

JEVONS'S MUSIC MANUSCRIPT AND THE POLITICAL ECONOMY OF MUSIC

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Introduction¹

This paper investigates an unpublished manuscript on music by William Stanley Jevons. In the first section we analyze the origin of the manuscript, and show that it should be seen as a part of Jevons's utilitarian 'science of man' project. The manuscript serves also as a justification for the time Jevons devotes to playing music, and it was meant as an improvement of already existing literature on the subject. In the second section we summarize the chapter 'On the Functions of Music', and we highlight several aspects. Music is partly an object of enjoyment, but it fulfills educational and moralizing purposes as well. An 'intellectual cleavage' in Jevons's ideas on music appears, when he argues that everyone may enjoy lower forms of music, but that higher forms require education and training. His diagrams on the classification of the arts reflect this 'cleavage'. In the third section we investigate the aesthetic context of Jevons's manuscript, and we argue that it belongs to the Anglo-Saxon aesthetic tradition of Shaftesbury. Although Jevons remains within this tradition, his general disinterest in aesthetic categories (the beautiful and the sublime) is explained by his utilitarian approach. The 'use' of art (in a utilitarian sense) is Jevons's concern, and not the metaphysics of the beautiful. This becomes clear in the fourth section, in which we investigate Jevons's policy prescriptions regarding public performances of music. These cheap and easily accessible means of spreading culture may operate as tools to elevate moral consciousness among the people. We argue that Jevons's solitary and intellectual conception of music may be ill suited for this purpose.

¹This paper contains hitherto unpublished material by Jevons (see appendix), which was found in the Jevons archives at the John Rylands Library of the Manchester University. Parts of the archives ("On the Functions of Music", JA6/47/8 and a diagram, JA6/45/4) are reproduced by courtesy of the Director and University Librarian, the John Rylands University Library of Manchester. We would like to thank Peter Nockles for his kind help with the archives, and John Vint and the Manchester Metropolitan University for the support during the stay in Manchester. This paper is part of the OZR-project 1971131490 financed by the Research Council of the Free University of Brussels. We received many interesting comments at and after the conference, and we would like to thank Neil De Marchi, Craufurd Goodwin, Judy Klein, Harro Maas and Michael V. White for their specific remarks. Michael White's comments were especially useful, as he directed our attention to several aspects of Jevons's context and to some additional archive material. All remaining errors are, of course, ours.

1. The Origin of Jevons's Music Manuscript

In order to understand the meaning of Jevons's music manuscript, we have to investigate the context in which it was written. The manuscript is one of the numerous products of Jevons's lonely hours in Australia. Jevons arrives in Sydney in October 1854, where he starts his position as an assayer at the Australian Mint. His acceptance of this position was partly motivated by the narrow financial situation at home, after the bankruptcy of his father following the 'railway boom crisis' of 1847-8. On January 5th 1855, Jevons writes in his journal that he does not intend to stay in Australia and remain an assayer for the rest of his life. On the contrary, he looks forward to returning to England after having collected a small sum of money. He would like to start over again at home, but now with some capital and with several years of 'colonial experience' (Black & Könekamp 1972:110). Jevons fills up his spare time with various scientific investigations (meteorology, botanics, geology), excursions and music.

In February 1856 Jevons receives the news of the sudden death of his father Thomas Jevons. Elsewhere we argue that this sad news enters Jevons's reflections on subjects regarding 'selfishness' (Mosselmans 1998a). He has always been somewhat preoccupied with this subject, but the death of his father brings in a stronger personal dimension.² Jevons would be pleased if he knew that he had pleased his father, and he wonders whether this reasoning is induced by feelings of love towards his father, or simply by selfish feelings. He concludes that "all our thoughts and motives (..) never seem to spring from a perfectly pure source" (Black 1973:212). Moreover, his father's death leads Jevons to a general questioning of what ought to be achieved in life. The outcome of his reflection is a utilitarian framework in which a 'science of man' emerges. We argue that the music manuscript is part of this 'science'. Jevons's personal worries are mixed up with his scientific investigations, and he seems to derive the basic principles of this framework from what he had learned from his father.³ Thomas Jevons always defended the idea that a person should "be *good* and *honourable*" and should "strive to make himself of *use & value* in the world" (Black 1973:214). Jevons's reflections on selfishness and usefulness are expressed in a letter to his sister Henrietta :

²Michael White urged us not to neglect other important contextual aspects. Indeed : Jevons did not start his reflections on 'selfishness' after the death of his father, as earlier remarks in his journal indicate (White 1989:624, Black & Könekamp 1972:112). Woolley's lecture on 'The Selfish Theory of Morals' should be seen as a major influence, as it enabled Jevons to couch his analysis of 'selfishness' in terms of pleasures and pains (White 1982:337-8, White 1989:625, Black & Könekamp 1972:132-4). This lecture therefore crystallized Jevons's thoughts on this subject. On the other hand, whereas Jevons visits the lecture in September 1856, he receives the news of his father's death in the month February of the same year. We agree with White that the lecture provided Jevons with more analytical rigour, but the death of his father gave his reflections a more personal and existential dimension. This becomes clear from a review of Jevons's letters to his sister Henrietta, which are filled with matters of a more intimate nature.

³This is, once again, not to neglect other influences. See the previous footnote for the argument that Woolley's lecture supplied Jevons's reflections with more analytical rigour. For the discussion of Jevons's early influences, see the successive articles La Nauze (1941), White (1982), Hutchison (1982), White (1984), Hutchison (1984), Bostaph & Shieh (1986), Bostaph (1989) and White (1989).

I have enough ado indeed to find out what I am myself exactly and to persuade myself that it is what is right, and to this end I have often entered into sorts of long mental discussions as to what the word (of all the most disagreeable) '*selfish*' really means. Generally, however, they terminate much about where they began, and I have lately begun to accept the wish to be *unselfish* as tantamount to the fact (Black 1973:240-1).

Jevons states that human behaviour should be judged by an investigation of motives. These motives should be guided by 'principles' of truthfulness and honesty of purpose, with a real regard for the sake of others and for oneself. This procedure may be too "indefinite and uninviting" for most minds, but Jevons does not see other options. He would like to be as unselfish as possible, but he is not at all convinced that similar processes of mind go on in other persons. Since words are insufficient to prove the purity of purposes, acts may be the only way to show one's honesty (Black 1973:241-2).⁴ Jevons uses this utilitarian framework to judge his own daily activities, and here he arrives at some trouble. He is always occupied with intellectual activities, and he even complains that he does not have enough time to undertake everything he would like to (Black 1973:225). He is very worried about how to allocate his scarce time to his various occupations, because he would like to maximize his use and value for the world. On the other hand, Jevons does not give the impression to be concerned with others. He reports to Henrietta that he had visitors, but could not spend more than twenty minutes with them because he was buried in a particular subject. He wonders whether his sisters will tolerate his 'abstract attitude' once he returns to England (JA10/1/37a). He writes to Henrietta :

Sometimes I begin to feel more like a misanthropist than is comfortable although in theory I profess the very opposite. I am not very amiable or well fitted to please small tea parties; it may be very well to amuse and please people in general but it scarcely seems my vocation. Cannot a division of labour be allowed so that those who are amiable may exercise their talents in small talk and good humour, while I betake myself to dreary work and thought ? This is all that I ask and surely I offer people in general a very favourable bargain. It is a petty that they cannot see it as I see it (JA10/1/40a).

Elsewhere Jevons writes that it would be 'bad economy' to drop his current activities and to work solely for others, although it would certainly be an action induced by good motives. It may be more profitable on the long term to devote much time to reading and scientific study, although it may appear to be selfish at first sight (Black 1973:276-7).

⁴This is in accordance with White's description of Jevons's 'naturalistic theory of ethics' : "what was good or ethical could be characterized in terms of 'sensible' properties of the world and hence could be discussed and identified in empirically meaningful terms" (White 1994a:431).

