’s songs by R. Kodrat (see appendix 15), which could be called successful, I think I should have made it clear enough that the “Kepatihan notation” of Solo is very well usable and readable, in its most developed form.

How this cipher system arrived at its present form, will be demonstrated to the reader in the overview which follows below.

9. History of “the Committee’s Notation”, since around 1903.

The cipher notation recommended by the Committee, which in a certain sense has made it its own, though in no part designed, has a history reaching back around 35 years.

Around 1903 namely, Mr J. Kats, now former Inspector of Education in Native Languages, and still interested in Javanese music, came to know a notation

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And these fine back-and-forth oscillations between the 5 and the 4 should result not in a second but in a seventh. Both suppositions contain little probability.

in the Kepatihan (palace) in Solo, that demonstrated the characteristic peculiarities of the intended system.

In other words: For the tones (keys) of the *pélog* tone family, in the direction low to high, the series of ciphers: 1 2 3 4 5 6 7.

In *sléndro*, however, the series: 1 2 3 5 6.

10. M. Dem. Warsåpradånggå. 1906.

The trustworthiness of Mr Kats' contribution is evidenced by the fact that a written source is already known from 1906: a small collection of gamelan pieces, recorded by the "*niyaga*", Javanese orchestra musician, Warsåpradånggå. This manuscript only contains *gendhing* given in *pélog - lima* – as occurs more often – presumably simply because the collector, intending to gather a much more encompassing volume, has never got further than the first of the traditional series of Javanese tonalities. Although up to now there is no notation known by him in *sléndro*, and it has thus not been proven that at this juncture the *sléndro* form of the notation under discussion was yet being used, it is probable: No-one has yet seen cases where a notator, as if in principle, only applied one of the two halves of this inequality. Of course it can be that the *pélog* form is so much older that the – unknown – designer started out from this form.

As regards the direction and the series of tones and ciphers, it is very plainly written in Warsåpradånggå: "In the *gendhing* the note ciphers simply follow the keys of the *saron* or *demung* starting with the deepest (lowest): Cipher 1 means the deepest key, cipher 2 follows", etc.

An excerpt from the volume in question can be found in appendix 1.

11. The Western components in this notation.

Of its kind it seems modern, that Western repeat signs are written, which will later be replaced for a while by more complicated signs. Faster (shorter) notes ("quavers" between "crotchets") are indicated by an ongoing stroke under the designated notes.

Although one would expect these strokes above the ciphers, this detail also chiefly appears to prove that the notation arose under the influence of the Western cipher notation as used in schools. After all, this detail could hardly have been invented spontaneously once more.

Yet the way in which that "quaver" stroke is applied, is archaic and a proof that the influence of the above-named school notation can only have been slight. Besides, if the influence were deeper, the bar lines would also have been adopted at the time as well.

But in principle, a group of three ciphers above such a stroke indicates that two notes are short. With seven, for example, six of them [are short]; the last one is

factually always long again. This Javanese conception is well defensible (see appendix 2): Two “quavers” next to each other between “crotchets”, after all give a group of three notes with shorter distances than the usual ones. That view is also dominant in some older Javanese writings, and it has caused terrible confusion in old transcriptions of Javanese notations. By way of novelty, not occurring anywhere else, in this variant a separate sign is used, specially indicating that such a last note above a stroke is long again; but then mainly only to signal a single “crotchet” between two “quavers”.

12. Djakoeb and Wignjåroemekså. 1913.

The second piece of writing in which the existence of our note ciphers is shown, is in fact a printed booklet, which is edited by the musicians (*niyaga*), from Solo, mentioned above (Also see appendix **3**).

In some respects, the notation in the booklet, from 1913, exhibits older features than in the manuscript from 1906! Perhaps Djakoeb and Wignjåroemekså were going back to an example from before 1906.

That is to say, they do not have the marks (or strokes) below or above the ciphers, to indicate that a note lies an octave lower or higher (or should be thought to), than the usual, medium position. The fact that longer notes lie in between the normal ones is indicated in a strange way, almost double, that will be old-fashioned: After a note to be lengthened there namely appear as many dots (“pin”) as the note units, (let’s say “crotchets”), are longer than one unit. But those lengthening dots have moreover twice as great a distance as that between the normal note signs, ciphers. (See appendix 3).

The irregularity, that the high *barang* is numbered 7, and not 1, that results in the octaves 1 - 7, and 2 - 2 (6 - 6) next to each other, for the *barang* and for the *gulu* (or *nem* as well), is really important. After all this makes it probable that the 7 is an element in *sléndro*, taken over from the *pélog* cipher numbering. And thus that the designer of our notation indeed began from the *pélog* side. (See earlier; section 10.) Because he who wants to see *sléndro* as the starting point, would not have much trouble in simply believing that it had taken over the whole cipher creation from a Western informant. Such a person would after all, closely notating down the *sléndro* scale in school notation ciphers, probably also write: 1 2 3 5 6 (!).

But now, how can the finding of the present notation have proceeded? – The extract from the Javanese text (appendix 3) was not unintentionally given in such a comprehensive translation. It provides a good idea of which style of reasoning one may expect in cases such as this from a real old-fashioned Javanese (and then as well, twenty-five or thirty-five years ago).

To expect a scholarly approach here, if not unreasonable, would certainly not be correct.

13. Psychological points of contention

The later burning question, whether the well-indigenous feeling, or insight, also involves the realm of primarily regarding the direction of the tones to be from the bottom up, or from top to bottom, is curiously heralded in the introduction to the part reproduced.

But as regards the invention of the notation, it may be conceivable that the designer, after having obtained knowledge of the Western cipher music notation, in the first place was affected by the fact that it works with seven ciphers, thus just as many as the number of keys, and tonal intervals, that the Javanese *pélog-slenthem* possesses.

Then, applying the ciphers from 1 to 7, to number the keys, in the second place he could have been surprised that the cipher 5 landed on the key of the tone called “five” (*lima* or *gangsal*), and the cipher 6 landed on the one called “six” (*nem*). And this last fact – this pure “coincidence”, as Mr Ki Adjar Déwantåråå appears to have named it – he would then, also according to the opinion of the latter, have made as the starting point for his cipher.

In the Committee’s view, the system should least of all be censured on this account; after all, it has the right to be regarded as a historically grown phenomenon; judgement on its scientific structure would, as already mentioned, simply be wrong.

Regarding that coinciding of tone names and key ciphers, naming those two tones according to the order of the keys is advanced by the authors of our booklet, without much emphasis, as a (quasi) historical fact. For the actual course of affairs this proves nothing, but it does show that such a coincidence appeared reasonable to them.

The question of whether the tone names that coincide with numerals should only be viewed as “name”, or whether they also possess an ordering power, does not need to have arisen with the native musician as a whole, before the creation of the cipher notations.

And in no case does it behoove the Western researcher – as long as he claims to strive towards a correct understanding of his own position amidst the people of this country – in no case is it fitting for him to deal with such issues through outspoken assurances or assertions. In the area of native psychology the Westerner, careful and modest, will anyway not get further than probabilities, plausibilities, possibilities.

Moreover, when it comes to the concrete point, the responses among the native musicians and music connoisseurs may differ greatly. To what extent, when they have become aware that the numeral names of some Javanese tones can be in harmony with the note ciphers, but also in conflict, will that conflict be felt as something so unpleasant, that one will try to evade it?

14. Messrs Poerbå and Ki Adjar,

for example, have a contrary point of view on this matter.

With Ki Adjar Déwantårå, whose system of tone ciphers makes such a discrepancy unavoidable, this is apparently not the case. It will also be clear, that if somewhere a series of tone names is in use, no scruples will be able to develop in this area, if numerals are mixed through it criss-cross without order or direction.

But elsewhere that can very well be the case. And so the more or less conscious appreciation for the coinciding of number and name, can still have become one of the factors that have helped the notation discussed here to spread so widely.

Unfortunately the latest talk that I had in Batavia with the well-known enthusiast and connoisseur of Javanese music, Mr Rd. Ng. Dr. L. Poerbåtjaråkå, was interrupted just at the point where he had asked me: “Do you also find it such a nonsense, not to write the ciphers of *sléndro* as 1, 2, 3, 5, 6?” So that the motives driving this Javanese expert in this regard have remained hidden to me. Yet it is not impossible that Mr Poerbå, or at least his brother Kodrat, also a recognised Javanese music expert, has known about our notation quite early on.

15. Regent Wreksådiningrat Sr., died ca. 1913.

A person who should also not remain unnamed in the question of the development of the notation, is Rd. M. T. Wreksådiningrat Senior, or at least, one of the older people of this name – because, officially belonging to the function of *wedana kalang*, it will certainly have been borne by others.

But here senior was written, because the regent of this name was not being referred to, who somewhat older people from Solo will be sure to have met, the one who enjoyed a certain fame as composer of music pieces for Western orchestra.

His father is the one referred to here. About him it has also been mentioned that he was not unacquainted with Western music, but he was mainly known as an expert in Javanese music. As the son of Rd. Ad. Såsrånagårå, the government administrator of Paku Buana IX, he himself belonged to the circle of government administrator Såsrådiningrat (the father of the one who had just retired). Thus he could certainly have been very actively involved in the development of the notation which probably originated in these circles. And when at a certain moment I asked his son and namesake for information about the booklets by Djakoeb and Wignjåroemekså – another interview that was interrupted! – I received the answer (it sounded more terse than civil): “Stolen from Father!” But although from that moment onwards I considered the chance that the older Wreksådiningrat was the founder of this notation, I still nonetheless believe that this chance should not be overestimated. Because at moments when one would expect his name to show up, it is not there. Namely where the Santiswårå-notation (to be discussed later), is found. Also see appendix 4.

16. Djakoeb and Wignjåroemekså. 1919, (1913).

Is it possible that the first booklet by Djakoeb and Wignjåroemekså, published by "Volkslectuur" in 1913, but not dated by the authors, could in the end also have been completed a few years earlier? For their second one, something like that is established. See appendix 5. In it they do not give a complete or satisfactory explanation of that previous booklet, "About Gamelan". Because no-one had yet taken the trouble and prepared a collection of notations. In fact this was incorrect: it was just that none of them had been printed. But it took place then on this occasion.

The notation clearly represents here a somewhat later stage than that one *gendhing*, included as an example in that oldest booklet. From the list of "names of tones" – namely those of *sléndro*, – other than *sléndro* pieces do not occur in the volume – it appears that now also the octave between the two *barang* tones needs to be represented by the two ciphers: 1 – 7, and on the other hand, the one between the two *nem* by 6 – 6. But factually the writers now know about the strength of the dots under or above a cipher. They use the very low octave, as far as 1. with a dot underneath, and the high tones up to and including $\dot{3}$ with a dot over it. But concerning the *barang*, for the high ones, insofar as it works better in the context, they equally well write $\dot{1}$ with a dot over it as 7, and for the low ones, (resp. medium) just as well 7. with a dot under it as 1.

17. The notation fails here in its old form.

Without speaking about it further, the authors no longer limit themselves in this booklet to the single, the "quaver" stroke under a group or small group of notes, yet they also now use two under each other. Mostly in the form, that a smaller, horizontal square hook is seemingly brought in within another, larger one. In so doing, it does not come as far as really well-described double, in other words "semi-quaver" strokes. And there is also much that remains uncertain in the use of the single, the "quaver" stroke.

But the *gendhing* in particular that set such demands, truly not small ones, and have a cantus firmus, that affords metrical detail as far as "semi-quavers", are usually not completely decipherable in this quotation from Djakoeb and Wignjåroemekså. Apparently the demands made on the notation as it was then were too great at that moment. Meeting these would only be learned through a renewed contact with its Western example or provocation. It will be necessary to return to this.

18. A double notation turns up.

No-one has ever denied that a music notation that, similar to the usual Western one, gives a graphical version of the notated melodies and themes, as it were, has

very positive qualities. But that is undeniably opposite to the conviction of very many Javanese that it is difficult; ciphers can be read more easily. Attempts to combine the advantages of both systems are thus quite understandable. They occur quite early, such double notations. The oldest known is the so-called Old Notation of the Paku Alam palace (Pakualaman). However, it does not combine its, let's say, graphical line with a cipher system but with note names shortened to one Javanese letter. But in principle that does not unduly make very much difference. This notation was not yet sufficiently metrically concise. (See appendix 6).

The latter is the case, however, with a somewhat later notation, which some call the "Trappenschrift" (ladder) notation, and that was first encountered around 1910. The other one was from before 1887. Despite its much greater complexity, it is possible that this newer one can directly be connected with that older one. Regarding his observation, it was Mr J. Kats whose attention was drawn to it by one of the gentlemen from the well-known family Kiliaan, a brother of the lexicographer and grammatician, himself a great connoisseur of Javanese music. It counted as being invented by a Javanese.

If one thinks away the steep ladder or skyscraper movement (and the colourful drum notation), placing everything on one line, then one is left with a cipher music notation readable as such, of almost the same nature as the one discussed above. (See further appendix **8**).

Once more there were only *gendhing* in *pélog pathet lima* (see earlier, section 10). Thus no information is known about details concerning the numbering of the other types of tones. But in the one mentioned it is remarkable that the *barang* tone does not get the number 7, but is left completely without a number (that is possible because the different tone intervals have both a notehead, a thick dot and sometimes also get a cipher). The *pélog* step or key is simply assigned a 4 –.

19. Metric complexities conveyed correctly.

As was just already indicated, the designer of this form of notation succeeded, if only in a rather complicated way, in avoiding rhythmic or metrical unclarities, even if the situation in this respect was not entirely easy to realise perfectly.

20. Dissemination of the cipher notation. The Mangkunegaran. 1914 (?); 1925 (?); 1939.

How the cipher notation at issue here and now precisely spread, cannot be checked. Initially probably mainly through something like direct contact. Other groups of *niyaga* (musicians), in the first place in Solo, but outside the Kepatihan there, will have come to know it through collegial discourse. Probably then, first those from the Kraton, but also quite soon, some in the Mangkunegaran. Because

it often occurs that a Javanese musician – possibly under two different (official) names – are employed both in the Kraton and in the Astana, for example.

At the time – and then most likely in the ennobling year, 1914 itself, – copies of a festival song were printed on loose leaves, sung for the adornment of the ennoblement of His Highness the present Mangkunegoro; and they gave not only the lyrics, but also the choir melody. Tonal environment: *pélog 1. bem*; tone system (if we are not mistaken): *pélog pathet lima*. Notation: the one under discussion here.

Therefore that notation does not need to have found further acceptance very soon. It was – I think – not before around 1925 that the request reached me from the Astana to transcribe a certain *sléndro gendhing* in that notation. (*"Anjar Katon"*; *pathet* 9.) It appeared that they only had the *balunganing gendhing* (cantus firmus) in notation there, but in another cipher notation. Namely, in that of R. Bg. Soelardi; that is to say, in his first notation system; more on this later. But now they wanted to have what they asked for, and a choir melody, in the other, let's say "usual" or "Kepatihan" system. In the Mangkunegaran at present the notation is conclusively used! (See appendix 7)

21. Competition on music notation systems. 1923.

An opportunity to, as it were, take a random sample or rather a momentary cross-section of the actual state of affairs with notation systems for music, was offered by the Java Institute in 1921. The result was published in January 1924. (See appendix 8)

22. Ciphers and polyphony.

The real aim was to elicit the creation of a notation suitable for notating Javanese music in a score. Thus cipher notations should really not have been considered at all. Because naturally, they are not too suitable for polyphonic music.

Two closely related lines, for instance Javanese vocal melody and core theme, are very well possible; but no-one will want to go further.

(That is to say, in Western cipher music notation one sometimes sees notated, now and then, for example a three-part school choir song. In this country it is sometimes used for writing up a choral melody set in four parts. But that is only made possible by the scanty rhythmic involvement and the conventional nature of this music in harmonic respect. The (moderate) heterophonic polyphony of Javanese orchestra music would, if notated in this way, be practically unreadable.)

However this may be, only three or four of the entries seemed to have an understanding of what was actually desired.

Rd. (Bg.) Soelardi (Hardjåsoedjånå), who I already mentioned a few times, had made a heroic attempt, if not to write an actual score, to accomplish a notation of all the different gamelan parts, each according to its own nature, and for this he

designed a completely new system of cipher notation. Better stated, a whole sheaf or collection of cipher notations.

In three of the entries, the normal Western staff notation system had been applied. Either virtually unchanged, or with an altered signification of staves and note lines.

23. Djatiswårå and Lebdåpradånggå, 1923.

Among the unchanged ones were the scores of Messrs Lebdåpradånggå and Djatiswårå. (see appendices 4, 8 and 9!) But they also appear to be familiar with the "Kepatihan" cipher notation (as it will be called from now on). However, they use it only to a very minor extent. That is, only in their extensive theoretical considerations, where an indication of beat or tempo (*irama*) is redundant.

That is all. Because of the three other entries, that only give cantus firmi, there is not one who chooses the Kepatihan notation, while that could have been just as possible as using the Javanese so-called chequered notation, as two did, or, like the last, using a new and newly-created notation, in which the tone intervals are not indicated by ciphers but each time by one single letter abbreviated from the tone name. Thus through its first name, the "*pornaming laras*", just as the usual ciphers to indicate a tonal interval are expressly named by Lebdåpradånggå and Djatiswårå.

24. Djatiswårå and Lebdåpradånggå et al, 1924.

From the observations just reported from that music notation contest, one may thus conclude that at that time, the booklet by Djakoeb and Wignjåroemekså printed in 1919 – it was sold out quite quickly, I think, but not reprinted – had not yet had time to "make itself felt". Because it is extremely possible that as the first printed booklet with a collection of gamelan themes, notated in the Kepatihan cipher notation, it can have given a decided impulse (see earlier, section 16.)

But however this may be, after their second book was printed, it was not long before others took over the task from them. And these were Messrs Djatiswårå and Lebdåpradånggå, the already-mentioned winners of a second prize in the competition of 1923. Whereas at that time they either did not appear to have a good idea of how efficient the Kepatihan notation, if well-used, could be in the metrical-rhythmic aspect, or they did not pay it any attention then, shortly afterwards they substantially realised the capacities of that cipher notation.

Collaborating with two more officials from the Surakarta Court circles, Messrs Soetåsoekarjå and Atmåmardåwå, they namely became authors of a gamelan lesson booklet in two parts. (See appendix **10**). That in it, theoretically at any rate, exploiting the capacities of the notation was taken really quite far – namely up to the "thirty-second" sextuplet, will however certainly not be the work of the new collaborators. Mr Lebdåpradånggå, as "bandmaster" Western-style, of

course mainly expert beforehand in reading the usual Western staff notation, would only later have made it clear that the Western cipher music notation – and thus in this case the Kepatihan notation as well – can perform rhythmically the same as that notation. In principle! it should be understood.

25. Kendhang notation.

As far as practice is concerned, the first section of this small lesson book does not go further than the use of “quaver” strokes. In the second section not further than “semi-quavers”. And then that is only really for the purpose of notating the drum part.

There had been earlier attempts to notate *kendhang* parts. The first, so far as is known, can be found in the booklet from 1913 by Djakoeb and Wignjåroemekså. (See above: section **12**). These only differentiate four or five different drum sounds, and do not give more than one drum stroke per beat. This results in a poor outline. The polychromy in that “Trappenschrift” (for this, see section **22**), – only three drum sounds, and one stroke per normal theme note – gives an even lesser result.

And so the second section of this little gamelan school, with its twelve drum sounds and its four or three *kendhang* strokes (“semi-quavers” and “quavers”) per beat, is in contrast much at an advantage.

