5.1. The (pop)rock singer: a self-taught or skilled artist

Samuel Tomeček

Abstract
The paper focuses on the relevance of training rock music singers in regard to the most frequently used (pop)rock vocal techniques. Although rock singers originally began as an opposition to an older generation of musicians or they used avant-garde and experimental interpretational practices, rock music gradually developed specific vocal and singing techniques that enriched the existing ones with particular nuances. What had originally belonged to the rock opposition became, over time, a part of pop music, and experimental or unusual singing techniques became a part of the mainstream. Several vocal techniques, such as belting, speech level singing, various types of guttural singing, and the classical bel canto have been used throughout the history of (pop)rock music. Using the examples of particular musicians (e.g. James Hetfield, Dave Grohl, Chris Cornell...), the paper analyses the historical development and relevance of (pop)rock vocal techniques. The author explores how initially self-taught singers and experimenters with untrained voices can learn to improve their vocal techniques. The development of rock styles in the world and the self-taught - trained singer relationship in a musical environment have been accompanied with natural explorations of new singing possibilities. Using a selection of distinct rock singers, this paper puts vocal practices of self-taught and trained rock vocalists into a historical context. It also analyses the formation of a vocal tone, which is demonstrated by the recordings of prominent world, as well as Central-European singers. The article aims to dispel doubts about the (no)need for a vocal training of (pop)rock singers.

Keywords: singing, pop music, mainstream, vocal technique, vocal training.

Introduction
The human voice is the most universal source of sound. We do not classify it as a musical instrument; the research of the human voice is perceived as an independent discipline of musicology from the boundaries of organology. We all possess it since birth, and yet we cannot utilize it sufficiently. Not only singers, but also presenters, teachers and physicians use their voice on a daily basis, and all of them need some vocal technique for their work. Of course, the singer can develop his/her career and have no singing or vocal technique, but its utilization can ease their work to a greater extent.

Let us start with a definition of “singing”. By what does it differ from the spoken word? By intonation. And what is the condition for this first-rate intonation? It is imagination.

Rock vocal techniques
We will introduce our overview of the singing techniques used in rock music by a survey of their development. At the time of the rock music beginnings, singers usually employed a natural way of singing, lacking any kind of vocal technique, whether a classical bel canto technique or another one – e.g. shouting in Afro-American folk music. At the time of the nascent rock era, the singers disregarded the need for technical enhancement of their singing, on the one hand due to the deliberate rebellion pertaining to rock as a newly-born style and on the other hand due to the shortage of voice teachers specializing in rock. An enormous rise in the rock music popularity, also brought about the rise of the number of concerts worldwide, and this led to excessively demanding conditions for rock musicians, especially singers. All this resulted in the necessity of their professionalization, and thus in the usage of singing technique and collaboration with voice teachers. Our analysis will confirm it by presenting a considerable technical development of the singers in particular periods of their career. Of course we can find exceptions, e.g.
Freddie Mercury, Prince, Michael Jackson and others, who were excellently technically equipped from the outset of their careers.

The commercial success of rock groups and performers also induced the pressure from the side of producers and managers demanding the improvement of the performing quality and maximal endurance during the performance. On the other hand, the voice teachers of the time had to adapt to new trends and specifications of the rock genre. The origination of new rock styles brought about the introduction of new expressive devices in the vocal performance, resulting in the birth of new singing techniques; we are speaking particularly about guttural singing used in screaming and growling techniques. Screaming in its natural appearance started to spread in the 1970s, mostly in hard rock and metal. For instance, James Hetfield from Metallica used it as an additional expressive device in their first album from 1983. This vocal technique established itself in rock music permanently no sooner than in the 1990s, when it became more elaborate, and some voice teachers specialized in it particularly. It was no longer used exclusively as an expressive device in short passages of the compositions, but as the main vocal technique, on which the whole or almost the whole composition was built, e.g. Chester Bennington from Linkin Park popularized it widely, not only as a stylistic rock modification for a smaller fan base.