Jevons would like to be 'powerfully good' not to just one or several persons, but towards a nation or even the world. He would therefore like to use the powers of his mind to maximize his usefulness for the world. He thinks that the most powerful ability of his mind lies in a strong disposition to classify things. He is not so good when it comes to forming new thoughts and opinions, but his strength consists in developing already existing ideas "into something symmetrical" (Black 1973:308). Although Jevons would like to be a practical man who sees the effects following the cause, he is more suited to become a student of remote and abstract causes, and in this sense could be a "great good to all succeeding generations" (Black 1973:335). Jevons illustrates the difference between a practical and a theoretical life by a reference to 'performance and preparation', or even 'labour and capital'. It may be 'good economy' to delay hammering, and to spend some time in acquiring strength and skill to use the hammer with more power in the future. Jevons's justification of his own 'dreary work and thought' is an important road to *The Theory of Political Economy* : "We enter here into one of those deeply laid and simple propositions of Economy which I hope some day to work out into a symmetrical and extensive manner hitherto unattempted even by Mill or Adam Smith" (Black 1973:359-60). Jevons's collection of the 'fragments of a scattered science' is therefore an outcome of the utilitarian framework he constructed in Australia. It is also quite reasonable to suppose that Jevons's ideas regarding 'preparation and performance' at least partly operate as justifications for his wish to return to England and to continue his education.

The same utilitarian framework enables Jevons to justify his scientific investigations and his aversion towards small talk and tea parties. On the other hand, he remains unsatisfied with other people considering him "strangely unsociable and uncompromising" (Black 1973:302). Jevons complains about not having a 'mind' to talk to : it would be absurd to express serious thoughts to persons who cannot respond to them or think them absurd (Black 1973:311). He prefers solitude, as this is a requisite in order to form 'earnest thoughts'; almost nothing can be learned from experiences with ordinary people (Black 1973:337). Although Jevons may exaggerate his solitude⁵, it is clear that he prefers solitary scientific investigations to social gatherings. He does not sleep much, and spends a lot of his spare time on the 'science of man', a collection of scientific studies which are based on Jevons's utilitarian framework. Jevons describes his project of the 'science of man' in a letter to Henrietta :

Within the last hundred years, sciences almost innumerable have sprung up, but mostly devoted to physical Nature. Comparatively few have perceived that Human Nature may also be the subject of a science. It is indeed a many-sided subject. Religion, metaphysics, ethics, jurisprudence, political economy,

⁵According to White Jevons made some misleading statements regarding his solitude, and he tended to exaggerate his intellectual isolation. See e.g. Jevons's activities as a photographer (Burke 1955). His numerous articles for newspapers (Inoue & White 1993) indicate that Jevons did not live in intellectual isolation. We argue however that Jevons's solitude remains important regarding his ideas on music (and religion) (see below).

politics, and even medicine, art, poetry and many other studies all have man for the subject (Black 1973:336).

Just as in physics, the science of man is directed to the discovery of general principles and laws. The science rests on the suppositions that man is "a phenomenon in which *effect* is always connected with *cause*", and that there have to be "causes to make people good and bad, happy and miserable, rich and poor, as well as strong and feeble". The science of man should take numerous data into account, because each human being possesses animal powers, a logical mind and a series of emotions and is placed in circumstances that are continuously changing (Black 1973:361-2). Jevons's project is therefore a heterogeneous collection of different disciplines, and he devotes much time to different surveys. One part of this large project concerns "towns and cities", and is directed to the discovery of the 'nature' of particular cities. It would consist in analyzing the constitution and causes of cities, the relative character of their parts and the relative character of particular cities (Black 1973:327).⁶ Another part is economics, "a sort of vague mathematics which calculates the causes and effects of man's industry, and shows how it may best be applied" (Black 1973:321). Jevons's music manuscript is another part of this 'science of man'. The chapter on 'Functions' opens with the observation that music is an "integral part of man" (JA6/47/8). Moreover, Jevons's comparison of different art forms is couched in utilitarian terms (see below). A first motivation for Jevons to prepare the manuscript is therefore that it is a part of the 'science of man' project. We elaborate on this subject in the next section.

We already stated above that Jevons's project is mixed up with personal worries. Besides a part of the 'science of man', the manuscript is also an attempt to justify his love for music and the time he devotes to playing his harmonium. Jevons buys the harmonium in 1855 and considers it a 'first rate thing' to have an instrument in the 'Australian wilds' (Black 1973:162). He purchases several pieces of music and practices a lot. He reports about his progress and his judgment of the pieces to his sister Henrietta, who is very fond of music as well. She is in fact the only person Jevons communicates with on musical topics. Jevons states that he does not play to please other people, but he would like to understand the music in his own way. He compares this with reading a book, which is also an activity never to be performed to please others (Black 1973:225). Although Jevons's solitude may be exaggerated when it comes to his scientific work, it may be a proper characterization of his attitude towards music. We argue later that Jevons's solitary conception of music has severe consequences for his policy recommendations. Jevons spends a lot of time playing the harmonium. On November 25th 1856 he writes that

⁶In an article for *The Sydney Morning Herald*, published on October 7th 1858, Jevons makes clear that the character of a city is connected with the character of its inhabitants. Jevons describes the "Rocks" as a dirty and unhealthy part of Sydney, inhabited by immoral and drunken people. Here, the complete absence of sanitation should be condemned. A proper sanitation may be a step in the direction of the elevation of the morality of the masses (Jevons 1858). For the role of music in the process of civilization, see section four.

"music proceeds well and I shall know half the music in the world in a few years if I play as much as I do know" (JA10/1/27). Music is very important for Jevons :

Music is always to me the same, a condition of my existence, a part of me. I believe I could live a *life of Music*. If our physical nature did not interfere, I can almost conceive it possible that a man might play music *ad infinitum* and still never tire. (...) Now I think that nothing less than a life time would quite satisfy my musical thirst while I find with concern that a single hour per day out of the 24, considerably interferes with other affairs equally or more important. Music thus ought to be a rare but still a legitimate and occasional delight (Black 1973:319-20).

This quotation suggests that the music manuscript should also be seen as an attempt to justify the time Jevons devotes to playing music, as it interferes with other activities. A third motivation to write the manuscript is Jevons's general dissatisfaction with the already existing literature on the subject. On May 3rd 1856 he reports reading Spencer's *A Rudimentary and Practical Treatise on Music* (1850), which he considers "*excessively dull* as well as rather difficult" (Black 1973:227). On July 3rd 1856 he writes to Henrietta :

I enclose you a long affair which I have been writing lately. Wishing to read and understand a little of the principles of music, and being rather disgusted with the superficial uninteresting sort of books I can find on it, I thought I would write a book of my own which however imperfect would indeed teach me more than any body else's. (...) Voici Chapters 1 and 2. As it must be so very short, I do not know whether I make it very plain, if not get other books to help you out, for instance Spencer's *Rudimentary Treatise on Music* (JA10/1/25).

Black and Könekamp argued that Jevons's music manuscript contained a new system of notation, and that it has not survived (Black & Könekamp 1972:32, Black 1973:243). There is however no evidence that the book was on notation of music. Jevons indeed writes in a letter that the current system of notation is "stupidly contrived", but he adds that "I should improve it if I think I had much to do with it" (Black 1973:227). It seems clear that the manuscript contains a general survey of music theory instead, as it was intended as an improvement of already existing literature on the subject. Moreover, the Henrietta section of the John Rylands Library in Manchester contains a document (JA10/1/32b) which is certainly a part of the larger manuscript to be found in the same archive (JA6/47/8). Since Jevons sent the manuscript to Henrietta, this is good evidence that the manuscript under consideration is the one mentioned in Jevons's letters.⁷ Jevons reports sending a new chapter of the book on October 1st 1856 (Black 1973:243) and

⁷We would like to thank Michael V. White for drawing our attention to the music material in the Henrietta section. We analyze it at the end of the next section.

another chapter ("a longer one than ever") on November 25th 1856 (JA10/1/27). On April 4th 1857 Jevons states that he does not have time to continue the book, nor does he have something in his head to write about.

We therefore conclude that the 'missing manuscript' is archived at the John Rylands Library, and that it was written in the last quarter of 1856 and the first quarter of 1857. It should be seen as a part of the larger 'science of man' project, as a justification of Jevons's love for music, and as his attempt to improve the already existing literature on the subject. In the next section we investigate this manuscript in detail.