26. Overcoming metrical complexities. 1925.

Each of the different drum sounds are represented by their own symbol, consisting of one or two letters. If it had always been two, then the aspect of the *kendhang* part would certainly have gained in rest. The sound symbols are on two different levels, according to whether they are hit from left or right. For that matter, the notation deals with them completely like the cipher symbols for the (sung or hammered) tones with fixed pitch. To assess the rhythmic-metrical usefulness of a notation it is completely immaterial whether ciphers or letters are written. That the capacities of the Kepatihan notation in this case are considerable, one can also perceive from such drum parts. (see appendix 10)

27. Djatiswårå et al, and the notation of vocal Javanese music (before 1930). Soetåsoekarjå.

In their book from 1925, Messrs Djatiswårå etc., by introducing signs for triplets and suchlike prepared the way, but they did not get to the point of setting down melodies and suchlike. Moreover, a little gamelan school was not the right place for this.

But in any case they did not wait too long to do so. Setting down a *wayang-purwa-lakon* in *pakem*-form (now recently, thus around 15 years later) in the Mangkunegaran, they would, as has already been mentioned here (see appendix **7**) only notate the gamelan themes – and to write down that *sléndro* music, choose the usual, Kepatihan cipher notation – the copy of a *wayang-gedhog-lakon* in *pakem*-form that we were able to consult is dated 1930. The formulation itself, by Mr Soetåsoekarjå, and the control by his co-workers, would probably thus have taken place one or more years earlier. But these three musicians from the Surakarta Kepatihan and Kraton – also employing the usual cipher notation for determining the accompanying *pélog*-music – have thereby in no way left out the melodies. (See appendix 11).

And so, – once more, – proven the practical utility of that notation.

The gentlemen in question have done excellent work with the music notation in this *pakem*. I only have something against the (many) triplets in it. I do not really believe, – as I have said elsewhere earlier – in their actual existence. But my disbelief not only finds no support from this group of Javanese tonal experts, but also not from Mrs Hofland, nor from Mr Kunst. Only Mr Walter Spies does not want to believe it either. And then, it is true, one will nowhere find a triplet with the old Winter; and neither, as it now appears, with the group of Javanese music experts grouped around Mr Atmåsoemartå, patronized by Pangéran (Prince) Praboewinåtå.

28. B.K.P.A. Praboewinåtå et al and the notation. ± 1935.

About them, the following: the society of Javanese music lovers, who practice gamelan playing in the *dalem* of the above-named prince, has existed since 1934 or earlier, and is called (*paguyuban*) Mardilagoe. They mainly concentrate on the new Javanese compositions of the *pangéran* and also more specially on their dissemination via the radio.

When the society wanted to publish a small compilation of new simple melodies by their patron in 1936, they also, again, used the Kepatihan cipher notation. In an extremely simple form: no bar lines, and no signs to indicate the length of the notes. Only some apostrophes serving as caesura signs between the note ciphers. With which the tune is almost determined, however. (See appendix 12) – In the same year, publishing a small volume of the most usual *gendhing* (themes), yet now applying the bar lines and also some “quaver” strokes, they praise the usual cipher notation as well-ordered (*panatanipun luwes*), easy (*gampil*) for playing or singing, and commonly used (*umum*); – further, this last description will repeatedly recur, in different words. – A year later, Mr Stm (i.e. staff musician) Atmåsoemartå comes along with his praiseworthy lesson booklet for the Javanese school vocal music, and likewise for the knowledge of the Kepatihan cipher music notation in its developed form. And one may well assume that this staff musician, a Javanese music expert, but with experience in the use of

Western staff music notations, has given guidance concerning the use of the cipher notation in that Praboewinåtå “Mardilagoe”, like the bandmaster Djatiswåra gave a few years earlier for the publications of the Museum Radyå-poeståkå.

29. Lagoe Djawi, 1935-1940.

But the just-mentioned lesson booklet itself responds again to the meritorious work that the group of “Mardilagoe” has undertaken where publishing is concerned. A collection respectively of notated children’s songs, “big” and “small” song melodies, and gamelan themes plus choir melody. The fifth volume of this is currently in press, while the first one is being prepared for a reprint. Yet the above-mentioned school booklet, or more correctly said, the handbook for Javanese teachers, makes special use of the material from the second and third volumes of “Lagoe Djawi”.

30. Notations without bar-lines.

Because while one can call the notations in it and in the fifth volume of “Lagoe Djawi” really excellent – just as good as in the *wayang-gedhog-pakem* of Mr Soetåsoekarjå (*et al*?) – the first volume uses the Kepatihan cipher system in a much more primitive manner. Especially the notations for unaccompanied voice as solo introduction to an orchestra piece (*båwå sekar*), with up to eight or nine ciphers above a syllable that are not or hardly further grouped, – and without bar lines – is definitely not decipherable in any strict sense. The choir singing parts in this first volume also have no bar lines. They have been replaced, as it were, by a series of large dots, thick points, that accompany the vocal text like a chain of beads, and mark the moments of what are called counts or beats. These give the arrangement of the ciphers for the melodic progression some kind of grip. But the determination of the rhythmic elements is still not very concise. One is compelled to assume particular conventions for reading certain groups quite randomly.

But the authors seem to have quickly become aware of the unclarities that arose, that were in some cases completely unreadable. A year later, in their second volume, they have been cleared away. In the meantime a (probably Catholic) teacher had joined their team of *niyaga* and musicians – which naturally does not prove that this person applied insight into the defects of the older phase. The year after, in any case, in his small “method” for teaching Javanese music, Mr Atmåsoemartå appears to have considered the complexities very thoroughly. In this he makes a plea – quite correctly – for the necessity of also writing in bar lines for the “big” *tembang*, in spite of all the freedom that is left to the singer in this genre, which it should leave. Meanwhile in these volumes, the question related to the division into bars of how, especially now in the *tembang*, one should deal with breaking off the lines, has been well resolved.

This question – meanwhile also of great importance for the children's songs – will be further discussed. (See appendix 13)

To be continued.

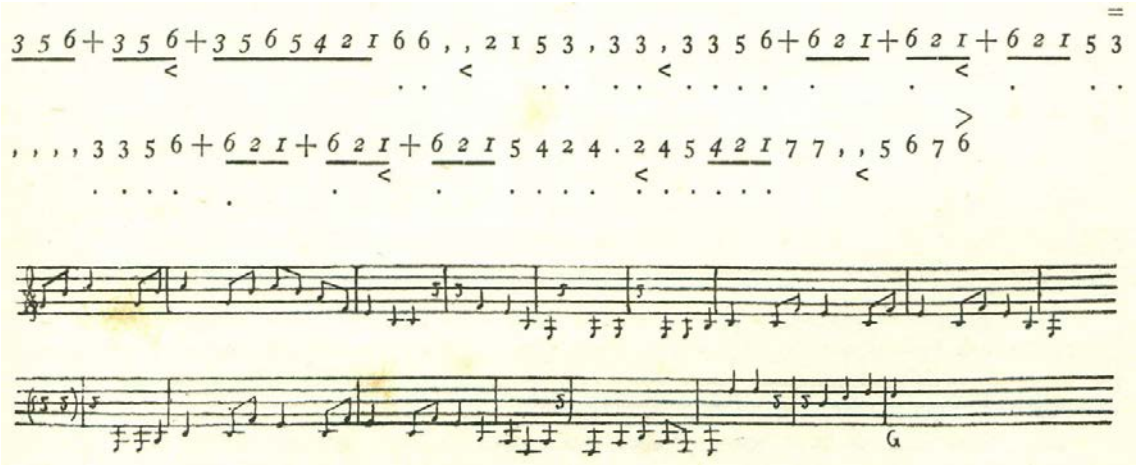
Appendices [1-13] to part 1

1. [with section 10] Excerpt of notation by Warsåpradånggå, 1906.

Mus. Sriwedari Soeråkartå. Book list no. 221; Ms. no. 149 Radyå-Poeståkå society.

3rd gong section of the *gendhing* "Dårådasih", *pélog pathet gangsal*.

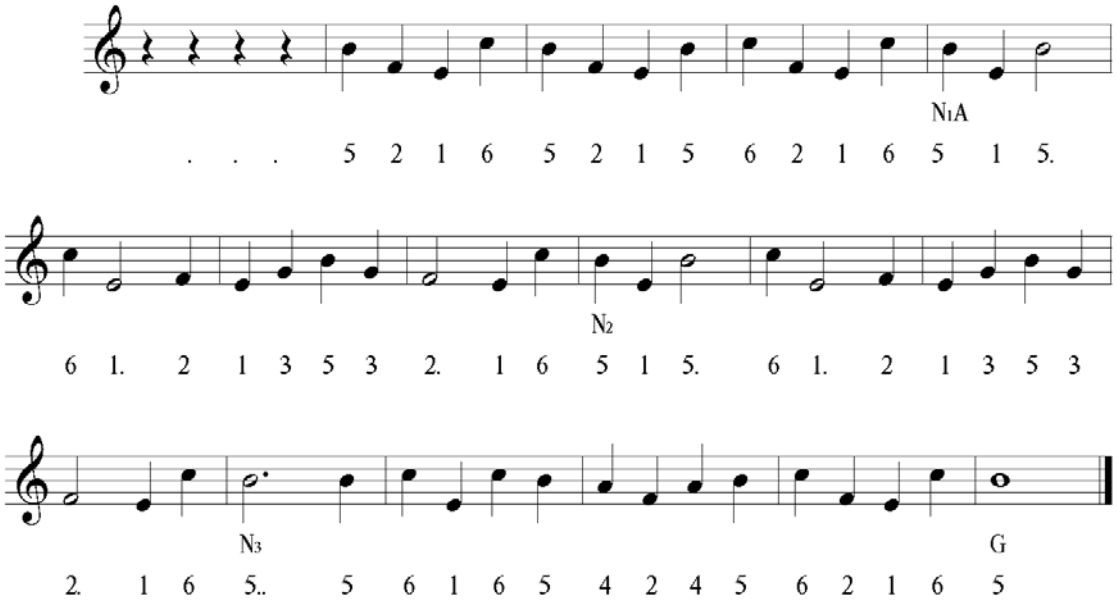
In the original (?), under a note of the lower octave, there is also a (short) stroke rather than a dot, which can still cause confusion. (Also a stroke above the one in the higher octave.) – Everything is also notated after one another; not, like here, with the line broken off after a *kenong* section.



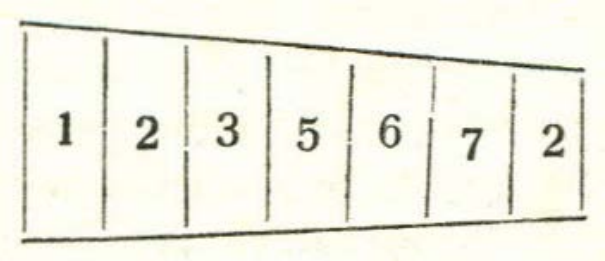
2. [with section 11.] Brandts Buys, J.S. & Anna Brandts Buys-van Zijp. 1938. "Javaansche genḍing's bij Land en bij Seelig" [Javanese *gendhing* by Land and by Seelig.]. *Djåwå* 18: 182-225. Brandts Buys, J.S. & Anna Brandts Buys-van Zijp. 1935-1936. "Land's transcripties van genḍing's" [Land's transcriptions of *gendhing*]. *Djåwå* 15 (1935): 174-185; *Djawa* 16 (1936): 230-242.

3. [with section 12.] "Lajang anjoeroeppaké pratikellé bab sinahoe naboeh sartå panggawéné gamellan kahanggit déning Djakoeb sartå Wignjåroemekså". Publication from "Volkslectuur", Series number 94. Batavia, 1913.

P. 26. *Gendhing* "*Kombang mårå*". 1st gong section. *Pélog pathet lima*.



P. 7 ff.
"Each of the seven keys of either a *sléndro slenthem* or a *pélog slenthem* have a name; the *laras* (pitch) of *suwårå* (tone) is also different (with each key). With (such) an instrument (….) *the order of the keys is from right to left*, in other words from the shortest key to the longest. *The order of the numbers of the keys is from left to right* (….)

Slenthem sléndro		
Key number	Name/pitch (*laras*)	*Slenthem sléndro* lay-out of keys
2, the shortest, furthest right	*gulu cilik*	
7	*barang cilik*	
6	*nem*	
5	*lima*	
3	*tengah*	
2	*gulu gedhé*	
1, furthest left	*barang gedhé*	

The low key 2, called *gulu gedhé*, is the *gembyangan* (octave) of the above-named *gulu cilik*. This is because both have the same *laras* (pitch). The difference is only that the one is low ("big") and the other high ("small") (as regards octave position). The key with number 1, the furthest left, is called *laras barang gedhé*. This is thus the *gembyangan* of the above-named *barang cilik* [7].

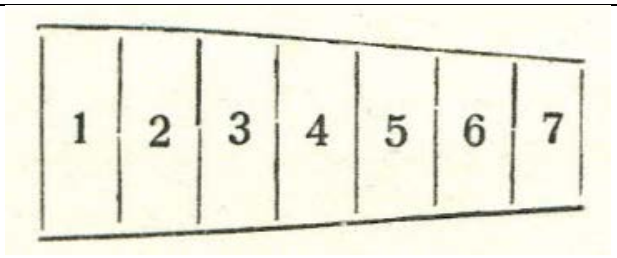
When one looks at the sequence of the keys and their names, key by key, one might probably think: Why do the numbers of the keys from 1 – 3 show a good

succession, (but) then one immediately gets number 5 and so on till 7, and then number 2 comes again?

On the omission of a number 4 for a key, one knows the origin of this, when one considers how the keys of a *slenthem* in *laras* (tone family) *pélog* are (numbered). The series of the numbers is from 1 – 7. (….)

The names of the keys (….) are the same as with a *slenthem* in *laras* (tone family) *sléndro*.

Only there is additionally a key with the number 4, the *laras* (tone step) *pélog*, while the key with the number 1 gets another name. Thus

Slenthem pélog		
Key number	Name/pitch (*laras*)	*Slenthem pélog* lay-out of keys
7	*barang*	
6	*nem*	
5	*lima*	
4	*pélog*	
3	*tengah*	
2	*gulu gedhé*	
1, furthest left	*panunggul nem*	

The key with number 1 is called *panunggul nem* (!), because this key *now functions as gembyangan* (counterpart, because it is now not an octave!) of the key *laras nem cilik* (!). Now, with the *slenthem laras sléndro*, only the number 4 has not been used, because it does not have a *laras pélog* key. So that the different names of the keys (also) do not get confused. That is why the names of the keys with a *slenthem sléndro* and a *slenthem pélog* are more or less the same.

Like the above-stated, the number 7 key in *sléndro* is called *laras barang*. The word *barang* may be a language bastardization, and then a (deliberate) deforming of the word *bareng* or *barung* (at the same time). After all, the key number 7 is the *pambareng* or *pambarung* (companion?) of key number 1, which indeed is called *barang gedhé*.

The names of key *laras nem* and key *laras lima* have been given according to the order of the keys, (: six and five).

The key number 3 is called *laras tengah* (middle), probably because that key is positioned as the middle of all the regular keys, because they only have five tones (*laras*). If the five regular tone steps (*laras baku lilima*) were now counted from one to five, then the third would find itself in the middle. Therefore this key is called *tengah*, since there are only five regular tones, even if there are now also key number 6 and number 7, counted according to the key arrangement of *laras pélog*.

The key number 2 is called *laras gulu* because it follows key number 1.

Because if one wanted to call key number 1 "*laras sirah*" (head), thus the "highest" key (N.B. "*laras kang dhuwur déwé*", – but for a "high" tone the word *dhuwur* is

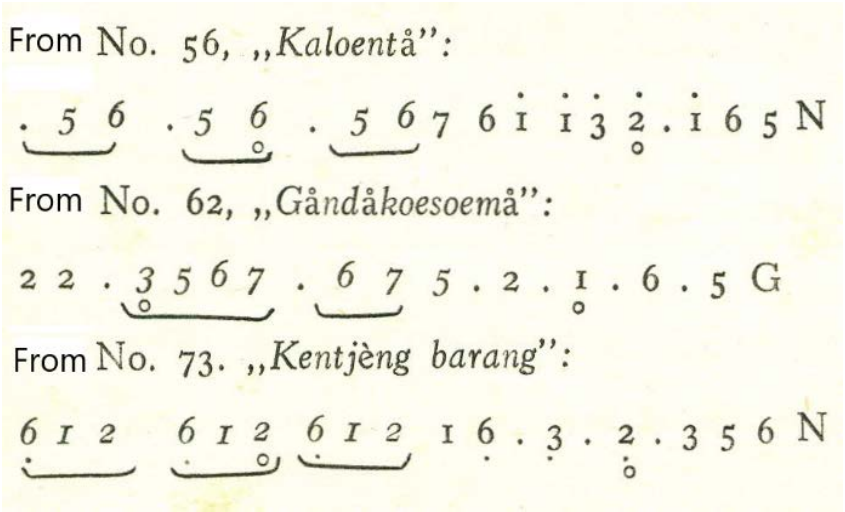
never used, thus always "*cilik*"!), then the key number 2 would have the meaning of the "*gulu*" (neck) of this head (*sirah*). [Besides, it is the lowest of the two!] The smallest key, following on key number 7, is again numbered 2. That is to say, that it has the same *laras*. Therefore it is also called the key of the *laras gulu cilik*. (….) There is also a *slenthem sléndro* without *wilahan* (key) *laras gulu cilik*, but that just reaches as far as the *barang cilik*. It is even the most usual *slenthem sléndro*. It does have seven keys however, because a (low) key has been added. This furthest left is called *laras nem gedhé*, the *gembyangan* (lower octave) of the *laras nem* (*cilik*), and it is numbered 6. (….)

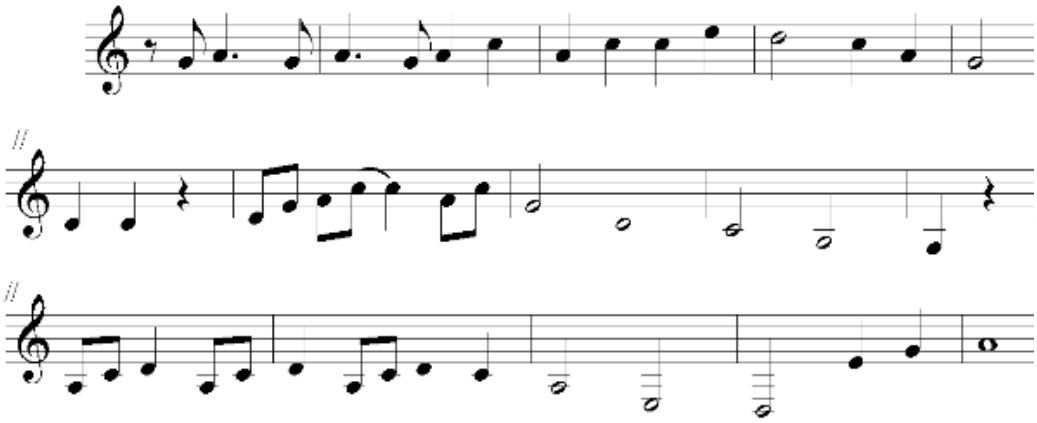
The *slenthem sléndro* does not have a *laras pélog*. The meaning (of that word) is around the same as *pélo* (speak inarticulately). Because the sound (*laras*) or the *suråså* (rasa, perception?) of that key (*pélog*) is like the speech of a person who stammers."

4. [with section 15] In a manuscript from about 1923 by M. Ng. Lebdåpradånggå, head of musicians (*Mantri-Niyaga*) in the Kepatihan Surakarta, and M. Pandji Djatiswårå, 2nd lt. bandmaster of the Kraton there, we find the man named as taking the initiative for the cipher notation to be a certain R. M. Ng. Djåjåsoedirdjå, Abdidalem Kaliwon Sèwu of Surakarta.

5. [with section 16] The Bebuka is dated 1912. "Serat enoet gendhing sléndro kaanggit déning Djakoeb toewin Wignjåroemekså". Batavia 1919, Series number 196. – Here it may still be noted, that these authors now no longer call the usual low *barang* "*panunggul nem*" but simply "*panunggul*". – This latter word is very usual (in Solo) for the lowest step in *pélog*, but not in *sléndro*. In the book by Mr J. Kunst, "De Toonkunst van Java", The Hague 1934, I, 68, 69, neither of the two names given here for this tone occur.