Searching vocal techniques in the historical development of rock music, analysing a number of male singers chronologically, we came to the conclusion that the classical bel canto technique is the basis for the entire American school of belting, speech level singing (singing with the mix) and their various modifications. This is also confirmed by the voice teachers themselves, either on their websites (Seth Riggs, Ken Tamplin, etc.), or by the use of the same kinds of vocal exercises, breathing technique, voice placement, usage of registers and others.

**Voice and health**

Proper vocal technique protects the vocal cords during the singing performance. Considering the frequency of public appearances of professional singers, the singer has to do more than 20 two-hour performances in a month; it could be a huge problem in the course of time without a proper vocal technique. It is possibly, also attainable by using the natural technique, but if the singer gets a bronchopneumonia, tonsillitis etc., during the tour, and he cannot cancel the concerts due to contracts, then the proper vocal technique can “save his life”. Regarding the injury of vocal cords, it is necessary to consider each instance individually. Vocal cords are muscles that can be injured like any other muscle, for example by untechnical shouting. A polyp can be formed on them, or, in layman’s terms, a small vein can burst. Similarly to a top level sportsman whom can be injured during his training, so can a singer be caught unaware. The majority of such injuries result from the excessive number of performances and singing while indisposed. Also, a technically sound singer can be swept along by emotions during the performance, thus bring about some health damage.

**Selected examples of rock singers’ analyses**

James Hetfield’s (*1963) baritone differed from metal voices of the time (groups like Anthrax, Slayer, etc.). It excelled by its greater melodiousness combined with aggressive singing without a distinct pitch and possessing a characteristically low voice, still accentuated by the chest register. From the beginning of his career he had been using guttural distortion instead of high screaming tones in order to accentuate aggressiveness. Thus his voice acquired a substantial deepness and evoked the impression of very high tones at the same time; James didn’t need to sing in such an extremely high pitch around C’ and higher so often. It does not mean he avoided them, he only did not use them frequently and the listener did not realise it was a source of tension. In his compositions so far, he had used the range of almost four octaves (using also falsetto and screams). On the recordings from the 1980s, his voice has not been so deep as it had been since the 1990s. From the first album *Kill’Em All* (1983) till 1991 he used a natural vocal technique, although the first instances of the screaming technique appeared here, e.g. in the piece *Seek And Destroy* (1983). Here he uses screaming in the chorus from 1:49 on the b flat in the word “destroy”. In some choruses we can sometimes hear him singing out of tune on the prolonged tone e’ in the word “searching”. During the recording session of the album *Metallica* (1991, an alternative title is *Black Album*) James lost his voice, because he had forced it over excessively. In addition to the audible voice murmur he was not able to intone properly. He had to find a voice teacher who helped him to get back the proper vocal placement and introduced him to the bel canto technique. For this album the band also recorded the world-known ballad *Nothing Else Matters*
(Figure 1), in which they used large strings with deep heavy-metal sounds, atypically for the heavy (thrash)-metal bands of the time. Here, James presents his smooth balladic character in verses contrasting with the “distorted” full voice in choruses. At the end of the phrases in the second verse and in the third chorus he uses another distinctive effect: he prolongs the vowels “u:, o:, e:” in conspicuous exhalations.

![Image](image-url)

Figure 1 – (Transcribed by Samuel Tomeček)

Familiarizing himself with the bel canto technique, he improved his voix mixte, working with false vocal cords to create distortion, which he uses less frequently (mostly at live concerts), and his screaming technique. His full voice is deeper and purer. Sometimes he also uses cantilena. All these aspects of improving his vocals can be noticed in the piece Saint Anger (2003), for example.

**Chris Cornell** (*1964) forever entered the musical public awareness with his world-famous piece *Black Hole Sun* (1994) using a vocal technique, belting to collaborate with his enormous vocal range G – g'. Cornell’s tessitura is baritone and the belting technique is his vocal domain. However, he also included a new technique of screaming into his vocal performance. It is a new technique combined with the already familiar technique of belting, which indicates advancement in the rock music development. For example, Cornell uses high-pitched screaming in the piece *Outshined* (1991), where at 3:35, after a short humming “mm” he sings legato on c’ one beat long, then on d’ almost two and half beats on vowels “o:o:o:”, six bars later again on d’ in the word “outshined”, where it is just the prefix “out” which is one beat long. “Shined” is sung again with full voice one octave lower. Thus in this piece the belting is combined with screaming, which is very interesting from the aspect of the technique development. In another piece *Shadow of the Sun* (2002) by the band Audioslave he used another kind of screaming, fry screaming. At the end of the piece at 5:04 and during the following eight bars in the lyrics “Shadow of the sun” he used this technique with a clearly discernible pitch intonation. Then in the final two bars of the piece he sings legato twice on the word “sun” for four beats long, using a rich timbre spectre, but this time without an explicit pitch.