2. Jevons's Music Manuscript

The manuscript *On the Science and Art of Music* is located at the John Rylands Library with reference JA6/47/1-17, and it consists of 50 pages. Most of the chapters deal with physical and technical aspects of music : The Nature of Sound & the Undulatory Theory (chap. I); On the Harmony of Sounds (chap. II); On the Complete or Chromatic Scale and the Adjustment of Notes or Temperament (chap. III); On Melody (chap. IV); On the Functions of Music; On Musical Rhythm and Time; and some preparatory writings.⁸ We focus on the chapter 'On the Functions of Music', as it contains Jevons's most explicit aesthetic ideas. We first give a general overview of the content of this chapter, and thereafter we examine several aspects in detail : the essential character of music, its intellectual aspects, and Jevons's concept of 'perceptive pleasure'. We thereafter examine and compare three different diagrams to be found at different places in the archive (JA6/45/4, JA6/45/5, JA10/1/32b). To clarify our arguments, we add material from the correspondence between Jevons and Henrietta (JA10, Black 1973). The appendix to this paper contains a complete transcription of the 'Functions' chapter (JA6/47/8) as well as the most elaborate diagram (JA6/45/4).

In the first paragraph of the 'Functions' chapter Jevons states that the 'functions' of music should not be reduced to its 'use', as music is more than a simple instrument of pleasure. It is an integral part of every individual, although the importance attached to music is not equal for every person. When the 'sense' for music is once developed, it becomes an indissoluble part of the person (like the other senses). Jevons would like to investigate the precise place music occupies "among the occupations and capacities of men". Music is essential because its experience gives rise to essential feelings. Everybody knows these feelings "to a greater or less degree" : they result from the contemplation of "subjects of interest, beauty or sublimity". These feelings remove the mind from its ordinary affairs and thoughts, but do not lead to conclusions or future purposes. The hearer receives "a sort of confident moral strength" which is not lasting, as it disappears as

⁸White notes that the chapter 'On the Functions of Music' was to follow the chapter 'On Musical Rhythm and Time', and that Jevons intended to add at least one chapter which should appear in between of the two chapters mentioned. As there is no trace of this chapter, it may be possible that it has never been written. See White (1996: 2).

soon as the music is over and the daily duties and sorrows appear again. Jevons lists other means of achieving these feelings : a walk in the countryside, sightseeing, observation of architectural or engineering works, or listening to poetry. The feelings arise from the contemplation of anything which possesses "a degree of fresh interest, beauty or grandeur". Jevons is unable to investigate the cause of these feelings, but it is clear that they do not depend on knowledge. No scientific knowledge of the subjects of 'interest, beauty or grandeur' is required : the beauty of a forest does not increase if the perceiver gains botanical acquaintance, and the enjoyment of music does not presuppose knowledge of harmonical composition. These feelings belong to the perception and not to the reason, and they are inexplicable. These feelings are similar to the feebler feelings which are produced by the contemplation of "beautiful" scientific facts or knowledge, or of "fixed principles and enduring convictions and emotions which form religion and all our sense of love and duty". This fact notwithstanding, Jevons considers the former feelings to be "far below the level" of the latter feelings. He then defines the concept of 'perceptive pleasure' as the emotions "produced by subjects of nature or art, through the medium of the senses or mind, but without the necessary exercise of the higher faculties of reason". These emotions can arise from different sources, and Jevons classifies them by the "sense or means through which they act on the mind" : the sense of hearing, the sense of sight, and "poetical ideas or mental pictures of beauty" which arise through the medium of the mind itself. Only a small part of emotions does not fit into this framework, but even these emotions are closely dependent on the three categories mentioned. Finally, Jevons introduces a table (which we investigate later in this section).

The first part of the chapter makes clear that the manuscript belongs to Jevons's larger project of the 'science of man'. Music is not merely an instrument of pleasure, it is an essential part of every human being. The aim of the 'Functions' chapter is to identify the precise place music occupies among the activities of a person. Everyone should experience the feelings that originate from listening to a piece of music from time to time, because these feelings let us forget the daily sorrows. Moreover, they lead to the experience of a certain 'moral strength' that enables us to survive in the context of the difficulties of our lives. All this may suggest that music should merely be seen as a 'tranquilizer' of the mind, an interpretation to be found elsewhere.⁹ Although this aspect is certainly present, a first nuance of this statement should be that it is an *essential* 'tranquilizer', which is necessary for every person. But more important, music is not a simple instrument of pleasure, because the feeling which is associated with the music has a certain intellectual dimension.

This becomes clear in the text under consideration when Jevons states that music is not equally important for everyone, and when he argues that everyone already experienced the feelings associated with music to a greater or less degree. Although Jevons maintains that these feelings have nothing to do at all with reason or knowledge, there has to be something 'intellectual' which implies that some people enjoy music more than other people do, and that it is more important in some people's lives than in other's. We can clarify this

⁹See Harro Maas's contribution "Pacifying the Workman : Ruskin and Jevons on Labour and Popular Culture", this volume.

point by taking other sources into account. Jevons states that it is possible to understand and appreciate music without being able to play it brilliantly. This indicates that this ability does not stem from some manual or technical abilities. Jevons compares playing music with reading poetry (Black 1973:257). Elsewhere he even writes :

I regard a fine piece of music like a fine poem, or essay or philosophical work, that is as a thing to be studied, understood and remembered. In this point of view playing music though it may *bore* others is still as good an employment of time *to a certain extent* as reading (Black 1973:225, original emphasis).

This quotation clarifies Jevons's statement in the manuscript that although the feelings associated with the contemplation of scientific, ethical or religious subjects are somewhat feebler than the feelings associated with music, they still have intellectual superiority. The study of art forms is similar to scientific study, but emotionally stronger and intellectually lower. Moreover, we show below that art forms which are concerned with subjects that may also become topics of scientific investigation, are valued higher in Jevons's utilitarian framework. All this implies that Jevons attributes to art and music an important intellectual dimension. A closer reading of other letters indicates that there are really different kinds of music, which are associated with different kinds of persons. Jevons writes about Handel's *Israel in Egypt* :

As you are aware it consists of little except grand heavy choruses describing the plagues of Egypt and the Exodus of the Israelites. The subject is one perhaps which no writer but Handel dared to attempt; ordinary music and ordinary art usually appeal to the more common and immediate feelings of the heart, which every one comprehends more or less. To paint such feelings or describe them in poetry is no very difficult thing, but as it is only the very greatest artists that can reproduce historical scenes, or embody things with which the mind always associates vague ideas of extreme grandeur, so it is only the highest master-hand that could take music from its ordinary sphere, and make it describe events of strange and miraculous nature as those which are the subject of *Israel* (JA10/1/40a).

This quotation indicates that Jevons regards this 'descriptive music', which reproduces historical scenes with 'extreme grandeur', as a high form of music. Jevons's letters to Henrietta are filled with descriptions of parts of musical pieces that express, for instance, the movement of frogs or the falling of hail (JA10/1/40a), and elsewhere Jevons describes a passage which "reaches the ultimatum of expression, the difference of Heaven and Hell. It is the highest effect of art" (JA10/1/37c).¹⁰ This indicates that a real

¹⁰This observation gives a new dimension to Klein's (1995:136) remark that Jevons had low qualities of visualization. He responded to a query by Francis Galton that he had severe difficulties in forming geometric conceptions in his mind. This low visualization capability

masterpiece deals with historical or religious subjects, which are reproduced emotionally in the inner eye (or ear) of the reader. This explains the lower status of music in comparison with science or religion : although they deal with similar subjects, science or religion are concerned with the contemplation of these subjects themselves, whereas music merely reproduces feelings of grandeur which are associated with these subjects. Although the latter feelings are more forceful than those produced by scientific or religious contemplation, they still remain intellectually at a lower level. Jevons's emphasis on the intellectual content of music also implies that, although strictly speaking no knowledge is required to appreciate a masterpiece, some knowledge may help. A person completely unfamiliar with the biblical or historical scenes reproduced in the piece, will not be able to perceive the intellectual significance of the music. He might be able to discover the beauty of the piece as such, but he could not relate it to the occurrences Jevons describes in his letters. This point is reinforced in a manuscript to be found in the Henrietta section at the John Rylands library (JA10/1/32b), which appears to be an earlier draft of a part of the 'Functions' chapter which is not in the archives.¹¹ Jevons writes :

Music, on the other hand, never attains its highest pitch of beauty and interest unless accompanied by words which giving a *poetical* meaning to its otherwise inanimate expression, intensify as well as define its influence on the mind. All the greatest musical compositions are, I believe, *vocal* (JA10/1/32b).