The following excerpts with "quaver" strokes can perhaps be read as what follows them. The thick dot or the zero indicate a *kethuk* beat, thus a relatively heavy moment.

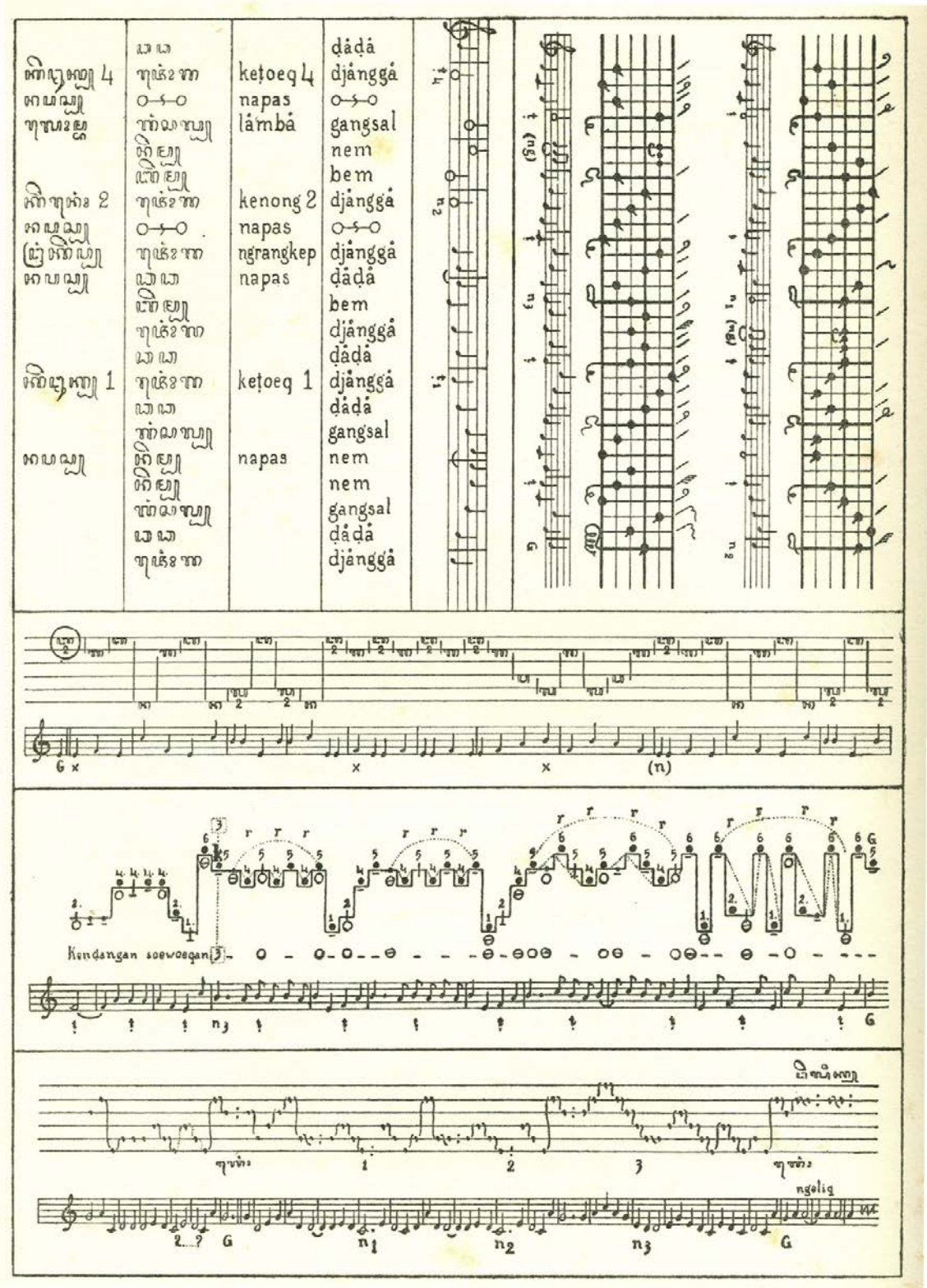


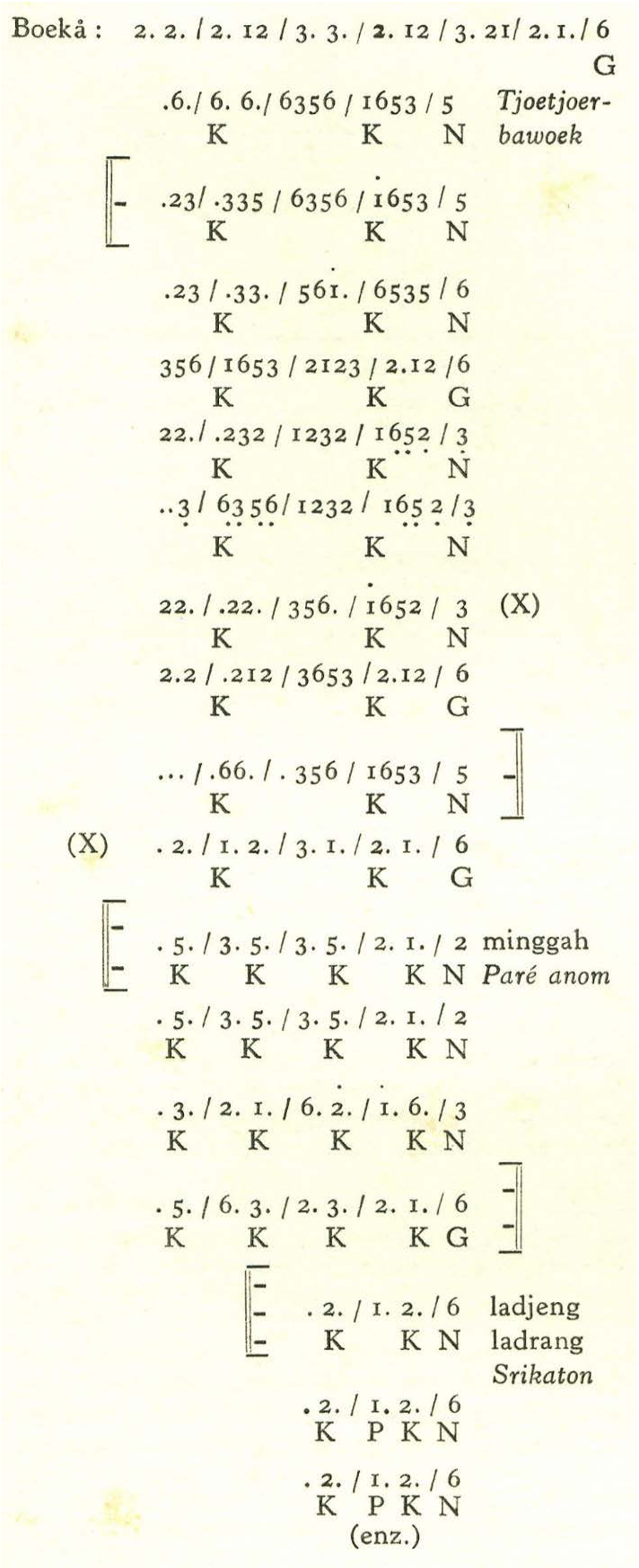


6. [with section 18.] Brandts Buys, J. S. and Anna Brandts Buys-van Zijp “Omtrent notaties en transcripties en over de constructie van gamelanstukken” (concerning notations and transcriptions and about the construction of gamelan pieces). See *Djåwå* 14; for the Paku-Alaman notation pp. 132, 133, 162, 163 and 165. For the “Trappenschrift” (step or ladder notation) pp. 133, 134, 163, 164, 165. Below, you can see the excerpt of the *gendhing* “*Glendeng*” in *Trappenschrift*.

7. [with section 20.] Sample of the “Common Cipher Notation”, otherwise “Kepatihan notation” (or “the Committee’s notation”, as it is currently used in the Mangkunegaran. – This sample is taken from the notation of the themes of the *gendhing* with the *pakem Bima Suci*, effected this year, in the possession of His Highness Mangkunegara VII, and intended for publication shortly by “Volkslectuur”. The notation is used in a variant with bar lines. Transcription seems unnecessary; to get a general and tentative impression, the Western reader can simply read it as if it were an excerpt notated in the Western cipher notation as used in schools. – This is always the case, moreover, with pieces from the *saléndr*o [*sléndro*] tone family. The X signals a jump to the repeat (Ultima Volta).

As *talu*, opening piece of the *wayang* evening, it undoubtedly needs to be understood as being in the *pathet* (key) *nem*. (Fundamental interval 2 – 6. Weak tone the 1.) But the second theme, “*Paré anom*”, seems rather to give a *menyura*-form of that *gendhing*. (Fundamental interval 6 – 3. Weak tone the 5.) But such a shift (to the fifth side) is not unusual.


ketoeq 4
napas
lámbá
kenong 2
napas
ngrangkep
napas
ketoeq 1
napas
djánggá
ḍáḍá
gangsal
nem
bem
Kendangan soewoegan
ngeliq

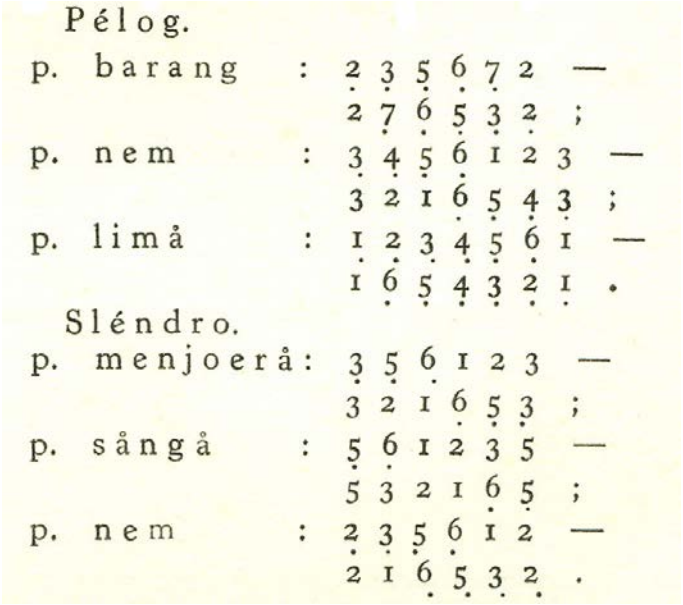

Boeka : 2. 2. / 2. 12 / 3. 3. / 2. 12 / 3. 21/ 2. 1. / 6
G
.6./ 6. 6./ 6356 / 1653 / 5 Tjoetjoer-
K K N bawoek
.23/ .335 / 6356 / 1653 / 5
K K N
.23 / .33. / 561. / 6535 / 6
K K N
356 / 1653 / 2123 / 2.12 /6
K K G
22./ .232 / 1232 / 1652 / 3
K K N
..3 / 6356/ 1232 / 1652 / 3
K K N
22. / .22. / 356. / 1652 / 3 (X)
K K N
2.2 / .212 / 3653 / 2.12 / 6
K K G
... / .66. / . 356 / 1653 / 5
K K N
(X) . 2. / 1. 2. / 3. 1. / 2. 1. / 6
K K G
. 5. / 3. 5. / 3. 5. / 2. 1. / 2 minggah
K K K K N Paré anom
. 5. / 3. 5. / 3. 5. / 2. 1. / 2
K K K K N
. 3. / 2. 1. / 6. 2. / 1. 6. / 3
K K K K N
. 5. / 6. 3. / 2. 3. / 2. 1. / 6
K K K K G
. 2. / 1. 2. / 6 ladjeng
K K N ladrang
Srikaton
. 2. / 1. 2. / 6
K P K N
. 2. / 1. 2. / 6
K P K N
(enz.)

8. [with section 21.] "Uitslag van de Prijsvraag inzake een Javaansch muziekschrift" [result of the competition concerning a notational system for Javanese music], on behalf of the jury (….), by Brandts Buys, J. S. 1924. *Djawa* 4: 1-17.

9. [with section 23.] That theoretical article has long been missing but it has now turned up again. There are, however, curious and characteristic things in it:

> "A gamelan set, be it *sléndro* or *pélog*, may well have only one "*grontoen*", but one can split those [each of those (two) tone families] into three "*grontoen*" [keys]. These are the *pathet*".

Regarding the *grambyangan*, the brief, plunking running through of a characteristic tone series, to indicate the correct position of the key (*donging grontoen pathet*), they give the following:

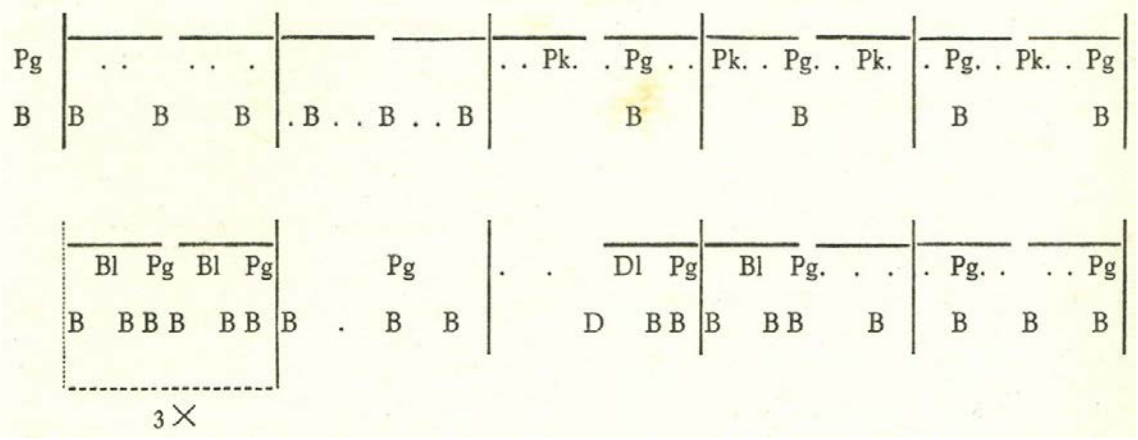


It is remarkable that in *pélog*, the *pélog* tone, the 4, is brought in, while the *grambyangan* instruments: *gendèr* or *gambang*, do not have it. Further that in *pathet lima* the connection 3 – 4 is written as though it were something normal and the *pélog* a transition tone, while these things need to be a rare exception. – For the rest, they thus begin with running up the scale. Which is probably also not the most common way of proceeding.

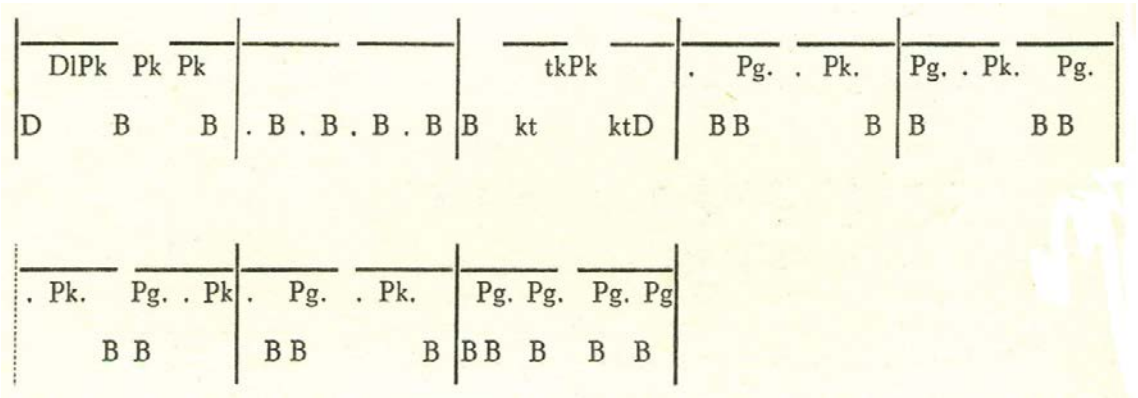
10. [with section 24.] "Boekoe piwoelang naboeh gamellan", *karanganné pårå lidding kommisi pasinaon naboeh gamellan ing pahemman Radyå-Poeståkå*. Surakarta, 1924. – Of the members of that committee, M Ng. Soetåsoekarjå was *abdidalem mantri garap bumi gedhé,* and M. Ng. Atmåmardåwå was *abdidalem mantri ordonnas ing nijågå pånåkawan*.

Ditto ditto, djiliddan II. Surakarta, 1925.

P. 110, the "*Sampak menjoerå*", excerpt from the *kendhangan* (drum part).



P. 105, the “Srepeggan pathet sanga”, excerpt from the drum part (*kendhangan ciblon*).



The tempo of these combat music pieces would be about 96, i.e. alla breve. Thus 96 half-bars per minute. (With tops up to about 144; but these are not concerned here). This is registered here because from the tempo indication in the booklet, namely “Wirama 1/2”, and the explanation of it, one would conclude up to an alla breve of 30 p. min., and this is totally incorrect.

The attempt of the authors to standardize the *wirama* (tempos or *mouvements*) has at once failed, for whatever reason. In each of their tasks they landed up much too low. But mainly, they have tried to link up all those *wirama* in one line behind each other, whereby each following double would be as broad as the previous one. And that decidedly does not hold true.

Arranged in such a way, the successive tempos would in turn exhibit a ratio of 2:3 and of 3:4. Moreover, because the given enumeration of the *wirama* is limited, the explanation also cannot really lie in the not-mentioning of some tempos – let’s say a hypothetical “*Wirama* 1½” or “2½” – even if these are possibly mentioned by others. –

But what happens in this – for the Javanese feeling really fast – tempo, is by no means tame. You can see the long series of beats to a value of three quavers (or really three semi-quavers), that begin immediately after the first beat of the above excerpt. In total there are 13. For that matter, towards the end of the excerpt a new series has just been opened, now of 9 pieces.

Running next to the usual ongoing movement in halves of the theme line in "minims" (or actually in "crotchets"), i.e. in this case: the *kempul* beats, that *kendhangan* has a decidedly polymetric effect. One can also feel it as the competing of two tempos: 128 against 96.

Regarding the second excerpt, after the simple syncopation-shifted positioned (alla breve) crotchets in its second bar, one finds, beginning with the second quarter of its fourth bar, a drum figure consisting of three beats, respectively three, two and one quaver long, thus covering a total of six quavers. And this figure is played four times, even outdoing the just-signalled effect of polymetry. –

It proves the correct policy of the notators of these *kendhangan*, that in notating in these places they have worked analytically, they have allowed their "quaver" strokes to run through, and have not marked the actually present "crotchets" (or really "quavers-with-a-dot") as such. – Just as that correct policy, at other moments, can indeed demand doing so.

11. [with section 27.] "Serat pakem ringgit Gedhog. Lampahan Djåkåsoemilir (Pandji Laléjan). Gendhing soeloek toewin sesendhoning dhalang mawi enoet", *karanganipoen Mas Ngabèhi Soetåsoekarjå, Abdidalem mantri garap ing Kantor Kapatihan, golongan papréntahan artå. Sampoen kaesahan déning* 1 *Mas Pandji Djatiswårå 1e litenan stap moesik*, 2 *Mas Ngabèhi Lebdåpradånggå, mantri nijåkå Kapatihan*." (Manuscript copied January 1930). For example of the arrangement see below, appendix 13.

12. [with section 28.] A. "Serat Wåråtåmå" *piridan saking piwoelang kinå sinawoeng sekar matjapat énggal (anjar) anggitan dalem Bandårå Kangdjeng Pangéran Arjå Praboewinåtå* (….). Surakarta (….) 1936.

B. "Serat titiraras Gendhing Lantjarran" *pangajoman pandjenengan dalem B. K. P. H. Praboewinåtå, kaimpoen déning M. Ng. Wiråwijågå, Th. S. Martåsoedirdjå, kawedalaken déning Stm. Atmåsoemartå*, (….) Surakarta (….) 1936.