Generally it may be said that all Cornell’s vocal creation is typically recognised by long legatos, technically perfected belting (using false vocal cords for more or less distortion of the voice, thus adding to it a unique timbre), which can be used simultaneously with screaming, full and muffled voice, voix mixte and falsetto. He does not avoid a soft tasteful vibrato, either. All these nuances are combined together into one composition, like in the piece *Fell on Black Days* (1994). His articulation is a typical attribute of his, and it has been changing during his career. It is true that once a singer gets on a technically high level, he/she can dare to articulate less clearly, mostly in lower ranges, but also in the higher ones; however, the comprehensibility of the lyrics diminishes. He partly displayed it during his work with the band Soundgarden (*Fell on Black Days*), in the project Temple of The Dog (*Hunger Strike*), and especially during the collaboration with the band Audioslave with their first eponymous album. We often see it in more balladic and slower pieces. Thus an interesting effect occurs, when the whole composition appears as if it to be tied (cantilena), disregarding his untypical phrasing (frequent up-beat entrances, melodic R&B embellishments, and phrase endings, e.g. in *Like a Stone*). Typical of Cornell’s phrasing and vocal work is the joined and interesting harmony that can be displayed, for example in the second verse of the piece *Black Hole Sun from 1994* (Figure 2).
While all Cornell’s work is mostly based on a distorted guitar sound, his dynamic handling of voice, bridges through vocal registers, voice timbre, agogics and interesting phrasing joined with the above-mentioned technical nuances, especially comes to the fore in independent unplugged performances (guitar, singing). One of his top unplugged performances is a cover version of Michael Jackson’s *Billie Jean*, but he is also well known for his own works, e.g. *Like a Stone* and *Black Hole Sun*. While he is playing and singing one single phrase, a dynamic progress from piano to fortissimo can occur. Simultaneously, the dynamic development of various accents and tempos will appear (and while playing rubato, the usage of fermatas also act as agogic devices). Cornell’s vocal performance is markedly influenced by older gospel and R&B singers. His most recent album *Scream* (2008) confirmed it, which borders on R&B and dancing pop, while Cornell keeps his standard rock performance while singing.