All this implies that Jevons considers music to be more than simply a 'tranquilizer' for the mind. It has an intellectual and religious dimension. But there exist different kinds of 'higher and lower' forms of music, and not every person is in a similar need for music of high quality. We already stated above that Jevons does not consider himself a scientific genius who creates scientific inventions, but that he thinks that his ability consists of developing already existing ideas into something symmetrical. Ordinary people, on the contrary, may not at all be suited for intellectual work, and should therefore confine themselves to routine labour. A similar picture emerges in Jevons's view on music. A

may partly explain why Jevons seems not to be interested at all in other art forms than music. His detailed descriptions of musical pieces contrast heavily with other very superficial descriptions of art, like his visit to the Louvre : "It is a magnificent palace filled with all sorts of collections of pictures, sculpture antiquities, etc., etc., but the most celebrated I believe are the pictures by the old painters" (Black 1973:58). He writes about an exhibition of paintings in London that "there were of course a great many fine paintings, but also a great many foolish and absurd ones, and a very large number of portraits which are very dull" (Black 1973:76). As the contrast with his descriptions of music is indeed very striking, we may conclude that although Jevons had a low capability of visualization when it comes to graphics, he had a very high capability of visualization for music. And this may (at least partly) explain his interest in music and his disinterest in other forms of art.

¹¹Jevons refers in this manuscript to a chapter on 'musical harmony', which indicates that it is in fact a part of the 'on the science and art of music' project. Moreover, the reference is to an unnumbered chapter, whereas the chapter on harmony in the 'science and art' manuscript is marked as chapter two. This suggests that the writings to be found in the Henrietta section are of an earlier date, since otherwise Jevons probably would have referred to chapter two. This manuscript elaborates on the division of the arts (where the chapter reproduced in the appendix stops) and on Jevons's criticism on Alison's *Essays on Taste*. We return to both issues later in the paper.

musical genius creates high forms of music, as we saw earlier. Jevons does not consider himself a musical genius, but he is able to play and appreciate the higher forms of music in his way. Ordinary people, on the other hand, may only be able to enjoy the lowest and simple forms of music which are immediately clear to anybody (due to a natural propensity of every human being). We return to this issue when we discuss Jevons's critique of Alison (who neglects the difference between higher and lower forms of music) and when we discuss Jevons's policy prescriptions regarding public performances of music.

At any rate, Jevons does not distinguish clearly the intellectual from the non-intellectual aspects of music. The feelings associated with music belong to the perception, and not to the reason, and this may explain why they are in fact inexplicable. Although they do not depend on knowledge, there certainly is a connection between emotions and knowledge which is not stated clearly. Instead, the concept of 'perceptive pleasure' serves to cover this tension in Jevons's music theory. In the first place, it seems strange that Jevons does include in his definition of 'perceptive pleasure' emotions arising through the medium of the mind. He does not recognize explicitly that when the 'mind' is at stake, intellectual aspects will certainly interfere. In the second place, he writes that there is no "necessary exercise of the higher faculties of reason", but he does not exclude the possibility that reason may interfere. And finally, the feelings arising out of the contemplation of scientific, religious or scientific subjects are somewhat similar but feebler. The concept of 'perceptive pleasure' covers this tension, which is also present in Jevons's diagrams depicting his classification of the arts.

The Jevons archives contain three separate diagrams : JA6/45/4, JA6/45/5, JA10/1/32b. They are classified in different sections of the archives, but it is highly probable that Jevons does not refer to one of these diagrams in his chapter on the functions of music, but to a similar (missing) table instead. Jevons writes that the diagram is represented on the following page, but this page is missing. However, no doubt remains that these diagrams express the classification Jevons refers to in his description. Jevons sums up the classes of art he differentiates with regard to the senses on which they operate. He establishes a natural distinction between the sense of hearing, the sense of seeing and a so far unnamed sense, a "third and highest division", in which he places poetical ideas or mental pictures of beauty. For each of these senses Jevons then intends to sum up the several subclasses of subjects and objects. The three diagrams represent three different versions of the same classification. JA6/45/5 and JA10/1/32b are simple tables; the elaborate diagram JA6/45/4 is reproduced in the appendix. All diagrams contain sight and hearing as main classes; the name of the third class varies. JA6/45/5 mentions "memory and understanding", JA10/1/32b "mind and feeling" and JA6/45/4 simply "feelings". All three diagrams mention a small fourth class of motion (marching, dancing), which we reconsider below.

In the 'Functions' chapter Jevons seems to refer to one of the tables, because he writes that 'poetical ideas' form the central and main division, but due to their close connection with 'natural objects' this last column is placed along side in a column under the heading of 'sight'. On either side are placed the artificial representations of these

objects and ideas, by both sight and hearing. This is precisely the structure of the two tables JA6/45/5 and JA10/1/32b : in both cases the columns are named (1) "sight art", (2) "sight nature", (3) "memory and understanding" or "mind and feeling", (4) "hearing" and (5) "motion". Jevons stresses that the tables provide insights in the close connection between the different forms of perceptive pleasures. For example, "landscape and painting in general", "natural scenery", "descriptive poetry" and "descriptive music" are placed on the same height in both tables. We show later that the additional material (JA10/1/32b) elaborates on the similarities between the different art forms, but it is highly improbable that Jevons refers to one of the tables in the manuscript (JA6/47/8). In the 'Functions' chapter Jevons refers to a column of 'Poetical Ideas', and not to 'memory and understanding' nor to 'mind and feeling'. All this suggests that he refers to a table with a similar layout as both tables from the archives (JA6/45/5 and JA10/1/32b), but not to one of these tables themselves.

The different layout of JA6/45/4 suggests a different approach to the classification. Many other differences substantiate this claim. Under the heading of sight, the tables mention a division between art and nature, whereas the diagram has no such division. In this last case the "exterior of nature and art" is mentioned as one of several subclasses. In the category of sight, the diagram makes mention of a division between "beauty" and "symmetry", whereas the other tables do not. A section on "Harmony of colours" does not appear in the diagram, nor do "ballads". "Oratorios and opera" are classified under the class of feelings in the diagram JA6/45/4, instead of under hearing. This diagram also contains a division between "harmony" and "melody" under the section of hearing, whereas the tables do not. Although there cannot be any certainty on this issue, it seems reasonable to suppose that the more elaborate diagram JA6/45/4 should be seen as the latest and most definitive version, and we therefore decided to reproduce this diagram in the appendix. We take special interest in two aspects of the classification : the structure of the diagrams and the way of presenting concrete art forms and objects. We take JA6/45/4 as the main focus of our attention and we refer to differences or similarities with the other two tables when required. We argue that all three diagrams contain a hierarchy of 'levels of abstractness', but only the diagram JA6/45/4 contains an elaborate second hierarchy which expresses the intellectual significance of the different forms of art. The tables are rather intended to represent similarities, as we argued above.

The general structure of Jevons's tables and diagram seems very clear. He presents a classification of art forms on the basis of abstract categories of perception. By inferring such abstract characteristics of perception from concrete art forms, Jevons is able to construct a hierarchical view on the perception of art. At the center of the diagram (or the top for the other two) we find the most general divisions. These are also the most abstract instances of perception of art. The more we approach the outer end of the circle, the more concrete the perceptions become : poems, paintings and choruses are more sensible than beauty, melody or harmony. Jevons uses the biological origin of the perception as the criterion to classify different kinds of perceptive pleasures. Hearing is not seeing because we don't see with our ears. In between, however, Jevons looks for a denominator as general

as possible. He comes up with the concepts of "symmetry" and "beauty" under the general heading "artistical" for sight, and the concepts of "harmony" and "melody" under the general heading "musical" for hearing. He does not succeed in mentioning a similar term for the category of feeling, although "poetical" is placed under this heading. Further off the center of the circle we find more sensible examples of the arts : under the heading of "beauty" Jevons recognizes, amongst others, "sculpture" and "painting"; under "symmetry" he places for instance "grand scenery" and "architecture". The "exterior of nature and art" separates beauty from symmetry, which apparently indicates that it possesses characteristics of both categories. Under "melody" Jevons places, amongst others, "vocal music", and under harmony he places for instance "military music". Under the category "poetical" Jevons places "poetry", "rhythm" and "opera", as most sensible examples of the class of poetical ideas. The furthest from the center of the diagram is the category of "regularity of motion", including "dancing", "military marching" and "military display". These very sensible art forms, on the overlap between sight and hearing, do produce as much emotion as any other, but cannot be represented directly by one of the three main classes. At first sight, Jevons seems to classify art forms through their 'levels of abstractness'. The individual is at the center of the diagram; he is surrounded by different kinds of senses and the perceptive pleasures with which they are associated; and the events capable of producing these pleasures are listed at the outer end of the circle.