C. "Gegaran piwoelang nembang preloe angoelinakaken swaraning wilahan gångså toemrap lelagon djawi" (….), *anggitanipoen: Stm. Atmåsoemartå* (….). Surakarta (….) 1937.

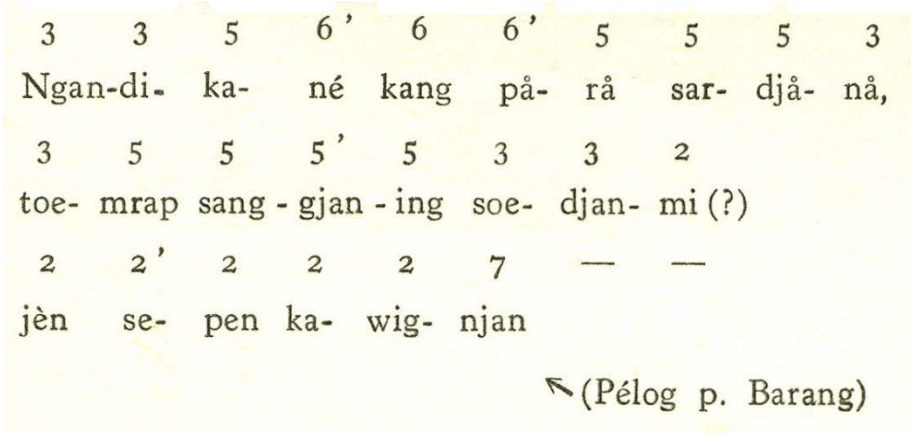
D. "S. Lagoe Djawi", *djilid I, tjap-tjapan ingkang kapisan, kawedalaken såhå katåtå déning Stm. Atmåsoemartå, kanthi kabijantoe såhå sampoen dipoenapsahi déning M. Ng. Wiråwijågå, Abdidalem mantri nijågå kadipatèn golongan tengen*, (….) Surakarta (….) 1935.

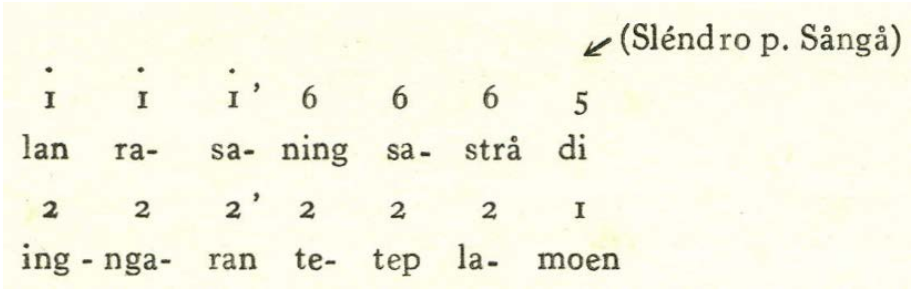
E. "S. Lagoe Djawi", *kaimpoen såhå kawedalaken déning Stm. Atmåsoemartå, M. Ng. Wiråwijågå, Th. S. Martåsoedirdjå, djilid 2* [volume 2], (….) Surakarta (….) 1936.

F. *Ditto ditto, kaimpoen* (etc., *ditto ditto*), *djilid* 3 [volume 3], (….) 1937.

G. *Ditto ditto, djilid 4* [volume 4], *katåtå déning Stm. Atmåsoemartå, gendhing-gendhing kaleresaken déning M. B. Wignjåbångsåpåtrå, Abdidalem bekel nijågå ing Karaton* (....) 1939.

Example from A. – The simple notation only gives the unornamented outlines, (the framework, the *balungan*) of the melody, *lagu*. With exceptions, possibly, for those where the end of a verse line or a caesura follows, one may maintain the syllables for equal amounts. Through always taking the bar line (of quadruple time) before such a note, its length is adjusted by itself.





But there should be caesuras during some words, and also, as it appears, if it is not preceded by a longer note that in that improper manner – by a quasi caesura – might want to be indicated.

That is, in the above beginning of No. 2 the note before the first caesura, and the one at the end of the second line (3 counts) should be long, and this fact should be respectively established by means of the next “caesuras”. – Like the “caesura” in the second line also establishes, that the final syllable of the first one is not lengthened.

Thus through the “caesuras” in the second and third line of No. 3 reproduced here, the final syllables of the first and the second as it were, are ideally standardized at a length of two counts. Which does not detract from the freedom of the vocalist to draw them out according to their own taste. – [See below.]

Later too, in F for instance, this simplest variant of the notation is still used, if it is possible to establish not the decorative finesses, but the main constituting features (*balungan*) of *tembang* or the like.

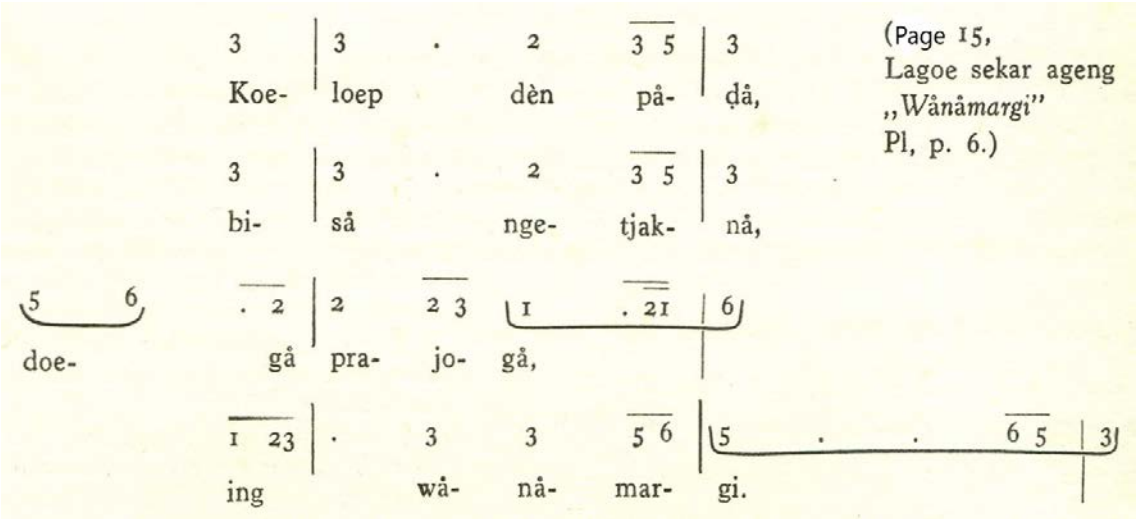
Examples from C. [with section 29.]

As already observed, Mr Atmåsoemartå has adequately considered and overcome the complexities of notating the *tembang*. These lay, as will be clear, in the precise account that the notator has to make concerning the introduction, the opening, with "Auftakt" (or "Volltakt"),[*5] the endings of the song verses and verse lines, and the various possibilities that may arise there.

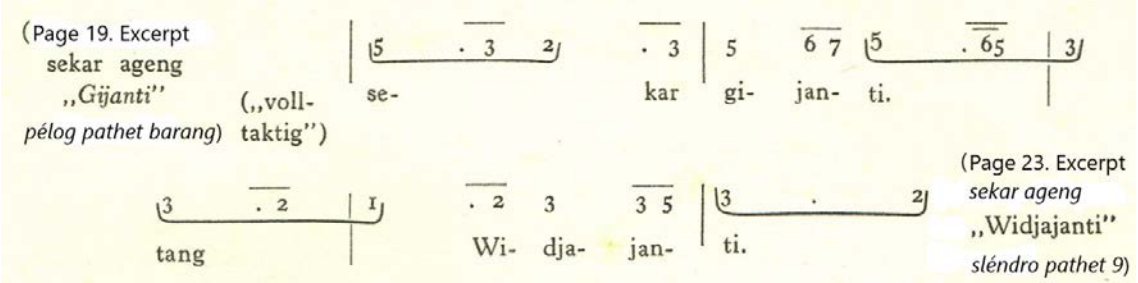
Theoretically, some things about the *angkatan* can be found in F and D. In practice, the possible variants of more or less long drawn out, feminine endings are recognised, and also, for example, the cases where the final note, as an exception, does not have to fall on the 1st but on the 3rd count of a bar. Furthermore, there is the start with "Volltakt". And – what is mainly important – carefully specifying the endings and the beginnings, but not the distance between the ending of the one line and the beginning of the next, which he has left specifically undetermined, as it should be undetermined.

If he had forced a "hurrying through" of the system of the bars and by notating "rests" given a fixed value to the suspension of the movement between the verse lines, his representation of affairs would have been much less correct than it is now.

He uses the cipher notation in question in a nicely clear and elegant way.



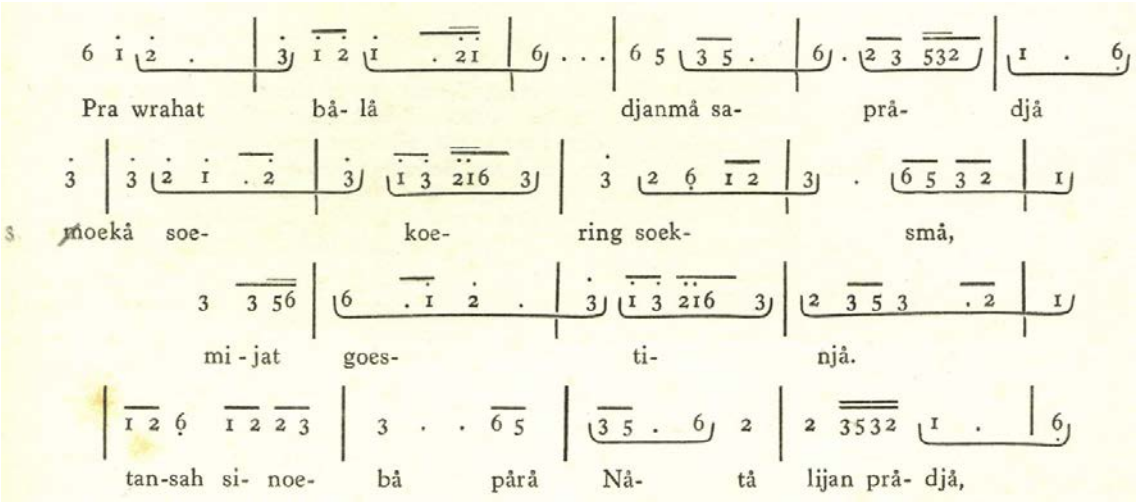
[*5] [That is, with a "light" (*Auftakt*, upbeat or anacrusis) or "heavy" (*Volltakt*, on the beat, accentuated) part in the rhythmic structure: arsis or thesis. W.v.Z.]

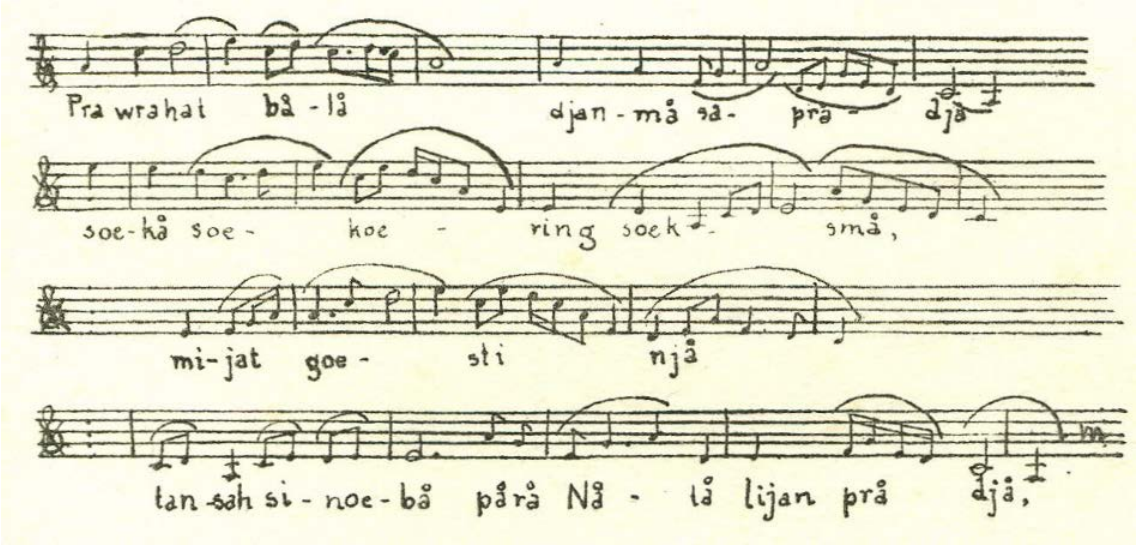


Example from G.

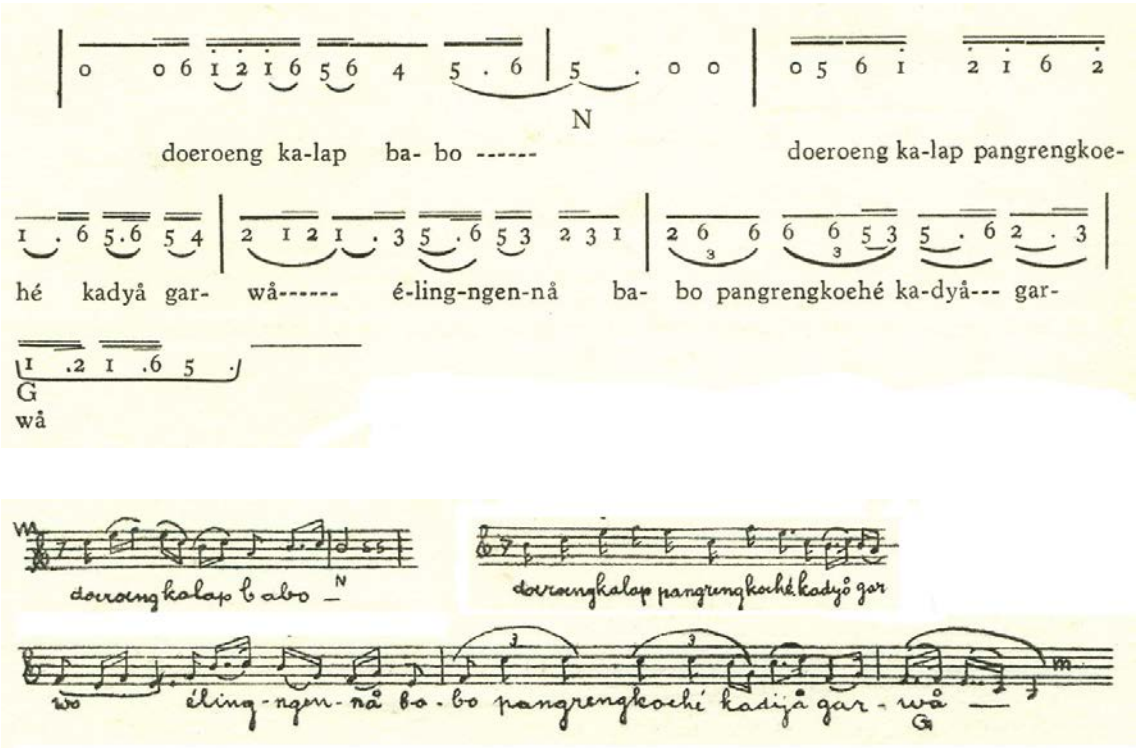
As well-made as are the notations of *tembang* with short verse lines, those with long ones naturally cannot be. Their protractedness compels one to break off the lines. But that would remain the case in whatever system they were notated. Still, it is a pity that now the verse will not have a well-organised form, as was possible with the notation of that shorter one. Breaking off differently than with a *pedhotan* (caesura) will be avoided, however.

The following example is from p. 38, *Båwå sekar ageng* "Arinidwani", first half of the verse. The tempo will be in the order of 1 sec. per count, giving details up to the "semi-quavers". [Musical mode:] *Sléndro pathet manyura*.





13. Example from *Pakem ringgit gedhog*, see above, appendix 11**.** [with section **27**]: Excerpt from the vocal part with the *gendhing* "Éling-éling"



The occurrence in this piece of "demisemiquavers" does not need to mean that the figuration and ornamentation of the vocal line is faster, or set out in more concise, finer detail than in a previous one. The notation will have come about with "*tata-irama*" (bar lines) "*gérong*", thus as is usual with that choir. (Cf. C, p. 26) Tempo

thus in the order of: one count (“crotchet”) lasts 2 seconds. But this notation does prove that the Kepatihan notation in its well-developed form leaves the user completely free to achieve any degree of refinement that he desires.

(Continued from [*Djawa*] volume 20 no. I, pp. 87-106 [in *Djawa* 20:145-167])

31. Start of the vocal application of the notation. 1907.

The Kepatihan cipher notation discussed here, – although maybe stimulated by the vocal Western cipher notation as used in schools, - will certainly have been created for instrumental intentions. But apparently it was very soon set up for vocal purposes. To see this one should go back to 1907. That seems to have happened then, for writing down the Santiswårå songs – a kind of sacred music with the strangest text complexes. In a contemporary volume with notations of children’s songs, *tembang* and *gendhing terbang* or also Santiswårå tunes, Rd. Kodrat comes upon the origin (or at least the revival) of the latter genre.

It will have been around 1907, when the former government administrator Rd. Ad. Ar. Såsrådiningrat (mentioned before in section 15), felt the desire to revive the *gendhing* for voice and *terbang* (tambourine). They had been very popular up to about forty years earlier, but at that time were completely unused.

Initially the government administrator could not find anyone then who was suitable to function as teacher. But at last he remembered R.M.A. Soemåningrat, a grandson of the Paku Buana (the Vth), in whose time the genre had particularly blossomed. He declared himself willing to promote the revival as much as possible, and to that end, to teach the head of the *kepatihan* musicians, the already-mentioned (section 10) *abdidalem Mantri panggedhé niyaga Kapatihan*, Kiyai Demang Warsåpradånggå, and to the musicians themselves, the *abdidalem among-raras Kapatihan*. But because he was already old, and his voice had become unsuitable for the long drawn out and loud singing, he used an indirect method, as it were. He taught the tunes to Rd. Kodrat and a younger brother of his, and these in their turn taught the musicians, while Warsåpradånggå notated the tunes in cipher notation, (*lan banjur ngangkani laguné*).

Now there do not seem to be many of them preserved in Solo, (at least not in later transcript). But the manuscripts in question do not appear to have been dated, at least in so far as we have been able to find out.

32. Mixing of ciphers with old, depicted elements.

Its notation is highly idiosyncratic. (See appendix 14) It uses the often characterised cipher system, without bar lines, but for the arrangement of the song line, for conveying ornaments and ligatures, mixes it with differentiated lines of serrations and dots running between main and side ciphers. One cannot count on these quasi hieroglyphs having completely established the contours of the ornaments. For the instrumental “quavers” the notation again now uses those long lines under the ciphers, probably with still other silent suppositions concerning whether the last note above or before such a stroke will become short or not, and suchlike. A complete deciphering is not possible at this time.

But regarding those vocal lines, they must be related to the wavy figures, that the Chairman of the Committee has made me aware of, and by means of which the Javanese guru have often conveyed a global impression of certain vocal ornaments in the vocal education of children.

In their turn, those mysterious small figures are also extremely interesting; and that is concerning their evident relationship with the lines, with which the Javanese teacher, indicating the text as well as sketching the contours of the melody with his stick, usually accompanies the singing of his pupils. If he is not yet infected with the unfortunate beat-giving in the Western way. But one can also manage to see that same sketching in the air of the way the music is going, not from a teacher but from a *niyaga* in a leading position. In Solo I have indeed observed this from an old *demang* or *lurah niyaga*, who sat in a *gamelan sekaten*, not playing along. Moreover, he did not use a stick but something like a roll of paper, or a rolled-up booklet, probably not brought specially for the purpose.

33. Cheironomy?

If it happens with sufficient musicality and liveliness, this drawing of lines irresistibly makes one think of the phenomenon that is classed in the history of music under the name of cheironomy. (By this remark, I really do not mean to have thrown up a hypothesis about a historical connection!)

But the nature of contours described in the air must be addressed later (see section 64.)

34. The original notation tested for school songs.

The booklet of Mr J. Kats (see appendix 15) will be the oldest one that has appeared in print, in which the cipher notation originating in the Solo Kepatihan is used in its simplest form, without bar lines or so, for music to be sung. From its simple form it appears clear that the collector was not out to make propaganda for a Western system, but rather subjugated himself to that which was formed in the

Javanese environment. Regarding melodies and lyrics, the material used for these school songbooks appeared to consist partly of real children's folk songs (from the handwritten collection of Mr P. Jansz). For another part, the Javanese helpers had used them as an example for their own creations. At the time the method had only been introduced into Protestant Christian education, but not into the Government school system, even though the compiler had actually intended it for that.

It could well be that it contributed something towards the notation becoming known, the cipher system in question. But since it was not reprinted, probably not very much.

35. Another variant of the notation.

There appears to have been a substantial interest in the publications – indeed excellent of their kind – of the Mardilagoe group, so that there is also noticeable influence. The fact that even the last-characterised notation (in section 30), "with the chain of beads", just to identify it, that this variant, whether apparently immediately let go by the finder, was further varied by an outsider, can serve as evidence. A collection of Javanese songs, intended for use in schools, written not long ago by Mr R. Siswåsardjånå, still in manuscript, also uses such heavy points or dots to fix the successive moments or otherwise the counts, although not in an uninterrupted line above, but partly below, partly in the text. And because no defining and distinctive sense was ascribed to the different ways in which ligatures, several tones on one syllable, are indicated, although that would have been quite easy to do, one can only guess at the precise intention of the details. (See appendix 16.)

36. Old forms still in use.

But also old forms of the notation – if in skilful hands – can be more usable than one would have expected, and are therefore still in use. Thus with great appreciation I became acquainted with the collection of notations of children's songs, *tembang* and also *gendhing terbang* or Santiswårå songs, that have been got together by the well-known Javanese musical expert R. Kodrat. That Mr K. uses an old form of the notation will not amaze anybody, since he after all, – as mentioned before (section 31), – appears to be one of the earliest users of the notation. In his 1934 volume he indeed has not given more than one metrically undetermined framework of the *tembang* (*majapat*), and is thus behind the present times – which can be regarded as represented by that booklet with notations of the new *majapat* tunes of Pangéran Praboewinåtå. But the children's songs have succeeded very well. Only at first sight they are completely unclear, because not only the bar lines, but also other means of visually summarizing the format are missing. So one has to count the beats of the tune blindly, as it were, (other than with a primitive notation of a gamelan theme, where one generally knows or sees

the main points a priori). But the second or third time, one can already feel the structure on the basis of the lyrics. (See appendix 17).

The peculiar asyndetic, atomic character of the variant used by Mr Kodrat mainly comes from the fact that he does not even use the strokes above the note ciphers, which otherwise indicate the “quavers”. He does not need them, because he has chosen his unit to be so small, so short that it is itself only a “quaver”. But then he also has to do without the connecting and grouping strength of those strokes.

37. Another recent school collection. Hardjåsoebråtå.

Regarding that short [time] unit, that can moreover also be found with those who do not particularly use the Solo-Kepatihan-notation in an old-fashioned form. For example in the nice collection of school songs by the Roman Catholic teacher R. C. Hardjåsoebråtå. Those songs – as so often in such cases, one is not sure whether he is really the composer and poet (for which “*riptanipun*”) or only the collector, in this case the arranger, (which “*nglempakaken*” and “*pilihaken*” would more likely indicate) – appear to have been introduced for a long time already to (particular?) schools, and their publication also seems to be expected soon. This teacher, using the ciphers and dots normally, and also writing bar lines, has equally avoided the “quaver” by using a short beat. (For example in the currently well-known popular children’s or street song “Kupu-kupu” as well, which he certainly would not have composed). That with children’s tunes one avoids the long, slow beats of the other Javanese music notations, is quite reasonable. But in addition to his 4/4 bars, Mr Hardjåsoebråtå could then also have introduced *alla breve* bars, and explain them. The way he has things now, it is – perhaps one can say, happily! – not possible to conduct them. (Which I think is anyway undesirable in the Javanese school).

38. Once more: Familiarity with the notation in school circles.

Also intended for the Javanese school, but then for the possibility of teaching gamelan playing, is a manuscript collection from Blitar, prepared by the teachers Messrs Moersirin and Moertaman. In educational circles, the “Kepatihan”-notation is so well-known, that it is very exceptional to receive notations from there in other kinds of notation systems. – If we now disregard West-Java, which is under the direct control of Mr Machjar Koesoemadinata [also Kusumadinata]. – But apart from the collection coming directly from his environment, with which Java proper also had to be conquered for his notation, for a long time now I cannot remember any new collection in a heterodox cipher notation. That is, Mr Déwantåråå naturally wants to print things before long in his own cipher system.

Regarding that gamelan schoolbook just mentioned, it does not have anything else special. It does not use any bar lines and also no “quaver” strokes, but notates the *bebuka* (introduction) as usual, probably beaten faster, twice as compressed as the rest. According to that method, the single incidental small group of “quavers” which occurs here and there, will also be seen without further helping signs. The proposed method, to express the *kenong* beats or suchlike by red or bold ciphers, seems unnecessary.

39. Familiarity among musicians and connoisseurs.

The end of these considerations, regarding the history, development and distribution of the Solo-Kepatihan-cipher notation, is in sight. One more small essay in manuscript by Mr R. Tanåjå from Solo may be mentioned, “Bab gångså Tjåråbalèn”, dated 1937, in which the playing of his singular gamelan is rendered in a bar line-free variant of the notation, which notates the “*gambyong*” and the “*klénang*” parts above each other, with the latter, lower one, four times as compressed as the first one.

Concerning his notations, the author remarks that they are written in “the cipher notes, generally employed by the *niyaga* of Surakarta”. Which corresponds with what is noted in the introduction to the *tembang* booklet by Pangéran Praboewinåtå (See appendix 12**,** A and also cf. section 28). Namely, that these “*titi-raras* are common among *niyaga* colleagues and also among the notables and the civil servants who are interested in gamelan playing”.

40. The Remainder.

For the rest, there is undoubtedly a lot, whether in print or in handwriting, that I have missed. For instance, I heard about a sizable manuscript collection of *tembang gedhé* in the notation discussed here, which I have not been able to get hold of up to now. – I also just found *gendhing* themes printed in the magazine for *wayang* knowledge (“Wossing) padhalangan”, directed by Mr R. Ng. Doetådilågå. Indeed, these *balungan* have probably just been reprinted from the second volume of Djakoeb and Wignjåroemekså, (or their source?), adding where they fit into the *wayang* playing. But printing them again without further explanation, in any case proves the general acceptance of the notation and also helps to maintain it. (See above, section 16.

41. The Regent of Kebumèn.

Two noteworthy moments in the history of the notation discussed here must still be pointed out.

1. A letter from the Regent of Keboemèn from mid-1938, in which Mr Aroeng Binang discusses the use of a new method of vocal music education for children and older people. The teachers (who have tested it) are “unanimously of the opinion that this method is the easiest”, and approached the Regent with a request to be able to implement it. From an attached collection it could be seen that notations in a variant of the notation under discussion formed an integral part of that method. And one could only praise those notations, even though, just like the entire method in fact, it seemed to be based too much on the gamelan, rather than on the original sung tune. As a consequence, not only were some vocal details, the division of the text syllables for example, left more or less undecided by the notation, but also – at least, in my opinion – in a certain sense this was to the detriment of the particular structure, or rather morphology, that can display the tunes. (See appendix 18).

42. Respect for the whims!

It is precisely its irregularities that have something unusually appealing, lend it a freshness, that is missing in much of the Javanese music under the balancing influence of the court culture. One of the salient manifestations of that strange equal-sharing culture is the dominant rigid square. The opinion of Ki Adjar Déwantårå can only be agreed with, that Javanese children’s songs should really never have been played with another gamelan accompaniment than a *srepegan* pattern or suchlike. Like when the same kind of approach is taken not to affect the metrical freedom in *majapat* songs. Even if a children’s tune is put in *ketawang* form, for example, neither through changes, broadenings nor accelerations of irregular elements, but with nothing happening other than rounding off (or rather squaring off!) the form through additional rests, that fill and count out the gamelan, even then one actually spoils the original.

43. Beware of gamelan!

Furthermore it is best to be thoroughly careful not to lean on gamelan too much for vocal music education! At the very least, the result can be that children largely forget how to sing without it.

44. *Gendhing* competition 1939.

2. The competition held on the occasion of the festivities to celebrate the Solo Kraton and its two hundred year anniversary, aimed at the creation of new *gendhing* that could keep the memory of this joyful fact alive.

The contestants now had the obligation laid on them to write down at least the thematic main line, the “framework” of the *gendhing*, and submit it in advance. In whichever notation they chose to do so, was left to them.

For myself, who was part of the evaluating jury, this made the competition even more interesting: Here was another chance – just like around fifteen years ago with the contest of the Java Institute (see above, section 21) – to get a current picture of the music notation question! And even to work out, as far as it goes, to what extent the contest and the recommendations given at the time had exerted any influence.

The jury at that time (see appendix 8) had namely recommended the same “chequered notation” that Mr Halusa now uses as the basis for his experimentation. (Whereby for that matter, it should also be taken into account that instrumental music was predominantly being considered then.)

Well now, of the twelve entries laid before the current jury, not a single one of them appeared to have applied the “chequered notation”, even in a distorted way; not even the one that made use of some form of staff notation.

Concerning the cipher notations – not a single person had put one of the notation systems into practice that I jokingly named heterodox cipher notations – a name that I also wanted to continue using.

All the twelve entrants applied the Kepatihan cipher system. They wrote it down with very varying skills, applied all kinds of different stages to it, and some succeeded better than others in metric precision.

But as I said, there were no exceptions, none who used another notation system. (And I would have truly have been very happy to grant to my good and old friend Ki Adjar Déwantårå, my fellow jury member, the exception that everyone was expecting as a proof of an increasing dissemination of his essentially very serviceable cipher system).

After this extensive discussion of the Kepatihan notation recommended by the Committee to the Director of Education for introduction to Javanese schools, there follow here, as was announced in section **7**, statements about and evaluations of the heterodox cipher notation systems.

45. Notation of Hinloopen Labberton, 1913, = Darmåatmådjå and Sastrådihardjå, 1930.

Of the cipher tone notation systems that embody a fundamentally different system than the “Solo-Kepatihan-notation”, in its different forms or stages, the oldest so far known is that of Mr (Prof. Dr) D. van Hinloopen Labberton. At the time, he revealed it in the appendix that he worked on for the booklet of the late K. P. A.

Koesoemådiningrat about Javanese children's songs. It is also the first notation that numbers the tones or keys from high to low. But this does not mean in the slightest that Mr Labberton invented that way or possibility. It could have been handed to him as such by a Javanese. But it could just as well be that on asking for the names of the keys, they could have been named and struck, starting with the smallest. He seems somewhat confused regarding the names of the tones. (See appendix 19).

46. Following the natural stanza form.

Long and short rhythmical details are not indicated in his notation; so as far as that is concerned, with an unknown song it is a matter of guesswork. But an important positive quality is that in this booklet – and this is the first time – in notating the melody, the natural form of the lyrics is followed. Certainly the best way to promote the understanding of the freedom of their poetic and musical stanza form, the greatest appeal of this wild singing.

The school booklet with children's folk songs and games by Messrs Darmåatmådjå and Sastrådihardjå, compared with the book by Messrs Van Hinloopen Labberton and Koesoemådiningrat, does not indicate a new stage and barely their own accomplishment. They have merely adopted nearly all the descriptions and melodies. But they have supplemented them with a few tunes that Mr Labberton did not have. The use of his notation does not necessarily demonstrate a preference: that was simply the easiest way. They do not mention his name. They have avoided the one probably-wrong tone name. Just one time they shifted the *pathet*, the position of a song.

47. The same notation with R. Bg. Soelardi, 1918 (?).

The cipher method of Mr Labberton is also used by Mr Soelardi, in his first publication about Javanese music. (See appendix **20**.) Namely the five ciphers of 1 to 5 to indicate the Javanese (*sléndro*) tones of *nem* up to *barang*; thus from above to below. Since there has almost certainly been contact between the two gentlemen – Mr D. v. H. L. added a few notes to the book of Mr S., – it is not in the least improbable that the one has influenced the other.

For marking the position an octave lower, both use a stroke (not a dot) underneath; for an octave higher a stroke above the cipher. Mr Soelardi is undoubtedly independent in his system for notating *pélog* music, for which he could hardly copy Mr Labberton, since the latter has not actually realised the issues involved there at all.

48. Some tones as side-notes.

Thus Mr Soelardi – the first to do so? – gives a notation in which the two tones that *pélog* has more than *sléndro* are characterised, not to say branded, as tones of secondary importance. And the tone *pélog* of a similar kind, "gender," is with the *tengah* (*dhadha*): ("*nunggil bangsanipun*"). And the tone *barang-pélog* with the *penunggul* (*bem*). The way in which this outline is conveyed in ciphers is quite unfortunate. (See appendix 20)

49. Shifting cipher notations.

Mr Soelardi also displays the inclination – once again as the first one? – to have his ciphers shift over the keys, even if only in a very individual case, and with a special aim.

(He is still developing a *kendhang*-notation, but it is not more balanced or detailed than that of Messrs Djakoeb & Wignjå from the year 1913.)

But! ..... Careful! ..... Careful!

Mr R. (Bg) Soelardi (Hardjåsoedjånå) may well be an ingenious and in many ways artistically gifted man, (we know his fine draftsmanship) – but in scientific talent and musicological knowledge, Mr R. Machjar Angga Koesoemadinata – master above master – is undoubtedly senior to him.

50. Machjar. In 1920. 1920 again. In 1922. 1922 again. – In 1923. In 1934.

And a great deal of what we currently know in this country about tone types, transposition keys, *pathet*, modes, between-tones, we more or less owe to him, indirectly or directly.

Concerning the renowned question of the inborn sense of direction in discerning the "movement" of indigenous music, Mr Machjar has made it his business with so much fire, and even a trace of intolerance, that it is indefensible to want to give another name than his in this matter. (see appendix 21).

51. Table of notations for pélog.

		bm	gl	dd	pl	lm	nm	br	
„Kepatihan" = Machjar 1922		1	2	3	4	5	6	7	
Soelardi II 1923		2	3	4	4	5	1	2	
Soemågéwoeram 1934		1	2	3	4	4	5	6	
Atmåwidjånå c. s.	pl bm	3	4	5	6	7	1	2	(1 = B-flat or C; maybe G?)
	pl br	6	7	1	2	3	4	5	(1 = F or G; maybe D?)
Machjar 1920	pl lw	7	1	(2)	3	4	5	(6)	
	pl bm	3	4	5	(6)	7	1	(2)	
	pl br	(6)	7	1	(2)	3	4	5	
Machjar 1922 bis.	pl lw	5	1	.	2	3	4	.	
	pl bm	2	3	4	.	5	1	.	
	pl br	.	5	1	.	2	3	4	
Déwantårå 1936	pl lm	1	2	3	.	4	5	.	
	pl nm	2	3	4	.	5	1	.	
	pl br	.	4	5	.	1	2	3	
Déwantårå 1939 & 1934	pl bm	3	4	5	5 = 1	1	2	2 = 3	
	pl br	5 = 1	1	2	2 = 3	3	4	5	
Soelardi I 1918		5	4	3	3	2	1	5	
Machjar 1923	pl lw	2	1	5 *	5	4	3 *	3	
	pl bm	5	4	3 *	3	2	1	5 *	
	pl br	3	2	1	5 *	5	4	3 *	

(For explanations see appendix 21.)

52. Anew, Machjar 1920 again.

The second notation designed by Mr Machjar in 1920 was a staff notation. One could even say: "the" staff notation. Because it simply approached the main features of the Sunda scales with Western note signs. Based on this one could also conceive of his cipher notation of that same year as the Western school cipher system and still add to it, with *pélog liwung*: 1 = *F* (resp. *E*-flat), with *pélog bem*: 1 = *C* (resp. *B*-flat), with *pélog barang*: 1 = *G* (resp. F).

53. Atmåwidjånå et al (Chr. group.)

This was noted because something similar is happening in Solo for notating *tembang* with a religious slant, by a group of Reformed Protestant Christian Javanese. This form of singing and poetic art was warmly promoted at the time,

among others by (Prof.) Dr Kraemer, so that in the intended circles, Javanese singing would not be completely displaced by Western. One uses the indications for the length or shortness of notes, etc., that go hand in hand with the notation, and certainly uses them not without merit, and also ventures into undertakings by no means small: for instance, *tembang gedhé* with ornamental ligatures of twenty notes on one syllable. But unfortunately, the bar lines have not been accepted right now. This obviously does no small harm to the clarity. Moreover, the art of "grouping the ciphers" when notating in such systems is also of exceptional importance – therefore practised here with less success than by Mr Atmåsoemartå *et al* (compare above, section 28), because it did not work out so well with the printing press. The latter needs to have a great variety of material with strokes etc., and also not to shrink from "cutting" them. Regarding musicality and insight into Javanese rhythm, the gentlemen referred to (see appendix 22) are certainly capable of delivering just as good work as the others. (But compare later, sections 82, 83, 84.)

54. Machjar 1934 and later.

Mr Machjar designed yet a second actual staff notation and, I have just been informed, Mr M. would really rather use this with his vocal music classes than the M. 1923 cipher notation now mainly used by him.

Mr Machjar is namely one of the few of the numerous indigenous musicians in Java who has had sufficient development in this sense, that he does not let himself be mesmerized by the "difficulty" of the Western staff notation, or what is taken for it, and would therefore be capable of objectively assessing the question: ciphers or notes. (We will leave the gentlemen bandmasters and staff musicians out of the running for now).

But however this may be, for the nine tones (five plus two plus two) of the Sunda *pélog* he has employed a stave with four lines, that indeed makes nine places available; (four notes on the line, three between, one above the upper one, and one under the lower one); and in addition help lines can be added. (See appendix 23.)

The main thing is that on this stave – for Mr Machjar something very natural! – the highest step, at least what the Westerner feels to be such, is on the lowest line; and vice versa.

55. About the direction!

This can now be further discussed.

Because since in 1923 Mr M. came "to the important discovery (and persuasion), that the Javanese tone enumeration runs from high to low, in which the higher tone in the Western conception is felt as low and the lower tone in the

European conception is felt as high" – since that moment he regards this question, so it seems, as the proper touchstone by which it can be seen whether someone has a true understanding and mainly whether he has a real feeling for the music of this country.

Now among those who allow themselves to be persuaded in this regard by Mr M. are neither Mr Déwantåråå nor I, and thus it can be feared that this or that may be denied us!

56. Mr Kunst pro Machjar.

A person who does belong to the adherents or followers of Mr Machjar in this respect is Mr J. Kunst. This is formulated in this way here, because the passages referred to in his monograph about Javanese music do not really give the impression that he had much of his own material on the matter.

57. The usual scale contra.

His Reverence himself sums up the elements in the most common Javanese scale, the series of tone names, that indicate an inclination to count from below to above, or – to avoid confusion now, to say from now on: from large to small. (The succession *lima*, *(e)nem*, and that of *penunggul*, *gulu*, *dhadha*.) These decidedly older elements are contradicted but not outweighed by other scales or parts of them, in which the counting has gone in an inverse way, apparently also traditionally. One can still bring in a lot more, for example that if you carefully ask someone, without influencing them, to name the keys of an instrument, they begin much more often with the smallest.

58. The "*grambiyangan*" pro?

And also, that with the vaguely outlining tone-searching, or preferably tone-pointing (*grambiyangan*), it is much more common to hear one starting from small to large. But given the unimpeachable indigenous elements that go in the so-called Western direction, one fails to explain others, that are under discussion, as *a priori* from Western influence.