However, there is also another hierarchical structure in Jevons's classification : from top to bottom. It visualizes a classification on the basis of Jevons's most problematic conception, namely the intellectual characteristics of art. We already argued above that although Jevons states that music may be a tranquilizer of the mind, he clearly maintains some intellectual aspects. Jevons remains vague in his conceptualization of this intellectual function, but a close examination of the diagrams reveals that they refer to it. The intellectual hierarchy may even be said to govern the structure of the diagram JA6/45/4. The top of the circle diagram presents the art forms which, in Jevons's opinion, require the most intellectual perception. The more we approach the bottom, the more the art forms become less intellectually stimulating. Following this classification, a hierarchy from poetry through visual arts and music to motional art forms becomes visible. The best example may be the higher rank of 'melody' over 'harmony', as it reflects the intellectual superiority of 'melody'. Jevons writes in Chapter 4 of the music manuscript, "On Melody" :

Harmony, indeed in some inscrutable manner *pleases* the *ear*; melody appeals to the *mind*, and it is merely by a succession of sounds, rising or falling, or varied in an infinite number of ways, that the musical composer has to express his thought and feelings and give that *meaning* or *soul* to his sounds which constitutes their intrinsic value (JA6/47/7).

This is perhaps the most explicit statement on the intellectual 'cleavage' in Jevons's thought on music. A melody is a meaningful collection of words, like a book is a meaningful collection of sentences. Melody appeals to the 'mind' and expresses 'thoughts',

but the feelings associated with it nevertheless fall under the class of 'perceptive pleasures'. Although Jevons does not recognize explicitly these intellectual aspects, he ranks 'intellectually higher' art forms above 'intellectual lower' forms. Other examples from the class of music provide the same insights. Jevons places vocal music (opera, songs, oratorios) on a higher level than instrumental music. We already saw above that Jevons prefers vocal music, as it depicts descriptive scenes (of historical significance) which require a more intellectual attitude and perception. The only exception in the distinction between vocal and instrumental music, the choruses, reinforces this argument. Jevons considers choral music outside the opera of less intellectual importance since it operates mainly within the context of less cerebral manifestations and grand performances. The same 'intellectual cleavage' explains why "historical painting" is ranked above "painting in general" and "landscape", and why "pyrotechny" receives a low hierarchical status. Similarly, the low position of the motional class outside the diagram, on the overlap between symmetry and harmony, not only gives utterance to its insignificance on a perceptive level of abstraction, but also on that of intellectual perception.

This second classification reinforces our point that the diagram reproduced in the appendix contains the most definitive and structural view on Jevons's classification. The other tables contain the (first) abstraction hierarchy, but they do not visualize thoroughly the intellectual degree (the second hierarchy). The tables do express some hierarchies of this kind, like the superiority of "descriptive music" over "vocal music and melody and general", but they do not express more general hierarchies (e.g. the poetical, artistical and musical are placed along side in the tables). Moreover, the fact that the two tables mention "memory and understanding" and "mind and feelings" respectively, suggests that in the earlier tables Jevons was not fully aware of the intellectual 'cleavage' in his classification. The final diagram mentions only "feelings", which may indicate that Jevons tried to demarcate perceptive pleasures more clearly from intellectual activities. He could not, of course, annihilate this tension by simply changing a concept, but the more detailed visualization of the 'second hierarchy' brings more clarity in the classification. Whereas the tables emphasize the similarities between the different forms of perceptive pleasures, the diagram puts a stronger emphasis on the 'intellectual hierarchy' of different feelings.

The additional music material to be found in the Henrietta section at the John Rylands Library (JA10/1/32b, see above) complements Jevons's classification of the arts, and plays down the strictness of his divisions. In this manuscript Jevons elaborates on the hierarchy of the arts :

Music is the pleasurable exercise of one of our senses and in this view stands in the same rank as the other two divisions of perceptive pleasures. It must be allowed however that if we consider the comparative values of the three kinds of perceptive pleasures that the balance is somewhat against our Musical Art, as being more abstract and of less general meaning and appliance than the visual and poetical dimensions of Art. It is not like these latter occupied with subjects for instance nature or man the contemplations of which in a scientific,

metaphysical or other point of view are of much superior importance and interest. Hence Art and Poetry must be allowed to take precedence, not that they are in themselves better or more easy sources of *perceptive* enjoyment but because they are likely to lead the mind to higher pursuits and more valuable acquirements (JA10/1/32b).

This quotation indicates once again that music, and art in general, have an intellectual dimension which is somewhat covered in the concept of 'perceptive pleasure'. Whereas 'descriptive music' is more important to Jevons because it reproduces historical and religious scenes of 'beauty and grandeur', art and poetry should take precedence over music because their subjects may be investigated scientifically as well. In this sense, art may become the first step for the mind to become interested in scientific investigations. However, Jevons continues by arguing that "more fairness" should be brought in this comparison. If the money which was spent in erecting a building of "architectural beautification" would instead have been invested in the maintenance of a small staff of musicians which would perform publicly and gratuitously, the town might be more pleasant and beautiful than in the first case (JA10/1/32b). The argument that the public performance of music is rather inexpensive is an important one; it returns in Jevons's writings on the policy of public performances (see below). Moreover, these writings once more confirm that the music manuscript is a part of the larger 'science of man' project. In a typically utilitarian fashion Jevons balances costs and benefits of several forms of 'perceptive pleasures' against each other. Moreover, Jevons underlines the importance of artistic expressions for the 'science of man' : although the production of objects with an agreeable and beautiful shape "is entirely useless in an utilitarian point of view, still in all ages much attention has been given to it, and more and more value depended upon it as he [man] became more and more refined" (JA10/1/32b). The performance of art in a culture therefore expresses its level of civilization.

The additional material contains also some arguments regarding the incompleteness of Jevons's divisions. A "new but insignificant class of motional perceptive pleasures" is formed by joining the idea of rhythm in music with regularity of motion, as in marching and dancing (JA10/1/32b). We already stated above that this small class is depicted below in Jevons's diagram : it is not included in one of the three main divisions, and the fact that it appears at the bottom of the diagram illustrates its low status in Jevons's classification. Indeed, elsewhere (in 1878) Jevons reports that he always considered dancing to be something vulgar, until he learned from his visits to Denmark that this was a prejudice against this art form :

But we are so accustomed to see ballet girls in evanescent skirts, in ambiguous attitudes, or dressed up as wasps or cupids, or something extravagant and low in taste, that we have established an inseparable association of ideas between dancing and immorality. I retain a grateful recollection of the Froeken Carey, who opened my eyes more than anything else to the degradation of public taste

in England. I afterwards learned that Copenhagen is considered a great school of graceful and chaste dancing (Jevons 1883:22).

Besides the introduction of this "new and insignificant class", Jevons plays down the strictness of his classification by arguing that several classes may be joined to form sensations which may not belong entirely to one of the three main divisions. Poetry is usually rhythmical and may be joined with the sounds of a melody; and opera should be seen as a combination of poetry, music and artistical representation (JA10/1/32b). The three main divisions can even be defined by reference to each other :

Poetry is the Aristical or Melodious Arrangement of Ideas.

Art is the Poetical Arrangement of Natural Objects.

Music is the Poetical or Artistical Arrangement of Sounds (JA10/1/32b).

Jevons's divisions should therefore not be taken too strictly. There is also no strict hierarchy among these divisions : music is more abstract, and therefore less likely to lead the mind to subjects of scientific interest; but on the other hand, music is not expensive, more universal and better suited for many different occasions, and it does not require much concentration and reflection (JA10/1/32b). Similar arguments can be found in Jevons's utilitarian judgment of public performances of music (see below). But there is still an 'intellectual cleavage' in Jevons's music theory, when he argues that the 'lower' forms of music are easily accessible to everyone, whereas the possibility to appreciate 'higher' forms depends on the formation of the ear. This 'cleavage' appears in Jevons's discussion of Alison's *Essays in Taste*, which is to be found at the end of the additional material JA10/1/32b. A review of Jevons's remarks on Alison is also a good starting point for an investigation of the relation between Jevons's music manuscript and other writings on music, art and aesthetics in his time.