59. Pakualaman notation doubtful?

It is true that the first specimen of notation by Javanese in which a direction could be viewed – a Pakualaman one in Land & Groneman – drew its "graphic line" in the reverse way from our Western one. But on Groneman's authority it was also

reported there that the other way round (thus movement in the “Western” way) occurred just as often.

60. Trappenschrift and suchlike contra.

And the derivates of that Pakualaman notation, the so-called “Laced-up notes notation” (see appendix 24), plus the so-called “Trappenschrift”, show, as far as we have encountered specimens, the quasi-Western direction. The latter, if it used the same ciphers for the tonal steps, could just as well have put the graphic image of those steps the other way round. If his feeling, that is to say, that of the designer, had driven him, the Javanese, in that way in the vague, still immanent depiction of tone movement. (See appendix 25.)

But that is just the question now: Does that depiction exist? And then: in the sense insisted on by Mr Machjar, or not?

61. Not many Javanese pro.

The share of Javanese supporters who testify that “the ciphers 12345 (from high to low)” – “high” and “low” understood in the Western sense, here rather called: “small” and “large” – “(are) traditionally used by the Javanese (….) musicians”, is actually only a small handful. (See above, sections 45 and 47.) Furthermore it has escaped Mr Machjar’s attention that their leader, to be sure, is a good Dutchman; that he and Mr Darmåatmådjå *et al* have very little moral authority in this matter. And that finally Mr Soelardi also cannot contribute anything decisive, to support the conviction concerning the contrary sense of direction, that was supposedly inborn in the natives. Perhaps he warmly believed that in 1918; but then he must have dropped that belief quite quickly. This happened namely no later than in 1923: “Soelardi II” just numbers in the usual way from “large” to “small”. (See above, section 51.)

62. Mr Kunst not an independent witness.

Concerning the rest of the remarks, kept quite general, that Mr Kunst made on the matter: “Incidentally noted, that the Javanese (and Sundanese) tone enumeration, where it is not Western-influenced, runs from high to low, whereby then also the (….) lower tone according to the Western view, is felt as higher (Sund. *luhur* = high, in this case Europ. low)”, – it seems than in this he is simply repeating the words of Mr Machjar.

Let the emphasis be laid here. Not because of this, that or the other, but solely so that no-one thinks to quote Mr K. as an independent witness that the Sundanese traditionally have not only called the high tones according to the

Western conception “small” but also “low”. And the low tones for the Westerner not only large, but also high!

If the latter indications had really traditionally existed, Mr Machjar would have hardly found anything out about them in 1923. I therefore consider them to be simple conclusions, drawn from his theory by Mr Machjar himself, and further that he is completely responsible for systematically introducing and implementing them in his music education.

63. No psychological objection.

Not that there is any objection, or psychological resistance to be expected with a numbering of the ciphers, which go against the Western direction. Not that! – Given the objects that one can just as well consider “high” as “large”, – trees, mountains and the like, it will certainly not impede anyone from naming a tone in turn high and large among his disciples; – or else low and small. But this cannot serve as proof of the existence of, as it were, pre-existing thought patterns. (Also see appendix **25**.)

The arsenal of the arguments of Mr Machjar was thus after all hardly imposing enough to fill the Committee with enthusiasm for the notion of turning upside-down one of the known cipher music notations of the Javanese, let’s say the Kepatihan notation, or that of Ki Adjar, on those grounds. Neither, after the lost tribe of the Banten Javanese, to gladly see the rest of the Javanese also placed completely under the music-pedagogical control of this gifted Sundanese. Because it seemed that Mr and Mrs Machjar were rather aiming for this. While the skill of the Javanese to organise their music pedagogy themselves should not be denied.

64. Once again: Cheironomy?

But what finally made me chiefly disinclined to yield to the suggestions of Mr Machjar, is the phenomenon that we have compared earlier in this article (see section 33) with the ancient “cheironomy”.

It is clear that the Javanese teachers could not follow any Western examples in this. And which of them, who is still functioning well and sees a song line being drawn in the air in this way, will not doubt that the main direction of the movement is thereby simply that of the Western or the Javanese notation. But regarding the direction, the sense of bursting out upwards and downwards of that horizontal line, whether they would go along with the rising and falling of the voice as in Western eyes and ears, or just directly against it, they were naturally completely free in this. No-one will entertain the notion of influencing them in this. – At least, not here in Java proper! –

Well now, as often as I have seen this done by Javanese teachers, it happened just as I would have done it myself in this case. It did not for one moment go

against the grain, in my feeling. And it gave me a very special aesthetic sensation of gracefulness and precise portrayal. The subsiding of a (too) low cadence!

But now the Sundanese. How was the situation there, in a certain sense prehistorical era, before Mr Machjar assumed the pedagogical care for their singing and further music?

Actually he is the only one who would know. Because again, he seems to be the kind, if his teachers have ever displayed the inclination to draw lines in the air with the singing, which rub up against his musical feeling, to suddenly take effective measures against it. – But perhaps His Reverence would like to tell if he has seen the necessity of doing so?

I surely hope that he has not missed the opportunity for this because he has directly set them – the arms – to conducting in a Western way?

65. Bar lines à la Machjar.

Speaking of conducting, giving the beat. Also here there is something to remark as a result of the work of this Sundanese musical expert. He himself and Mr Kunst have emphasized rather a lot, that reading an upside down cipher system must be extremely troublesome for a Westerner. They have kept quiet about such note systems. Of the latter I have not yet discovered any, of the first to some extent. And then I have to say: It is all right; you get used to it.

But what is worse are the bar lines of our, truly original, Sundanese music pedagogue. Without, for that matter, writing a word of explanation – one would certainly not call it wasted – he writes those differently from all the rest of the world!

Or must one call the fact a sufficient warning, that in the beat scheme in that booklet he has put a I with the first upbeat, and a IV with the downbeat? With experience I know that in the Pasundan one can obtain handwritten notes in the Machjar system, in which of course there is no warning, and then one reads the bars with the strongest count before the bar line and not after, completely wrongly. And afterwards only with the greatest difficulty; or then one prefers to rewrite them. That is now really difficult and confusing; also for whoever is a professional music researcher. And that can indeed cause a misunderstanding for a Sundanese, who has first learned to read music with Machjar’s bar lines, and afterwards come into contact with others – Javanese for example – where they are set the normal way.

And the craziest thing about this case is still that with this frightening action – Machjar against the world – it is also still the world which is wrong, and not Mr Machjar: his bar lines are actually better. To be sure, others have much earlier undoubtedly made clear – Hugo Riemann for example! – that it would have been better if they were different, and in such a way. But they have made it clear that it

would be “an endless work”. But is there anything that Mr Machjar does not undertake, once the thought has occurred to him?

66. Proposal for amendment.

If I had as much confidence in the compliance, the willingness to please of this Sundanese music scholar as in his inventiveness and ingenuity, then I would like to help him with a proposal. Namely to preferably to get rid of his irregular bar lines, but to replace them with a small space between the ciphers. For his pupils that would not make the slightest difference, they would accept that extra space just as well as dividing signs. And for the rest of the world he would have removed a considerable obstacle.

They could even combine those others: their bar lines (for the traditional “bars”) with his spaces (for the “bar motives”). Curiously enough, moreover, these dividing spaces already exist. Only I have no idea where they come from. Mr Soemågéwoeram (see appendix 21) notates them, for example, and no bar lines; but he does not say a word about it, and we do not regard him as the creator. And also among the participants of the most recent *gendhing* competition (see above here, section 44), there were those who used them.

So far Mr R. Machjar A. Koesoemadinata. That is to say, I still wanted to note down something about M.’s other objections to the notation system of Ki Adjar Déwantårå; other than what pertains to the direction of his ciphering, therefore.

67. Notation of *sléndro pathet* with Déwantårå.

Because Mr Machjar also rejects the *pathet* notation in Ki Adjar’s *sléndro* pieces. Mr M. writes about it: “Since the three *sléndro-pathet*: *sångå*, *nem* and *manyurå* all make use of the same tones, the undersigned regards it as unnecessary to transpose the ciphers to the *pathet*, as Ki Adjar Déwantårå does. For compositions that are in 2 or 3 *pathet* (….) the system of Ki Adjar Déwantårå is even problematic. – The difference in *pathet* is in the position of tonic (….) and dominant (….). The tonic does not always need to be represented by the cipher 1. – This is also not done in the Cheve-method, besides: (….) in minor, (….) 6 is the tonic.” (See appendix 29).

68. The “1” necessarily the tonic?

Indeed. It does not particularly need to, in abstract. One can also have a “1” not mean anything special. But if one wants a tone as tonic or main tone, then allocating the position of No. 1 is an excellent means for it. In the so-called Chevé-

notation, one can also make a substantial mistake by signifying the minor tonic with the cipher 6.

69. Minor!

It hinders the concept that minor is something as independent as major, and not something derived. It is excused due to the fact that our usual minor is actually an out of tune flat (major-flat)[?].

70. Modulation?

In the rare case that a Javanese piece is clearly set in two *pathet*, and these are not merely rather shaky or floating, one can indicate the change of tonic, just like with a modulation in the school cipher notation. Although the latter also sometimes ignores an actual modulation, e.g. to the fifth; mainly when the formally characteristic tone is not played. But otherwise, for example, this can be put: The 1 becomes a 3! And that could indicate a transition from *sanga* to *nem*, or from *nem* to *menyura*.

But the fact that Mr Déwantåråå also values making the *pathet* of *sléndro* recognisable in his cipher system, rightly too, is very understandable. Also for whoever does not think the movable ciphering in Javanese music is necessary: which after all is the case with the proponents of the Kepatihan-notation. But back to that question later.

When however the three Javanese *slendro-pathet* only have five tones together, and the intervals between them are all the same size, so that *sléndro* is completely equal-step – of which I am still not convinced, but Mr Machjar is, and concerning Mr Kunst, who after all did not believe before that a precise equal grade *sléndro* was truly Javanese, but does so now.

71. A formless *sléndro*?

However, even with an only “practically” equal-step sléndro, the total tone series has something formless, something undifferentiated, through the lack of separate intervals which spring to the fore. For example one also no longer knows whether they should regard their *pathet* as “real” (transposition) keys, or as shifts in the key: thus modes.

72. Registration of the *sléndro-pathet* desired?

When one further still considers that the Javanese gamelans may not only considerably differ in absolute tone position, but outside of that, if they have seven-tone *saron* instruments, they can put their total *sléndro pathet*-system one step higher or lower – the lowest key, at least in theory, can represent both the *barang* and the *nem*, – then one can very well imagine that someone will find the whole system richly gelatinous, and will want to introduce some kind of certainty, among other things by different numbering of the distinctive *pathet*.

73. Sundanese and normal *sléndro*.

With the relatively limited meaning that their own, usual, thus (in any case relatively) equal-step *sléndro* has aquired in the Sunda lands, such considerations would in themselves have held less importance for Mr Machjar. In notation intended for children of Java proper, he simply tends to give: 1 = *nem saron*. In the *sléndro* part of "Diadjar Mamaos": 1 = *barang*, (which corresponds to Jav. *nem*). But he immediately writes as well: There is no objection to taking another pitch ("*laras*") for it: for example, 1=*singgul*, (that agrees with Jav. *barang*). (The underlining is mine. But Mr Machjar does nothing to curtail the choice!)

74. *Pathet* or vocal range?

In this way, in *sléndro* it would be a case of an opportune, pleasant vocal range. Although for Mr Déwantårå in a certain sense as well, it is probably only secondary. Because he appreciates the qualities of the *pathet* in this regard, but undoubtedly wants to limit himself to the three "existing" ones.

75. *Pathet* and vocal range!

The relevant passage from the talented defence that he has given for his notation, translates as: "The advantages of (our) "*pathet*-notes (ciphers)" are not small. Because everyone who uses them will quickly understand (.....) that in the *laras sléndro* there are three kinds, namely *pathet sanga* for low tones, *pathet menyura* for high, and *pathet nem* for children's voices, which do not reach the high and low tones of the adults. (.....) Whoever realises this, will never (again) sing a song in too low or too high a range".

76. *Sléndro-pathet*, tonality, modality, and voice region.

It will be clear that there is more behind this: things that Mr Déwantåråå does not say. At least not at the moment. For the moment, the difference between the *sléndro-pathet* may now be viewed as primarily tonal, which certainly seems most rational when speaking about a good pitch for the singing voice in question. Then it is still possible to observe that the tonal range difference: “two fifths”, but that is practically only one step, between *sanga* and *menyura* is actually not of that order, where on those grounds one can assign the low tones and voices to the first *pathet*, and the high ones to the second. And still, factually and not infrequently, one makes a *sanga gendhing*, for example, into *menyura*, by shifting the cantus firmus up one step. But for really well-characterized song tunes according to all their qualities, in addition to the tonal *pathet*-characteristic through tonic, dominant, favourite ending notes and suchlike, secondary features will still have to be added for the decision: which *pathet*. And they will then have to be, more or less, of a modal nature, preferably relating to the size and thus tone region sought, if they are to be tenable under Ki Adjar’s observations about low and high voices. In this one can think about a difference of the order of, say, a fourth.

And those mistakes in tonal range to such an amount could otherwise only be explained if *pathet nem* (*sléndro*) were in fact involved in the playing, which anyway will be considered as moderate, average. (Compare appendix 26.)

77. *Tembang*. *Pathet* of children’s songs.

But all in all, these further complications of the *pathet*-characters, although important for the fully developed and ornamented *tembang* singing, really do not seem so for the children’s songs. Whereby for that matter it may immediately be admitted, that Mr Déwantåråå also undeniably could and had to take the first into consideration in the designing of his notation and of his vocal method.

However, regarding the practice of the elementary vocal music education, here one can of course force fixed positions through one’s teaching, mainly when it comes to the application of instrumental accompaniment. But being fixed is certainly not the nature of it.

78. Non-existent pathet found nonetheless!

That is how one can find for example a typical children’s song, noted down by several Javanese, comparing it further in the different versions, where one of them would want to name a particular note a *menyura*; the second would put it a step lower, so therefore it is in *sanga*; but where the third has gone a step still lower, and has thus notated it in a “non-existent” *pathet*, (with a “1”, in this case the

"tonic" on *dhadha*!). Mr Déwantåråå doubtless knows of such cases just as well, or better, than I do. Including that one in which even the *barang* becomes the actual tonic and thus would deserve to have the cipher "1".

Despite his, Ki Adjar's, observation, that it really is too silly, like in the Kepatihan-notation, to make a particular tone No. 1, which in all proper *pathet* would just be somewhere in the middle, in an indifferent place, without main tone, tonic or dominant function.

79. Tonic not necessarily "1".

It is true: Exceptions prove the rule. But on the other hand Ki Adjar is naturally completely aware that it has never been anyone's intention to attribute the main tone function to the 1, and that it is absolutely not done by the users either. Nor involuntarily.

When for the sake of brevity, and in a way of speaking, one sometimes refers to the Kepatihan-notation, our common cipher notation, as: a notation with a fixed tonic, then here, if desired, one can also for example mean the *nem*, the 6. It is indeed not an axiom – also not one created by the practice – that a 1 necessarily has a main note function. – Even if (see above) there is really a lot in favour of giving it this (See appendix 27.)

80. *Barang* border tone.

How could it anyway be – a question to which we do not remember ever having seen an answer – that the tonally indifferent *barang* became the typical border tone of the important *saron* instruments, and thereby, despite all its unimportance, puts the same typical fold in each gamelan-*sléndro* cantus firmus, in the compact fundamental summary, that is the form in which those gamelan themes govern the *gendhing*?

81. Care for the *pathet*.

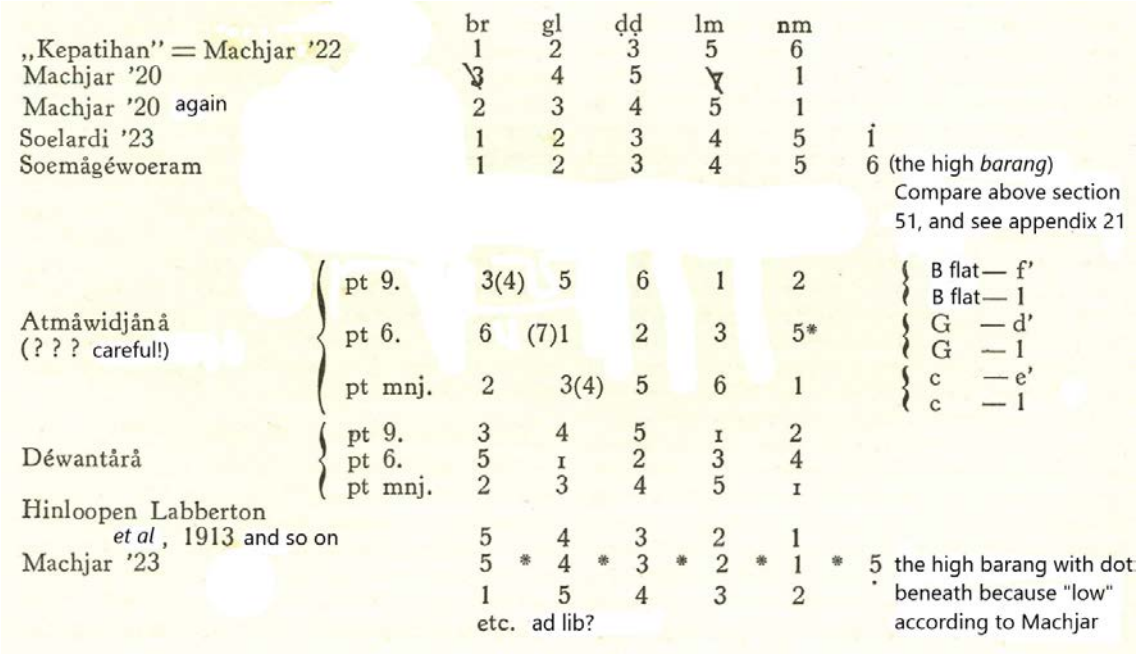
However all this may be, although, as I announced above, it appears unnecessary to me – yes, I want to add here: positively wrong – to want to fix the main tones too much, and therewith the pitch positions of the children's songs that have a limited range, where for *sléndro* in my opinion five levels may easily be used, as long as they remain well within the range of children's voices, yet for art music singing, the *tembang*, the question is really different, and it must be commended that Mr Déwantåråå is concerned whether thereby sufficient insight into and feeling for the fundamental *pathet* is safeguarded in the long run.

Ki Adjar can certainly be right about the times changing a lot in this respect. Earlier, not long ago, there was no need for this concern. Without too much exaggeration one could say: Everyone feels them. Nobody knows anything about it.

And then – as Mrs Brandts Buys tended to do – [one could] engage in not unamusing discussions about the factual differences in the *pathet* with old *niyaga*, who, politely but unbendingly, kept referring to the – naturally lacking in us! – feeling: “Madame must stay here a long time. Then Madame will definitely learn to feel it.” – – “I hope so, father. Thank you. But you see, we also have something like that. Major and Minor. If you ask me, then I say: You have to feel that. But I can also point out the difference to you.” – But this ruse has never worked. (Although they never caught the trick in that representation of affairs: They could after all point out the difference between *sléndro* and *pélog*!)

But can one now have confidence in the feeling of all Javanese in this respect? There are certainly groups I would not like to vouch for.

82. Table of notations for *sléndro*.



And then once more there are: Machjar 1920 again, the equivalent of the approximation in Western music ciphers transferred to the usual Western notes, viz. *E* flat, *F*, *G*, *B* flat, *C*. [*6]

[*6] [For the notation of ciphers with slanting lines through them in Machjar 1920, indicating raised and lower tones, also see Appendix 22. W.v.Z.]

And Machjar 1934, the “topsyturvyfication” of *sléndro*, but in his own notation. That is to say, the in-total, including the five between tones: 5- = 4+, 4- = 3+, and so on, general ten-tone Sunda *sléndro*, put on to a five-line stave. (If there were a violin clef at the beginning, the “largest” note, the “*singgul*” (= *barang*) would be a *G*’’ and the “smallest”, against the following “singgul”, would be a *D*’).