3. The Music Manuscript in Context

We already mentioned above that the intellectual 'cleavage' in Jevons's writings on music is especially visible in his arguments regarding the intellectual superiority of melody over harmony. Precisely this argument forms the core of Jevons's criticism on Archibald Alison's *Essays on the Nature and Principles of Taste*, published in 1790. Although Alison distinguishes between different kinds of sounds, he does not establish a hierarchy in Jevons's sense, nor does he emphasize the necessity of musical training and education for the adequate perception of higher forms of music. According to Alison all sounds may be sublime, though not to the same extent. The level of sublimity of each sound or series of sounds depends on the precise nature of the sound (thunder, tempest, cascade), but also on the association the perceiver makes. Alison acknowledges that not every perceiver has the same ability to form such associations, and is not equally sensible to the sublimity of

sounds (Alison 1790:153). He attributes these differences to several reasons, as for instance the temper of the perceiver or the regularity of occurrence. A musical composition affects the emotions of sublimity or beauty as a result of either the nature of the single sounds, or of the nature of the whole composition, or of the associations the listener connects with it. According to Alison the ability to create associations is the key in the perception of music (Alison 1790:194-195).

Jevons criticizes Alison for not establishing a firm hierarchy of different kinds of music : whereas everyone may experience rhythm and harmony, the proper appreciation of melody requires a genuine formation of the ear. He writes :

He [Alison] has not sufficiently entered on the Theory of Music, to see the complete distinctions of melody, rhythm and harmony, which all contribute to the pleasures of music, but independently of each other (...) Still if anything more were required to prove the independence of associated feelings, we may be convinced by the fact that rhythm and harmony are naturally discriminated and enjoyed by all persons and at all ages, while the enjoyment of a melody depends absolutely on the character and education of the hearer (JA10/1/32b).

Whereas Jevons relates the sense for higher art forms to training and education, Alison refers to the aesthetic categories of the beautiful and the sublime. Jevons refers to these concepts as well, but does not put much emphasis on them because of his utilitarian orientation (see below). According to Alison the perception of art is attended with a specific pleasurable emotion, incomparable to other emotions. This particular emotion is then called taste. But, unlike other emotions, taste has a particular interaction with the mind :

Taste is that Faculty of the human Mind, by which we perceive and enjoy, whatever is BEAUTIFUL or SUBLIME in the works of Nature or Art (Alison 1790:vii).

Although Alison tries to connect taste with the human mind, he does not elaborate on the function of the mind in the act of perception. Alison tries to isolate what he calls the most important elements of the pleasurable perception : the aesthetic concepts of the sublime and the beautiful. When the artist tries to strive for truly great art which is permanent and genial, he has to employ the concepts of the sublime and the beautiful. Throughout his essays, however, Alison hardly succeeds in isolating the pleasures associated with beauty or sublimity from other pleasures. On the whole, he seems unable to connect the emotion of pleasure with the effect that it has on the human mind. Rather, his use of the sublime and the beautiful as acknowledged intellectual concepts keep him from bridging the gap between emotion and intellect.

Alison's vocabulary of the beauty and the sublime belongs to a specific Anglo-Saxon aesthetic tradition which considers the sublime to be the ultimate goal and structure that governs the arts. That goal is the attempt to find a natural foundation of the perception of

the arts, and of taste. One of the most prominent pioneers of this tradition is the third Earl of Shaftesbury. His contribution does not only deal with the specific characteristics of sublimity, especially in its connection with the religiosity of art, but also, and perhaps more importantly, with the attempt to find a natural and anthropological foundation of the sublime. Shaftesbury was a pupil of John Locke, and tried to incorporate his empiricism into aesthetic inquiries. As such, he is one of the first who tried to establish an empiricist foundation of sublimity. His view of mankind as harmonious and virtuous was, in the early 18th century, particularly reflected in classical architecture and music (especially in the proportionality of the sonata). In short, Shaftesbury argued that mankind is good by nature, and therefore able to recognize other good aspects in the world (like the works of nature and true art). Shaftesbury's empiricism implies that this recognition is based on the senses. Although his influence remains implicit and vague, his views on the subject of the foundation of aesthetics have been of great importance for the further development of the thought on art and music (Shaftesbury 1790).¹² Alison tried to complete Shaftesbury's empiricist foundation, by combining it with his emphasis on the intellectual aspects of the perception of art. He enlarged Shaftesbury's concept by adding, apart from the sensorial recognition, the appeal to the mind as well (Kallich 1948:234). We already argued above that Alison introduces the categories of the sublime and the beautiful for this purpose, but he does not succeed in bridging the gap between emotion and intellect.

Alison's conceptualization brings Jevons's in mind. Both use the same vocabulary, and adhere to the same established tradition of aesthetics. Like Alison, Jevons recognizes the importance of the concepts of sublimity and the beautiful, especially when he refers to the difference between the intellectual and non-intellectual characteristics of aesthetical perception :

[A certain feeling] is excited by the contemplation of subjects of Interest Beauty or Sublimity (...) It arises in short from the contemplation of anything possessing a degree of fresh interest beauty or grandeur (JA6/47/8).

Precisely in this section, in which Jevons tries to define or describe the feeling he perceives when confronted with great objects of art, he resorts to the terms connected with the Anglo-Saxon tradition. But while Alison clearly places himself within this tradition and tries to continue it, Jevons does not consider aesthetical concepts as essential for an investigation of its effects on the mind and emotions. This may be explained by Jevons's utilitarian approach of the subject. Whereas Alison would like to enlarge Shaftesbury's empiricist foundation of aesthetics by taking intellectual aspects into account, Jevons would like to examine the 'use' of music in the context of the 'science of man'. Jevons wants to know the precise place of music among man's occupations, and he would like to develop utilitarian guidelines for using music. Many of the writings on art from the middle

¹²For a concise treatment of Shaftesbury's connection with Locke, see Marsh (1961).

of the 19th century on treat art in a utilitarian way.¹³ Resulting from a desire to preserve art (or deal with it) in a more industrialized society, the main argument is that, if nothing else, art serves as an educator of man, to make him perceptive for nature and the beauty in it. Evidently, this argument is connected strongly with a moralist view on the matter. Jevons is therefore not so much interested in the nature of the sublime as such, but rather in the capability of art to raise the level of morality. This is especially visible in Jevons's writings on what we might call the 'political economy of music'. In the next section we show that these writings are compatible with our examination of the music manuscript. Although written more than 20 years after the manuscript, it may be seen as a policy outcome of Jevons's ideas on aesthetics.

4. The Political Economy of Music

We showed earlier that Jevons uses utilitarian notions in his comparison of different art forms. Several of Jevons's arguments return in his article "Amusements of the People", which appeared originally in the *Contemporary Review* of 1878 and was reprinted in *Methods of Social Reform* (1883). In this essay Jevons complains about the attitudes of lower class people in England. He argues that the behaviour of drunken English 'blackguards' differs fundamentally from the behaviour of Continental or American lower class people, who are, 'comparatively speaking', ladies and gentlemen of refinement. Jevons states that it is difficult to change these bad habits, especially because they have been confirmed by centuries of ignorance and mistaken legislation. Lower class people in England do not have access to good moral public amusements, and therefore their only option is to get drunk in their spare time and to cause trouble. In Continental Europe these morally elevating amusements exist, and this explains why the lower class people in these countries have a much more refined behaviour. In England, on the contrary, the aristocracy suppressed the existing amusements, but did not offer alternatives. The earlier amusements had to be suppressed, as they were but covers for crime and immorality, but the people are in need of new amusements instead. Lower class people are mostly excluded from natural enjoyments because they do not have any property, and the existing public amusements are usually too expensive. The aristocracy lives a life of amusements, and the hard-working labourers should get a harmless and healthy counterpart. This should give rise to moral improvement of the lower classes, through a change of habits and attitudes (Jevons 1883:2-7).

Jevons has two purposes in mind : entertainment and civilization of the people. Both purposes are interconnected, because the necessary entertainment of the people should lead their habits in a more civilized direction. Especially music seems to be the best

¹³Jevons's utilitarian treatment of art is similar to Bentham's fragmentary remarks on the subject. Bentham states that art is a source of pleasure which should be used for a moral elevation of the masses. He even argues that art may be a good substitute for drunkenness (Bentham 1825). These ideas appear in Jevons's policy prescriptions as well (see next section).

means of popular recreation, as it fulfills all the requirements. Jevons lists three arguments which are similar to his earlier remarks regarding the utility of music in relation to other forms of art (see above). First, listening to music does involve no bodily fatigue. No efforts are required, only a "passive abandonment of the mind to the train of ideas and emotions suggested by the strains" (Jevons 1883:9). Other possibilities, like visiting galleries or museums, involve rather tiring body movements and are therefore less suited for the purposes of entertainment and civilization. A second main argument is the low cost of music. The cost of a theatre is necessarily higher than the cost of a music performance, because theatre is drama plus the music. Institutions which are designed for higher-class people generally cost much, which necessitates a higher entrance fee. Thirdly, music is more pure and removed from concrete life than a drama. This is important because the public performance should distract the labourers from their daily work and sorrows. Jevons recognizes that there exist 'lascivious' songs, but the impurity lies in the words, not in the music (Jevons 1883:8-11). This clarifies Jevons's statement in the music manuscript about the attainment of "a sort of confident moral strength" : the music serves as a 'tranquilizer' of the mind (entertainment), but the songs have to be pure and morally elevating (civilization). All this is also compatible with the importance Jevons attaches to music which reproduces scenes of historical and religious grandeur, and it illustrates the importance Jevons attaches to vocal music. While music serves as a 'tranquilizer' to a certain extent, it should contain an intellectual and moral component in order to elevate the moral attitude of the listener. This would also annihilate the unhealthy habits of lower class people :

What some seek at the cost of health, and life, and reputation, from alcohol, and from opium, that they might obtain innocuously from music, if they could cultivate true musical taste (Jevons 1883:10).

The cultivation of musical taste is therefore a prerequisite for the moral elevation of the people. Jevons argues that the low quality of musical education among the masses explains their 'helpless state' when seeking recreation. Their musical education should somehow be 'triggered' by the organization of free public musical performances. As this would not cost too much, there are no real financial burdens. Middle and upper class people are however afraid that these performances will attract "a horrid crowd of roughs and pickpockets". But as soon as "the novelty of the thing had worn off" and the roughs and the pickpockets would stay away because of the presence of the police, middle class people would no longer be reluctant to go to these performances and bring their families with them. Moreover, higher and upper class people might be willing to pay for reserved chairs or by a subscription list, and this would possibly cover the expenses. Local movements should organize the performances. Jevons claims that especially religious and sacred music is important, and people from all ranks may attain it. The elevation of the tastes of the poorer classes should be achieved by a mixture of different kinds of music : the better class of dance music, old English songs and popular classical songs, but a careful

intermixture is certainly appropriate. Jevons seems to suggest that people would be attracted by the more popular and easier parts of the performance, and that the careful injection of some 'higher' musical pieces would gradually rise the musical tastes. Jevons's own observation is that every person is able to appreciate a really beautiful melody; only musical symphonies require a long training (Jevons 1883:11-16). This is in accordance with Jevons's earlier views, like in his criticism of Alison we discussed above.

The government cannot interfere directly in the private organization of already existing music halls; the audience has to demand better entertainment. On the other hand, the already existing public places of recreation (the Crystal and Alexandra Palaces and the Westminster Aquarium) should maintain a high tone in order to avoid degradation to a vulgar level, but meanwhile they have to "make a point of mingling all classes together" (Jevons 1883:17-18). This argument resembles Jevons's discussion of trade unions in *The State in Relation to Labour*, where he raises hands for heterogeneous co-operations. A partnership binding together the interests of employer and workman should be the solution for the labour problem. Industrial divisions should be perpendicular, not horizontal : the workman's interests should be bound up with those of his employer's. The workman will then become a shareholder of the firm (Jevons 1882:143-9). A careful intermixture of higher and lower class people would give rise to moral improvement, on the work floor as well as at public performances. In this sense, Jevons remarks that those who would like to elevate the tastes of the masses, place the means to achieve this goal as far away as possible from these masses (Jevons 1883:18). A proper method to improve habits and morality should on the contrary be that higher class people visit popular performances, in order to give a good example that may be imitated by lower class people (Jevons 1883:24). Middle class people love to imitate their betters, but they should also be willing to visit 'lower' performances. The careful intermixture of classes would give rise to social improvement through 'aping the upper-class'. Jevons writes at the end of his essay :

There are none so blind as they who will not see, and this is the kind of blindness which prevents us from seeing that the vulgarity of the cheap trip, the inanity of the music-hall, and the general low tone of popular manners, are no necessary characteristics of hard hands and short purses, but are due to the way in which for so long a time popular education and popular recreation have been discountenanced. Of course the question of recreation is subordinate to that of education (Jevons 1883:26).

The last sentence once more shows that the intellectual and moral aspect of music are more important than its recreative function. Jevons's policy prescriptions are not limited to the case of music; several other policies with an even greater emphasis on intellectual aspects are present in *Methods of Social Reform*. Public libraries should receive sufficient funding, as this would give rise to a reduction of poor rates and less expenditure on crime. Jevons does not condemn reading literature as a distracter from practical subjects, because the alternative would be even worse : reading of vulgar works or no

reading at all. Public libraries should therefore be seen as progressive institutions : they increase education and general intelligence (Jevons 1883:32-48). The same may be said about museums, at least if there is no accidental ordering of subjects and no political influence (Jevons 1883:58-73). Jevons's educational project struggles however with some difficulties, as *The Spectator* remarks in October 1878 :¹⁴

Mr. Jevons's advice to give the people music may be sound, but where is the evidence that the people wish for it, in place of more objectionable entertainment ? Why, in fact, does not the people, if it would like music, subscribe its twopences, and have music ? (Black 1977:291).

This criticism points into the direction of a vicious circle in Jevons's policy prescriptions : he would like to alter the musical taste of the masses through public performances of music, but in order to be able to appreciate refined forms of music, a certain musical taste already has to be present. People might be more attracted to lower and possibly more 'vulgar' forms of music because of their bad tastes, whereas precisely 'higher' forms of music would be required to improve morality. Here we encounter the 'cleavage' in Jevons's music theory we already identified above. The music manuscript we examined earlier refines this observation. It is clear that Jevons has a somewhat solitary, intellectual and high-class conception of music. He prefers descriptive music which recreates biblical and historical scenes of beauty and grandeur for the listener. A piece of music should be studied like a book; it should be understood and remembered. This conception of music (or art in general) indeed allows moral elevation, and intellectual elevation also if the theme of the artwork may become a subject of scientific investigation as well. The concept of 'perceptive pleasure' covers the tension between the intellectual and emotional aspects of music, and is not a valid analytical concept to differentiate 'higher' from 'lower' forms of music. It is unclear whether a 'careful intermixture' of different kinds of music (and classes) is possible.

Here we encounter a general problem in Jevons's thought. White (1994a) elaborates on a general 'cleavage' in Jevons's political economy between the individual of the theory and the character of a concrete person. This is especially visible in Jevons's discussion of the reduction of working hours, which he opposed. A reduction of working hours would only give rise to a greater drunkenness. Moreover, the majority of the population (labourers, artisans, white-collars) would prefer 'greater ease' in case of rising wages, whereas a small exceptional class of 'learned professionals' would work more severely in case of increasing incomes. Jevons's economic theory is constructed around the notion of a 'representative individual', but in his practical surveys terms of class and character should bridge the gap between theoretical agent and concrete individuals. The 'representative

¹⁴Charles Corkran, a Unitarian minister, remarks in a letter to Jevons that he agrees with Jevons's suggestions, but he states that concerts in London are difficult because of reasons of climate and distance. He already proposed a similar policy to "a very active Broad Church vicar", but the proposal fell through (Black 1977:292).

individual' is based on Jevons's image of the Victorian middle-class : the labourer in Jevons's theory would, in the absence of other motives, devote all energy to the accumulation of wealth. Since this definition does not fit in the case of lower class people, Jevons's description of character and class behaviour relaxes his 'ceteris paribus' definition of the labourer. Different solutions for economic problems emerge when different characters are involved.¹⁵ In this case, Jevons's intellectual, solitary and upper class conception of music may be ill suited to the problem of the elevation of the taste of the aggregate of low class people.¹⁶

Conclusion

Our reading of Jevons's music manuscript confirms once more that his large oeuvre should be considered a unified whole.¹⁷ Jevons's utilitarian project of the 'science of man' consists of many surveys from several disciplines, including the 'science and art of music'. His general methodology entails the construction of a (representative or average) individual and the application of this notion to a concrete case by taking elements of 'character' into account. In the case of music, the manuscript may be seen as the toolbox in which the individual perceiver is created. This individual is then used in Jevons's 'Amusements of the People'. Unfortunately, Jevons's solitary and intellectual conception of music is unsuitable for an elevation of the morality of the masses. It is therefore doubtful whether his programme of moral elevation can be brought into practice. We showed above that *The Spectator*, in 1878, questioned whether the masses ask for morally elevating art. This argument can be put otherwise : Jevons does not take the role of demand for art into account. This is an important problem, as the role of art changes in the 19th century, and the importance of demand increases heavily.