83. *Atmåwidjånå* et al, and the *pathet*.

It was the small group using Western note ciphers that was alluded to, at the end of the section before last. I would not be able to say with certainty whether they account for which *pathet* the piece that they are notating is in, or whether when writing down those Western cipher notes they give an awareness of what Javanese tones they are representing. I mean to say: with their powers of comprehension. They will undoubtedly internally hear the Javanese sounds. But to start with, there is never a *pathet* named. That is to say, the only time we came across the word “*barang*”, was in the name of a *tembang*: “*Pankur barang*”. And that was set not in *barang* but in *menyura* (supposedly). The melody of the name referred to will have been transposed to the “parallel-key” as it were, as not infrequently occurs between *menyura* and *barang* melodies.

84. The same and the extra tones.

That the gentlemen of the group alluded to (compare earlier, sub 53) do not (or seldom?) keep in mind (in hearing!) the Javanese names of the tones while notating, can also be discerned from the lack of inhibition in which they can write more than five different tones in, for that matter, unimpeachable *sléndro* pieces. Some of the cases in which they did that have been indicated above. See the *sléndro* table. Where there is a cipher between brackets there, it means: sometimes, a single time, it replaces the cipher next to it, probably as another rendering or aspect of the same Javanese tone. With the asterisk, a decided in-between-tone, a crossed-through, augmented 5 is rather intended. Also, something similar can sometimes be found between 2 and 3. (But it should be noted that with these authors, there is no guarantee of a fixed connection between cipher and function). The extra tones of this last category, that in contrast to that of the first, are not used as a replacement of the normal note, but in addition to it, as a transition or interchange note, create a not very probable and rather lame chromatic effect, when read as they appear there. The interval, the raising or lowering, will have to be taken as much smaller than its semitone. But those other, non-“chromatic” semitones give a very different, much more pleasant and natural impression.

It appears that the Javanese in question (me too, as it happens) do not feel the Javanese *sléndro* as actually equal-step, but two of the intervals in reality as larger than the rest, but then also the boundary of its quasi “thirds” as variable, to a certain extent.

85. Once again the *pathet* and the same.

But how do these Javanese gentlemen feel the *pathet* now? Not always correctly, probably. Because in their *pélog* notations one can, for example, come across positions that seem to lie just midway between the normal *pathet* positions, so that one does not know which is before one's eyes.

At this moment I have not been able to check this for all their notations. But in other cases I do think I can trace their actual intention; and then by means of comparison. The foundation for the outline of their system given in the table above (that will probably not fit all the cases) consists of three notations of what in essence is one and the same melody, but in (fairly) strongly differentiated form, variations. These were respectively notated as they would stand in Western keys: C, B-flat and G. And in their main features they were indeed transpositions of each other. But then – if one does not want to attribute a decidedly abnormal position to one or more of them – there is also no other possibility than to declare them to be, in the same order, respectively *pathet menyura, sanga* (9) and *nem* (6); whereby they are also arranged quasi "melodically" from above to below. In terms of harmonic relationship, ordered by their fifths, that should be: *menyura*, 6 and 9, thus the Western keys of respectively: C and G and B-flat. The middle one should thus be about a tone too high, which is not an important fault. Better still, concerning absolute position, the outer two can be regarded as a tone too low and the series can therefore in fact be understood as D, G and C. But now we will further adhere to the positions of the booklet; and of the table. In passing: in the notations of these gentlemen it should of course not be assumed that they have indicated the main tone of the *pathet* in question by the "1", the tonic, of the chosen Western key. It seemed to be so here. But that is not to say whether it was coincidence; or rather expression of a correct feeling. However this may be, everything is certainly not in order here.

Because if one pays attention to the voice region in which the three distinct versions lie, thus chiefly also to the magnitude, then the one here in *pathet* 6 would not be the moderate one, but the low one. And then *pathet menyura* would here show the signs of moderation, self-limitation.

Thus this does not agree with the statements by Mr Déwantårå, which I am certain are correct (see above, sections 74, 75 and 76).

So from two to one: Either the Messrs Atmåwidjånå *et al* are mistaken regarding the outlining and demarcation of the versions they gave. Or they do not mean the *pathet* that we have divined from their notations. And then they will have written them on the wrong level.

It has to be acknowledged that the *pathet*, both practically and theoretically, are not an easy matter. And it is certainly not without danger to get involved in it, seemingly in the dark, if one does not have the infallible feeling or instinct of the musically old-fashioned Javanese in this matter.

In this, Ki Adjar is absolutely right.

86. Déwantårå 1934–1936–1939. (*Pélog*).

But Mr Déwantårå's own notations of the *pathet* have not yet been further discussed here. That is, there is nothing more to remark about those of *sléndro* – setting aside the inclination of Mr Machjar to be perfunctory about them, in a certain sense. But there is something peculiar about the rendering of the *pélog-pathet*. Just see the back-and-forth "battle" contained in the dates. (Table in section 51).

The present-day, certainly not incorrect, notation has apparently not been established completely without difficulty. These difficulties are also undoubtedly inherent in the material itself. The *pélog-pathet* of the Javanese are actually confused. One has seen that with Mr Machjar, three different ones are always given – apart from once when he wants to write specifically for Javanese understanding. That is, the Sundanese have certainly no fewer than three well developed tonalities within the *pélog* mode. But the lowest of them by fifth position, the *liwung* tonality, is regarded by the Javanese as extinct, or insofar as it still has traces of life, yet as occupying a strange position.

87. The difficulties with *pathet lima*.

The quasi "lowest" of the Javanese three *pélog-pathet*, namely *pathet lima*, does not represent it; at least not in the normal cases. I wanted to locate it in what I have called the bi-tonality of *pélog-pathet lima*. (Compare appendix 28).

Now Mr Déwantårå initially, quite rightly, has only recognized two tonalities in *pélog*: *pélog bem* (which include *pathet lima* and *pathet nem*), and *pélog barang*, and thus also only two tonics, two different "1"s. (See appendix 29).

Namely, successively, the *lima* and the *gulu*. But it soon seemed that he was no longer satisfied with that solution, that he found something illogical in it, that – other than with *sléndro* – the three *pathet* would have only two *dasar* altogether. But mainly he also found the difference between *pathet lima* and *pathet nem* too large after all to let them continue under one flag, as it were. – So he then arrived at his proposition of 1936 (see the table in section 51 above), whereby in *pélog p. lima*, *pélog p. nem*, and *pélog p. barang*, the tones *bem*, *nem*, and *lima* respectively are the tonic, or at least the main tone.

88. Objections to "Déwantårå 1936"

I have talked about that change more than once with Mr Déwantårå, and also clearly made known in writing ("Djåwå" 18, compare Appendix **29**), that I particularly thought it was wrong. My objection was that even though the tone *bem* in *pathet lima* was surely an important, main tone, it nonetheless had a different sense there than the tone *nem* in *pathet nem*, so that if one wanted to refer to the one as "*dasar*", tonic, one should not do so with the others, because in

so doing then in reality a non-existent, “slanting” parallelism would be suggested. – But Ki Adjar – an exemplary man, where perseverance is concerned – would not be persuaded. Nor through the communication that it might well not be possible for me, as the case may be, to vote for a system that contained such an error. For that matter, the case in question did not come up, as the Javanese members of the Commission continued to see serious objections in what they found to be the difficulties of the system, and I had resolved not to force objections from them in any way, since I considered them the representatives of those who would have to work in practice with the system to be chosen.

89. Machjar’s opinion about it.

In the meantime I learned that Mr Machjar also regarded the changed Déwantårå system (1936) as a step backwards. He, M., formulated the objections in a technically perfect way, precisely by pointing out that the actual difference between *p. lima* and *p. nem* was one of a modal nature; but not of tonals, such as choosing one’s own tonic suggests.

I consider it unlikely that this observation of Mr M. has reached Mr D. in that form, and even more unlikely that Ki Adjar has allowed himself to be persuaded by it. When recently with great pleasure I saw Ki Adjar turn back from the dead end of an erroneous theory, I did not doubt for a single moment that K. A. was solely led by his own reflections in the last instance.

90. Further explanation from Déwantårå himself.

Needless to say and as evidence, a quotation from a letter from Mr Déwantårå, concerning his present viewpoint. It touches upon the question of the natural limitation of the melodies, of the magnitude and of the modal aspect of the melodies present in the various *pathet*, which has already been raised (see 75, 76, 85). But this more specially concerns the *pathet* in *sléndro*, and what is below that in *pélog*.

“For the vocal I find it more practical to begin the series with ‘3’” [and thus not with the “1”]; “especially to clearly be able to feel the difference between the ‘*pélog lima*’ and ‘*pélog nem*’ like ‘two children from the same family’. Both have the same ‘*pélog bem*” tuning; the ‘*lima*’ begins and ends with the ‘*bem*’, while the ‘*nem*’ lies one tone lower: *nem*-*bem*-g-d-l-(n). Yet I accustom the children to the tuning: *bm*-g-d-l-n-(*bem*).”

“*Pélog barang*: once again to accustom the children to the *pélog* tuning (yet now starting with the higher 3rd tone), I write:

3 - 4 - 5 - (5 or 6) 1 - 2 - (2 or 3)

1 - n - br - (*bem*) - g - d - (*pélog*).” –

91. Substantial difficulty of *pathet* issues.

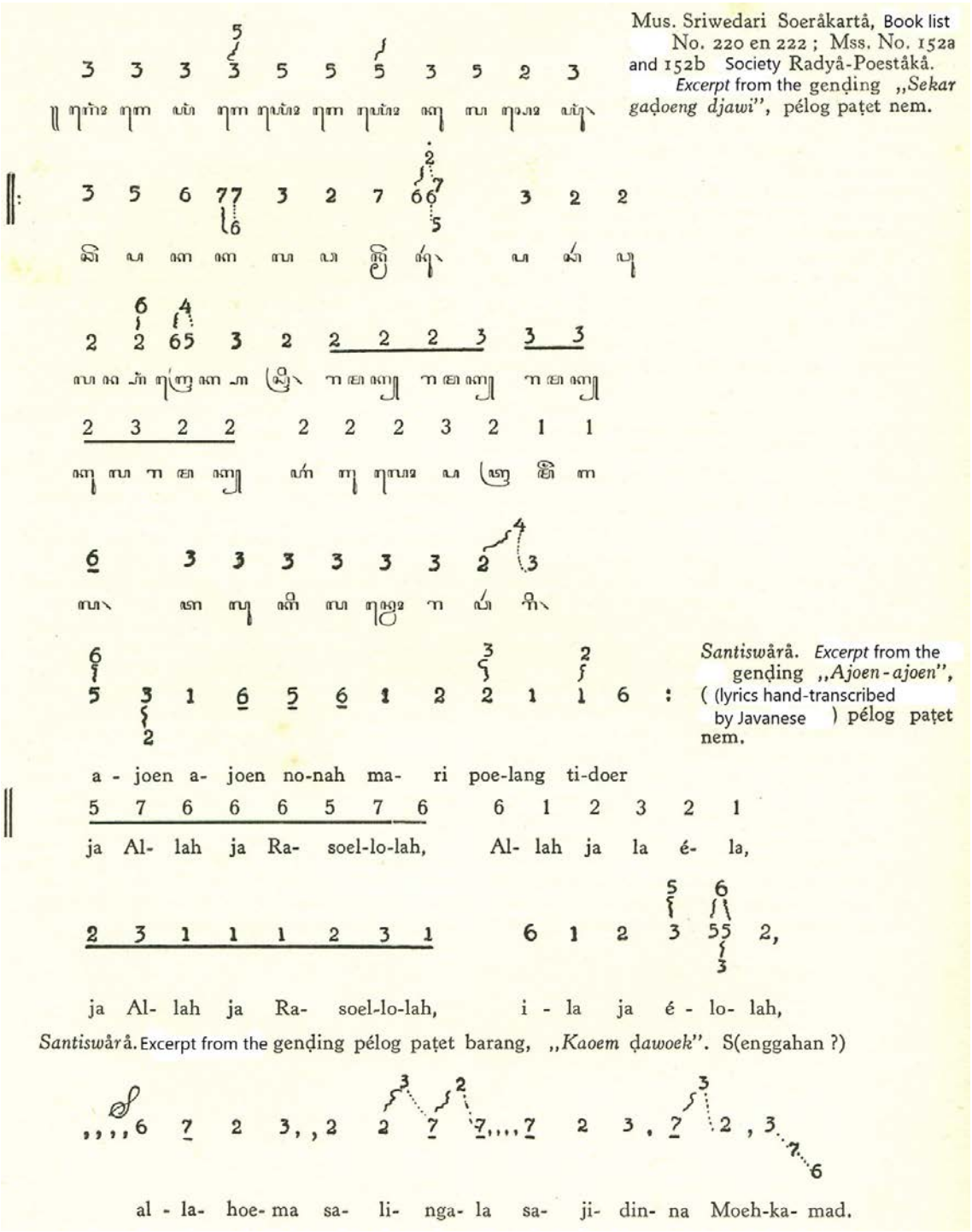
Here it appears that regarding the secondary qualities determining the *pathet*, Mr Déwantåråå attaches more than I do to the starting tone and final tone, and less to its magnitude. But there is something else, something we now, for the moment, find even more important:

The difference between the two opinions that have been held in turn by Ki Adjar with regard to the *pélog pathet*, concerns not only the question on the position, and the more or less independence of *pélog lima*, *because – also leaving that aside now* – in both stages, at one time or another he has attributed another tonic or main tone, “1”, to the different *pathet*. Neither in this matter have Messrs Déwantåråå and Machjar actually yet become one.

Nothing less is intended here than to make a complaint of both of them. But what is meant here is something completely different. When indigenous music connoisseurs such as these two gentlemen – certainly on good grounds, because as I have earlier and elsewhere comprehensively demonstrated, a tone can appear to posit itself in very different ways as a, or even “the” main tone – turn out to be in disagreement with each other and possibly also in themselves, should not practitioners be free to hesitate in introducing a system with such dilemmas into that practice?

Appendices to part 2 [14-29]

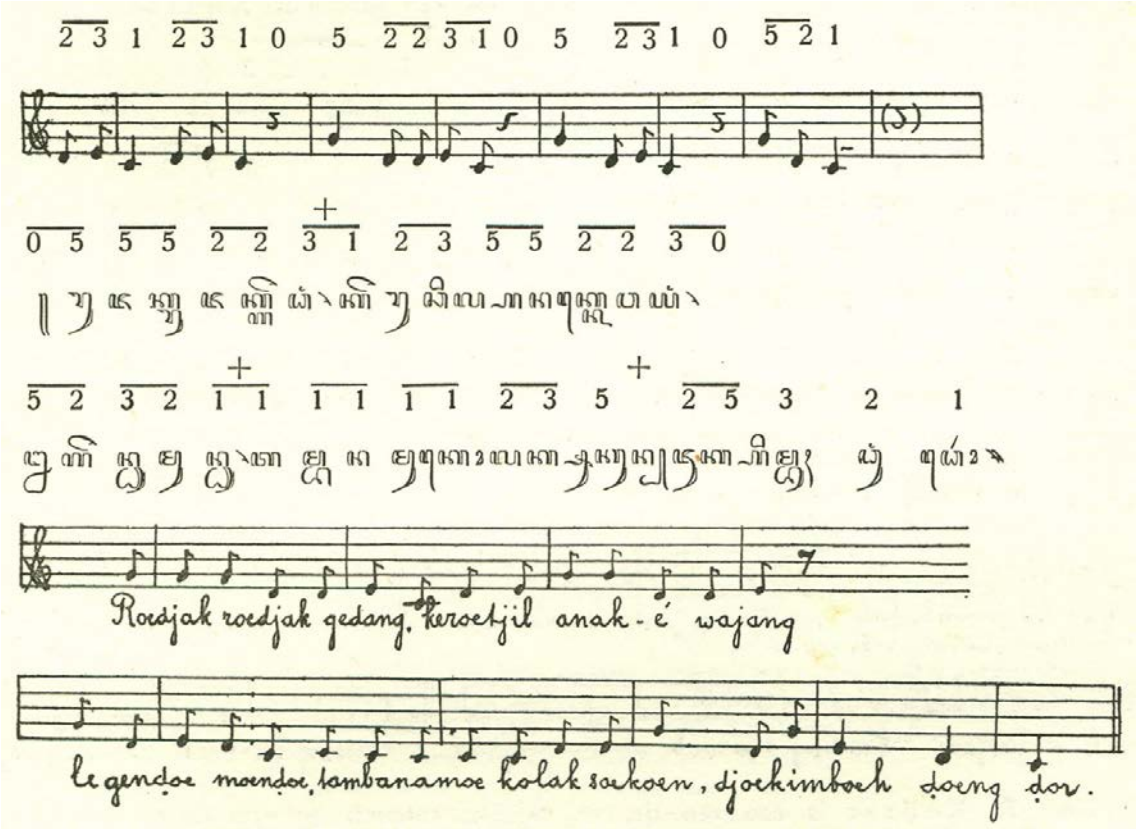
14. “Noet genḍhing Santiswårå”. [with section 32]



15. [with section 34] Lajang genḍhingan kanggo ing pamoelangan Djåwå, anggitané J. Kats ing Mådjåwarnå; kaetjap ing pangetjapané toewan G. Kolff & Co. Weltevreden, 4 parts 1907-09; Dutch title: "Zangboekje voor Javaansche scholen, behoorende bij Handleiding voor het Zangonderwijs" [Vocal music booklet for Javanese schools, belonging to Guide for Vocal music education], compiled by J. Kats, published with collaboration of the Dutch Indies Missionary Society.

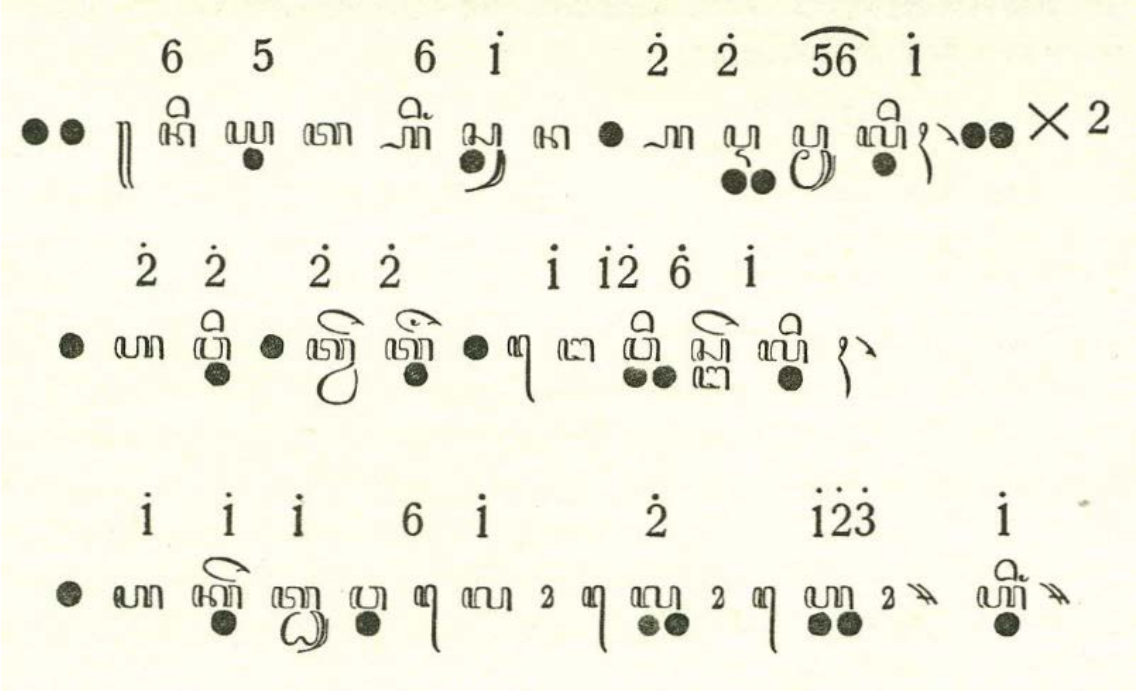
We do not have any text from our first example. But from the transcription of the tune, it can be clearly seen that the notation is a good representation of its fine, spirited metre, with its floating between "upbeat" and "on the beat" forms.