The second half of the 19th century saw the emergence of a new function of the artist, depending increasingly on markets and sales instead of traditional patronage. Pierre Bourdieu (1979, 1994) refers to this change as the battle of artistic legitimacy. One of the main effects of this change was that art works no longer resulted from a reflection on the world, but rather became anticipations of public demand. Attention was diverted away from large, officially sponsored historical pieces in favour of more portable forms, such as picturesque landscapes and portraits. Alexis de Toqueville made similar remarks in his *Democracy in America*. He argued that the role of art in a democracy differs fundamentally from its position in an aristocratic society. In an aristocracy all art is consumed by a small group of privileged people which are difficult to please, and therefore art is created by craftsmen which strive for perfect workmanship in order to maximize profits. When the

¹⁵See White (1993) and White (1994b) for Jevons's use of the category 'race' and White (1994c) for Jevons's use of the category 'gender'.

¹⁶Elsewhere, we elaborate on the general problem in Jevons's thought that he is unable to link conceptions of individuals with conceptions of aggregates of individuals (Mosselmans 1998b).

¹⁷See Mosselmans (1998b) for similarities between Jevons's logic and economics.

privileges have been abolished this situation changes dramatically. As soon as the standards of wealth are generally moderate (without however introducing superfluity), the universal desire for comfort among the people encourages the taste for the useful, rather than the love of beauty. This explains, according to de Toqueville, that the painters in his days try to copy nature as exactly as possible, whereas earlier artists tried to do better by adding beauty to beauty, and by showing glimpses of divinity. The modern craftsman maximizes his profit by selling products of average or inferior quality to as many people as possible. Toqueville writes :

To arrive in a country and find some things admirably made tells one nothing about the social conditions or political institutions of that country. But if one finds quantities of things generally shoddy and very cheap, one can be sure that in that country privilege is on the wane and classes are beginning to mix and will soon lose their identity (Toqueville 1966:434).

This is precisely the goal of Jevons's music policy : to establish an intermixture of classes which would raise the morality of the lower classes ('aping the upper class', see above). But Toqueville's analysis of the role of art in democracy and aristocracy shows that Jevons maintains an inadequate view on the content of art works. His higher forms of music should be seen as examples of Toqueville's aristocratic art forms, which are therefore inadequate in a democratic society. Unlike Toqueville, Jevons did not perceive the changing role of art in his days, which led to a greater emphasis on demand in the art market. The popularization of culture has been a slow process, which started in the early 19th century. It required mass media interest and a receptive middle class, elements which Jevons ignored in his analysis.¹⁸

¹⁸See Grindhammer (1975) for a description of this process in America.

Chapter
On the Functions of Music.

By functions of music is partly meant what one should call the use of music, but not exactly so. If we were to speak of using music, we should imply that it was a sort of instrument, one of pleasure no doubt, which we could employ or may avoid at will.

But music is more than this; it is an integral part of a man, of the musician of course more especially, but of all men more or less; they could not lay it aside any more than they could one of the perceptions or faculties of their minds when once developed; and they use it by nature as they use any of their senses, rather than as an instrument supplied by art. By "functions" of music then is meant more exactly the part or position occupied by it among the occupations & capacities of men.

Before attempting to explain what I believe the [the] part of music really to be, I must call upon the reader to bring before his mind as distinctly as possible a certain feeling that all have no doubt been conscious of, to a greater or less degree, on innumerable occasions. It is excited by the contemplation of subjects of Interest Beauty or Sublimity, and consists of a gentle excitement, an engrossment of the thoughts by agreeable subjects and a general removal of the mind from its ordinary course of duties & frailties, and its continual mixture of slight pleasures and pains.

When rising to an unusual pitch, the feeling of which I speak becomes an intense delight; it absorbs the attention completely, and causing it to forget ordinary affairs and thoughts, elevates it to a region of pleasurable sensations nowhere else discovered. It is indefinite however, leads to no conclusion, suggests it may almost be said no leading or strong thought or purpose and even of one's future path in life, or unavoidable duties happen to occur to the mind in the midst of this sort of intoxication, they appear smoother than ever before, the difficulties have entirely vanished and oneself feels such a sort of confident moral strength, as will only too soon be found to disappear when this state of feeling has ended and the petty or great difficulties of life once again visible in all their reality. Who that has attended a concert, play or other public performance, has not experienced this sudden and almost disgusting revulsion of feelings at its termination when the music has finally ceased & no longer rivets the attention, and a dreamy progress home, and a renewed circle of duties and the sorrow are all that seem to await one.

This feeling, too, is often excited more or less, by every pleasant country walk, by sight-seeing by beautiful and extensive views or grand and striking scenery on sea or land, by magnificent architectural or engineering works or a fine piece of poetry, or lastly by music whether in the wonderfully grand and sublime Oratorios or the sweet and exciting Song. It arises in short from the contemplation of anything possessing a degree of fresh interest beauty or grandeur and is accompanied by cheerfulness or good humour, often rising to excitement or a sense of impressiveness. Let the reader

bring to his recollection as many occasions as possible when this has been felt and by a short reflection try to obtain as clear and definite an idea of its nature as he possibly can.

To investigate its cause would be to enter one of the most difficult and least certain of metaphysical subjects and be quite beyond our purposes. It will suffice to say that it does not depend in any particular degree on knowledge. A pile of rocks is no grander in this point of view after their geology has been examined, the beauty of a forest scene is not increased by a botanical acquaintance with the trees and plants composing it, nor is a knowledge of colouring or harmonical composition necessary for the enjoyment of excellent painting or music, though no doubt all knowledge & such acquirements refine the mind and tend to make it more susceptible of such impressions. A large & well-designed piece of architecture is pleasing and distinguishable from less masterly works in a manner that it is hard to understand; the essential nature of Poetry it is universally acknowledged to be almost impossible to define, and lastly the sense of beauty or of melancholy arising from a simple succession of sounds, that is to say an air or melody, is equally inexplicable.

But this feeling belongs to the perception, not the reason and is far below the level of a somewhat analogous but feebler feeling produced by the contemplation of wonderful and beautiful facts of science or knowledge in general, or those fixed principles and enduring convictions & emotions which form religion and all our sense of love and duty.

I have occupied so much space in considering this abstract subject, because this feeling it is, which proves the high position really held by music and which naturally suggests itself as a means of classification that is to say as the characteristic of the class in which music falls. We may define it conveniently by the somewhat comprehensive term of Perceptive Pleasure meaning any emotion, usually an agreeable one, produced by subjects of nature or art through the medium of the senses or mind but without the necessary exercise of the higher faculties of reason. Now it will be remembered that I have spoken and I believe with truth, of a large number & variety of objects or circumstances capable of producing perceptive pleasures. I enumerate them all and place them in one grand class, because the relation of each to the mind and its faculties are throughout of much the same nature or order, but they naturally fall into subclasses according to the sense or means through which they act on the mind. Music evidently belongs exclusively to the sense of hearing. The Exterior of nature and artificial works of beauty and grandeur, as well as their artificial representations by pictures, sculpture etc., act principally on the eye in the sense of sight, but these as well as music it must certainly be allowed, are more or less connected with the third and highest division of perceptive objects, viz. poetical ideas or mental pictures of beauty, and though even these may not quite comprise the origin of every form of what I have called perceptive enjoyment, the remainder are but insignificant in proportion & closely dependent on these.

All these objects and subjects which occur to me are fully represented in the diagram on the following page, under their respective subclasses.

The central & main division is that of Poetical Ideas which are however so closely connected with & derived from Natural Objects that the latter are placed along side in corresponding order in a column of their own but under the heading of Sight. In parallel order likewise on either side are the artificial representations of these ideas and objects by both sight & hearing, in the columns respectively of Art & Music and we have thus exhibited to us both the close connection yet evident distinction of all these sources of perceptive pleasure.

QuickTime™ and a
GIF decompressor
are needed to see this picture.

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