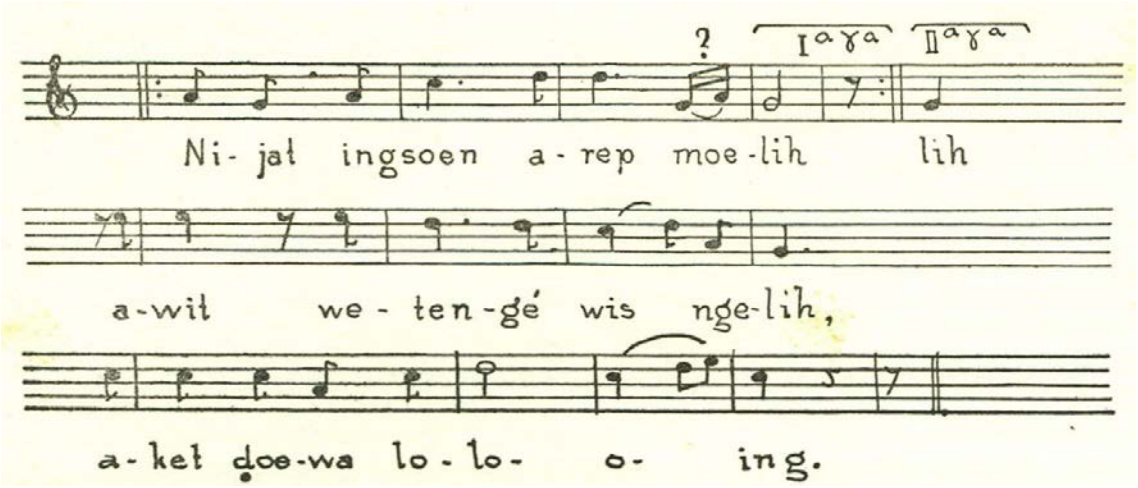
In the second, the use of small crosses can be seen, by way of separation commas – the only addition to the notation by the collector. We have added the lyrics of "Roedjak geḍhang" to the song (Overbeck No. 315), which probably do indeed belong to it. This song is metrically interesting too. Its structure is easiest to understand when one assumes that there is a bar with two surplus "quavers". (The 6th and 7th note on the second stave.) But one can also assume that a bar line has in fact been left out. (That the 3rd and 4th note on that stave take the place of "crotchets".)[*7]



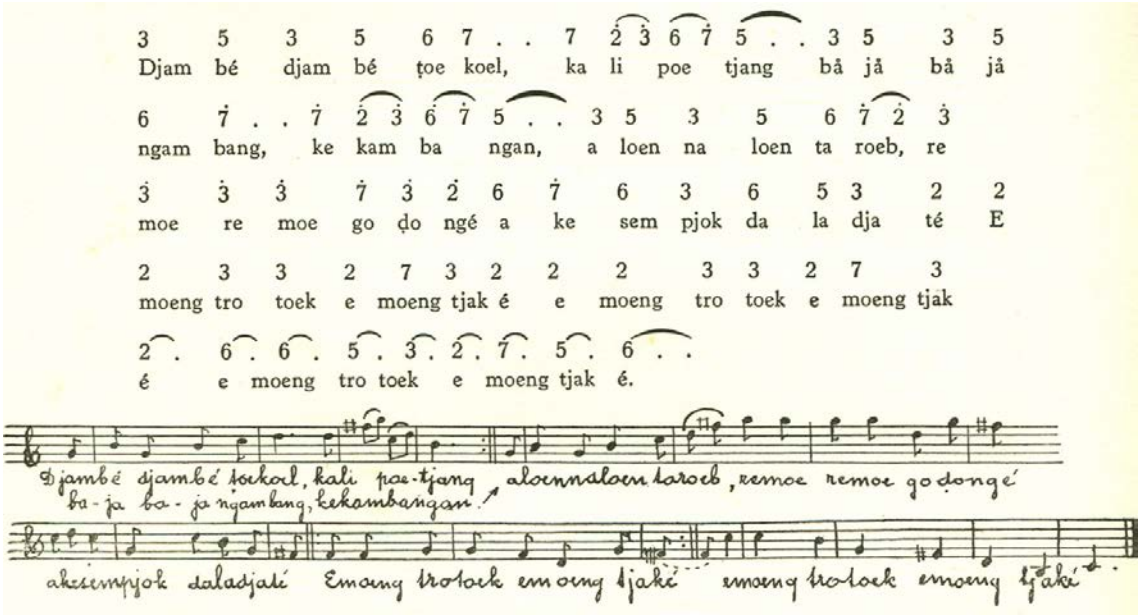
[*7] [In the last-but-one full bar before the end the first note (G) presumably has to be a crochet, instead of a quaver, or a quaver rest should be added. W.v.Z.]

16. [with section 35] Example (No. 3) from “Swåra Måjå” by R. Siswåsardjånå.





17. [with section 36] Example, “Lagoe Djambé - thoekoel.” from the R. Kodrat volume.



Mr R. Kodrat is one of the fairly numerous authors who do not refer to the keys of the *saron* or *demung* or suchlike for the numbering of the tones, but to those of the *gendèr*. He also belongs to those several who, despite the keys being numbered from low to high, enumerates them from high to low:

Gendèr Sléndro: $\dot{3}\ \dot{2}\ \dot{1}\ 6\ 5\ 3\ 2\ 1\ 6.\ 5.\ 3.\ 2.\ 1.\ 6..$

Gendèr Pélog-nem: $\dot{3}\ \dot{2}\ \dot{1}\ 6\ 5\ 3\ 2\ 1\ 6.\ 5.\ 3.\ 2.\ 1.\ 6..$

(Rather called *Gendèr Pélog-bem*!)

Gendèr Pélog-barang: $\dot{3}\ \dot{2}\ \dot{7}\ 6\ 5\ 3\ 2\ 7\ 6.\ 5.\ 3.\ 2.\ 7.\ 6..$

For the tone 4 (*pélog*), he refers to the bonang.

When two tones, and two counts, fall on one syllable, he disjoints the latter, as it were, for example by writing “le ir” instead of “lir”. – He does not want the names, the ciphers of the keys to be sung. (And thus apparently also not abbreviations or derivatives of those cipher names!) He thinks they can very well be sung to tra la la; that is to say, to *no, no, né, no, né, né, né, no, né*. And that indeed decidedly seems to be preferable. – He thinks bars are unnecessary with *tembang macapat*. – The numbering of the *barang* tone is still peculiar. In other words, that the octave dots jump between the *nem* and the *barang*; put otherwise, that the $\dot{7}$ is in a lower position than the $\dot{2}$. (He does not seem to put two dots under the lowest *nem*.) But that is because he considers that *barang* (7) strictly as a substitute for the neighbouring *bem*, and thus provides it with the same octave indication.

In passing: A statement not encountered anywhere else up to now is that the tone *barang sléndro* can have the name *manis*. (“*Manis,.... saiki ketelah diarani barang sléndro.... kawoedjoedaké ångkå 1*”). In R. (Bg.) Soelardi we still encounter

the statement, also without antecedent, that *manis* occurs as a name for *penunggul* (in other words, *bem*). – Or should those statements demonstrate a Sundanese influence? Namely, according to the statements of Mr R. Machjar A. Koesoemadinata in "Sastraning Kanajagan" I, Batavia 1934, the Sundanese know the note name *mamanis* as a synonym for *barang*, and in both *pélog* and *sléndro*. (The latter is missing in the book by Mr Kunst). Moreover, the pitch should factually correspond with the Javanese *nem*. – Concerning the Pasundan, evidence is lacking for the identification of *ma(manis)* with a tone called or functioning as *penunggul*. The relevant statement of Mr Soelardi is in his second essay, his submission on the occasion of the 1923 Java Institute competition.

18. [with section 41] Example "Dolanan Lintang Rembulan". (Kebumèn).

19. [with section 45] "Serat Rarjwå Saråjå" anggitanipoen Kangdjeng Pangéran Arjå Koesoemådiningrat ing Soeråkartå, kawewahan katranganipoen laguning genḍhing déning D. van Hinloopen Labberton ing Batavia, (....) Buitenzorg 1913. Given above the keys of his gendèr numbered 5 4 3 2 and 1, – to be understood as *sléndro* or *pélog* instrument according to the circumstances, – are, successively written: *barang*, *panunggul*, *setengah*, *gangsal* and *nem*. Lower down, in a list, there is the same, but with *penengah* instead of *setengah*. Usually one says and writes: *tengah*. The tone characterised here with a 4, regardless of whether it is in *pélog* or *sléndro*, can never be other than the *gulu* (*jangga*). The longest key of a *pélog saron* is called *penunggul*, never the second.

20. [with sections 47 and 48] "Serat Pradånggå" inggih poenikå anerangaken genḍhing Djawi mawi gambar gångså serentjak, kaänggit déning Bagoes Soelardi ing Soeråkartå (...) Weltevreden. (undated; appeared in 1918, according to the Bibliography in the book by Mr Kunst). – Here Mr Soelardi writes 3 for the *pélog* tone and 5 for the *barang* tone. Since he had already used the line under the cipher to indicate lowering by an octave, this usage in a completely different sense

can cause confusion. – Furthermore, the *pélog* tone is thereby indicated as divergent from a *tengah* (*dhadha*) which is positioned a second lower; but the *barang* tone as divergent from a *penunggul* (*bem*), which is positioned a seventh lower and a second higher respectively.

Regarding the question of *pélog* or *barang* as irregular tones, also see section 3 of the Appendices! (Djakoeb and Wignjå).

21. [with sections 50 and 51] Here use is made of the small memorandum in which Mr Machjar takes into account the evolution his views in this special area have undergone in the course of time. Since the essay was fairly brief, I do not have all the details. – The Roman I has not been used by Mr M. and the others. I just want to say that by putting this instead of the usual 1, that tone is explicitly indicated as main tone or tonic of the key in question. – About the tones between brackets, it was emphatically observed that they were side-notes. But presumably they were not marked as such in a special way. – The tones that have a dot in front of them have also been explained by the authors concerned as side-notes, without our knowing, however, how they notated them.

[with section 51] There is a similar objection to Soelardi II (also see the end of Appendix 17) as to Soelardi I (see Appendix 20). In the particular case, the small horizontal line, – now above the cipher, – has to express that the tone is higher than indicated by the naked cipher, though in the other case that it is lower. – This author has the *nem* as 1 in both his essays. Since with others, that *nem* also has a tonic function in certain *pélog* categories, it is possible that Mr Soelardi after all wanted to convey something similar.

The asterisks put between certain tonal intervals in the Machjar 1923 system indicate the two extra side-tones, which characterise the Sundanese *pélog*-like keys. This stage of his notation system, embodied in the booklets “Diadjar Mamaos” (Rakitan pélog), digenḍing sarta didangding koe Raden Mhj. Ag. Koesoemadinata Sarimbit, Dj. Ka I, Weltevreden 1929, and Dj. Ka II, idem 1930, as well as Idem idem, (Rakitan salendro), Dj. Ka I, idem 1930, represents what should be called a lowered tone in the system by a rising diagonal line, and an augmented one by a horizontal strike-through. So for example, respectively: 3̸ and 5̶. That will be due to the material available at the printer’s. More normal would have been 3̸ and 5̸ Later, Mr Machjar did write simply 3- and 5+.

Mr R.M. Alex. Soemågéwoeram is the author of a small booklet “Panoentoen Genḍing Djawi” (mawi noot), Dj. I, Ngajogyåkartå, (1934). He does not account for why he thought it was good to design yet more new cipher notation systems. That is to say, it could well be that he indeed became aware of the *pélog* tone as an out-of-the-ordinary tone; but not the *barang* tone, or at least not to that extent.

But in his variant for *sléndro* there is nothing like that, and actually nothing reasonable. For that *sléndro* sequence, see a later section of the text (section 82).

22. [with section 53]. "Tembang Djawi mawi noet" karanganipoen M. Atmåwidjånå, M. Atmåkéråtå, M. Siswåpraså då, M. Reksådarmådjå, ing Soeråkartå (.....) 1928. Djilid I. – Idem, idem 2nd edition 1932. – "Tembang Djawi mawi noet" Djilid II, isi tembang ageng, karanganipoen koemisi tembang ingkang djilid kapisan (....) Soeråkartå (....) 1929.

There are certainly no complaints about the printing of the first part; but that made simpler demands.

23. [with section 54]. "Sastraning Kanajagan" Djilid I dikarang koe Raden Machjar Angga Koesoemadinata (....) 1934 Batavia.

24. [with section 60]. See the essay mentioned in Appendix 6, – "Djawa", XIV, pp. 134, 164, 165. There it is called the "Kettingschrift" (chain notation). – Messrs Djatiswårå and Lebdåpradånggå name its inventor, around 1890, as Kjai Demang Goenåsetikå from Jogjakarta.

25. [with section 60]. Is the name "*sorog andhap*", that is, "low auxiliary tone", for the *sorog* that is one storey higher than the usual (i.e. higher in the Western sense), old, traditional? – It is not in the monography of Mr Kunst. Besides, even then, on his own he would not be able to establish Mr Machjar's proposition without any further evidence. (See his booklet mentioned in Appendix 23, on p. 15.)

As far as I know, that crazy Javanese "*dhuwur*": high, in Djakoeb and Wignjåroemekså, (compare Appendix 3), to indicate the position of a tone, is a *hapax legomenon* (only occurring once there). But in this case it would indeed indicate the lowest (in the Western sense) tone of a group as the highest. – Moreover the connections, relationships in this situation are particularly complicated. Mr Kunst, see his *op. cit.* I. 67, and also, above, the text in section 56, remarks: "(...) the sequence (.....) *penunggul-gulu-dhadha* (= head-throat-chest) – naturally one starts with the head – (....) refers to a period in which the scale was regarded as from low to high". Yes, of course, but one would naturally (at least presumably) find what is called "head(?)" and "throat" to be higher than the "chest". So yet another possibility could be depicted here, namely enumerating from below to above, thus in the Western way, but calling that: from high to low. – But finally it is still also conceivable that with that "*gulu*" and "*dhadha*", they were thinking of an animal rather than a human!

26. [with section 76] In a previously mentioned magazine article by J.S. and A. Brandts Buys-van Zijp, something was already communicated about such errors, in the approximate amount of a "fourth", based on oral communications by Mr Déwantårå. However, in *pélog*. – See "Djåwå" XIV. 153.

27. [with section 79] In only one single case have we seen accidents occur because somebody wanted to assign a particular meaning to the 1 of the Kepatihan notation. In a completely strange manuscript volume, the maker of which is not named. He had transposed quite a large number of the *sléndro-gendhing* from the book, without crediting it, the second, by Djakoeb and Wignjåroemekså, in a new self-made notation system, whereby, incidentally, although he put bar-lines, he did

not solve the metrical puzzles given by those notations. His notation system is a staff notation, and a four-line one, that often occurs with half-indigenous, half-Western notation schemes, even though the lines in the different cases can mean something completely different. See above, in the text, section 54, the notation system of Mr Machjar 1934 for *pélog*. – Further, Mr R.M. Soerjåpoetrå wrote one at the time for *sléndro*: *Barang* below and against the first line, *gulu* on top; and so on.

The unnamed person indicated above, however, puts his *nem* on the first line, his *barang* between the first and second, (for both, counted from the bottom); and so on.

Using four lines always gives slightly Gregorian associations, here very enlivened, however, since right-angled and stemmed, part black, filled-in, part open notes (with a value of one and two counts respectively) are written. And although the author derives those notes, their form, from the profile of e.g. *saron* keys, he may well have come across that idea through notations of Western choral music. Something that was overlooked for a while may also be mentioned, namely that while the *gulu* and the *dhadha* are admittedly on his second line and between the 2nd and the 3rd, there is then a gap: The *lima* is between the 3rd and 4th and on the 4th there is once more a *barang*. – Later, though not at first, he combines that staff notation with ciphers, and he employs the usual Kepatihan system, writing it in an orderly way under his notes. So the "gap" in the cipher sequence, – between the 3 and the 5, (*dhadha* and *lima*) coincides with the one in the note sequence, i.e. with the empty 3rd line from below.

But these complications and the fact – leaving aside the above-mentioned metrical puzzles for now (also see, above, Appendix 4) – that he sometimes gets the bar-lines wrong by half a bar, such peccadillos are of no importance next to the disaster he could have unleashed in the area of the theory of *pathet*, and of the names of the tones.

That is because, without precisely knowing what he has begun, he wants to make an attempt to adopt the *pathet* theories of Mr Déwantårå, but at the same time hold on to the Kepatihan cipher notation.

Thus he not only sums up those theories in the small tables below:

pathet nem.	*pathet sanga*.	*pathet menyura*.
1 = gl [2]	1 = lm [5]	1 = nm [6]
2 = ḍḍ [3]	2 = nm [6]	2 = br [1]
3 = lm [5]	3 = br [1]	3 = gl [2]
5 = nm [6]	5 = gl [2]	5 = ḍḍ [3]
6 = br [1]	6 = ḍḍ [3]	6 = lm [5]

but he also arrives at crazy formulations such as "*Swara rarakitan ing laras gendhing ingkang katedahaken sawijah* (*barang* "dados" *nem*: 1 = *nem*) *poenika dipoenwastani pathet menjoera inggih* 1 = *nem poenika laras ingkang dados dhadhasar ing pathet*."

Thus not (only): if 1 functions (or else: 1 becomes) the *nem* (in *menyura*), but also (even!): (to) "*barang*" becomes the *nem* (in *menyura*)!!!

So that the fixed tone-names, initially key-names, should become step-names, function-names in the Déwantårå system. And then still that "*barang*", with its functional weakness, should be the name of the tonic ("*dhedhasar*") in question.

Just now it was still forgotten that the old notation system of the late Mr Soerjåpoetrå can be found, amongst other places, in the op. cit. of Mr Kunst, II, 359.

28. [with section 87] See a previously mentioned essay in "Djåwå," XIV, 140, 149, (163), but chiefly one yet to be mentioned in "Djåwå," XVIII, 217.

29. [with sections 67, 87, 88.] In retrospect, it is often difficult to retrieve the publications of Mr Déwantårå. I also do not know where Ki Adjar originally published his first (and presently again his last) system of cipher notation for *pélog*. I myself have known about it since 1934. See the often-cited essay in "Djåwå," XIV, 152, 153.

The second system is (among other places?) to be found in "Wewatoning kawroeh genḍhing Djawi" déning Ki Adjar Déwantårå, (.....) Series "Taman-Wasitå" No. D. IV. 1936 (Jogjåkartå); p. 58.

The currently once-more-accepted first one (among other things?) was mapped out again in the essay, in which he defends his whole method for education in Javanese vocal music, (to the Commission): "Mempersatoekan *Notenschrift* oentoek *systeem* serta *methode* pengadjaran lagoe djawa. *Notenschrift* menoeroet Sari-swårå. Oleh K.H. Déwantårå. See "Keboedajaän dan Masjarakat", Th. I, No. I, May 1939.

In the "Serat Sari-swårå kanggé moelangaken sesekaran djawi ing grijå toewin ing pamoelangan, mawi titi swårå aksårå", ingkang mangriptå Ki Adjar Déwantårå, djilid I, (.....), Groningen, den Haag, Weltevreden, 1930, – in this songbook itself, only the notation for *sléndro* has been explained.

What may still be noted: In the essay "Javaansche genḍings bij Land en bij Seelig" by J.S. & A. Brandts Buys-Van Zijp, "Djåwå", XVIII, 218 the reproduction of the Déwantårå 1936 *pélog* notation is all right, but not the recapitulation concerning the system from the year 1934. In the essay "Djåwå", XIV, 152, it is given correctly.

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