The natural voice register of Dave Grohl (*1969) is tenor (he used the lowest sing tone $E$ in the piece *Learn to Fly* in a bridge at 2:57). Similarly to other rock singers Dave has some specific characteristics in his vocal performance. Due to his preference to piercing, rock vocals, as he doesn’t have a natural hoarse voice like Louis Armstrong had for example, he needs to distort his voice quite often (with the help of false vocal cords). We can see it for example on a recording of *Learn to Fly* (1999), where in choruses he reaches the highest tone of the whole composition $f$ sharpe by a pure full voice without hoarse timbre ingredients. On the contrary, on other recordings, e.g. in the first verse of *Pretender* (2007), he uses a discernible distortion in full voice on the tone $e'$ from 0:36, which is still more accentuated by higher dynamics in a chorus from 1:23. To produce such a timbre, or sound effect, by his voice without hurting his vocal cords, he inevitably has to use a precise vocal technique. Similarly to Chris Cornell and other rock singers, he uses the belting technique. His massive distortion in the high register is attainable only by the usage of correct exercises, and an enormous capacity of the lungs in combination with a perfect handling of breathing. Indeed, the more resonant effect on albums is achievable in the studio also by a superimposition of several unisono voices. He also uses a technique of screaming (fry screaming), which is noticeable in an almost thrash-metal piece *In Your Honor* (2005) from the eponymous double album. It is in this piece where one of the most distinct usages of screaming can be found through Dave Grohl studio recordings. Following the two-bar rest and a deep inhalation on 3:21, which can be described as an exemplary preparation for a scream, the scream itself comes held in four bars, maintained by a legato without a distinctively discernible pitch, and descends from $e'$ gradually to a tone one octave lower. The other, acoustic CD from the double album can be seen as an absolute opposite. On it we can find e.g. a duet with the singer Norah Jones in a Latino piece *Virginia Moon*. He is handling his fine velvet voice in a very untypical way in an almost baritone register. He has displayed interesting work with his voice in the latest piece, *Razor* (Figure 3), in an ambient acoustic style. In a short segment he also displayed some other vocal skills, which would not show off in rock pieces. At some places in verses “wake up, it’s time, ... mind ...” the use of a very fine vibrato ending the phrases is interesting. In choruses he also uses a tiny melodic embellishment on the word “razor”. Similarly, we can notice his tied singing, which helps to complete a pleasant air of the piece.
Chester Bennington (*1976) – his vocal excels by a flawless screaming technique, fry screaming in particular, and its combination with a pure bel canto and a “distorted” singing. His tessitura is tenor, and he practically never uses a pure falsetto or a head voice. Mainly in the high register he forces his voice by the use of false vocal cords and “distorts” it considerably, what is typical for him in each of his compositions. We can use the piece Numb (2003) (Figure 4) as an example, where in the first verse (8 bars) he uses the range of a – d’ in a cantilena of a pure voice in mezzopiano. Then 6 bars of a bridge come in the range of c sharp’ – f sharp’ in the same voice timbre, which is concluded by a straight legato on e’ in a crescendo as a preparation for the chorus. The chorus itself is distinctive by a distorted voice in forte in e’ – g sharp’; that means, he uses two characters of vocals in the same register.

![Figure 4 – (Transcribed by Samuel Tomeček)](image)

We could find an uncountable number of examples of screaming by this singer; the longest one belonging in the piece Given Up (2007), whose duration is more than 17 seconds in a 7-bar-legato from 2:27. Another unusual sign is rap combined with distorted singing, e.g. in the piece Papercut (2000). In the first verse from 0:51 he raps during four bars, concluding them by a distorted voice on words “but in my skin”. A confrontation of Chester with Chris Cornell in live performances in 2008 (music project Revolution) is interesting: three different singing techniques are juxtaposed (belting with bel canto and screaming) in two duets Crawlin (Linkin Park) and Hunger Strike (C. Cornell).

Presenting here American singers, let me introduce you one example from the Slovak rock scene beside them. Mário “Kuly” Kollár (*1972) governs the baritone tessitura, which can be characterized as a dramatic one. His vocal sounds are respectably compact in full voice during the whole range of almost two octaves. It does not weaken even on the highest tones around a’. “Kuly” started in the Desmod band in the 1990s as a natural singer. It is interesting that in that time, from its beginning until the release of its first two albums 001 (2001) and Mám chuť… (2003), the Desmod band played metal, almost nu-metal. But for both these styles, a “yelling” belting or screaming way of singing is typical, which “Kuly” does not use. With his typically tinged vocal he brought a more cultivated, softer and still more romantic pop-rock performance with an increasing number of bel canto elements. Studio recordings did not reveal any problems, but live performances till 2008 often brought audible out-of-tune singing in a higher register. It is a question whether this off-key singing was caused by the lacking of vocal technique, poor onstage monitoring at live performances, or stress-related issues which “Kuly” has been fighting for years. One thing is for sure: after a 12-year-long singing career “Kuly” decided to find a voice teacher, who apparently helped him with his technique, which is confirmed by the latest live concerts of the Desmod band, of which “Kuly” is the frontman. In 2006 they released a CD Uhol pohľadu, where he sang a cover version of one of the most popular songs of a significant deceased Slovak singer Karol Duchoň – V dolinách. In this piece we can notice “Kuly’s” voice’s characteristic features and nuances. His vocal “a, a:” is not as conspicuously covered as a classical bel canto would demand it, but despite this we can say that cantilena is his domain. He belongs to a small number of singers in Slovak pop-rock mainstream who use it frequently. Another distinctive attribute of his is a characteristic vibrato, applied mainly on the long vowels of the lyrics “v dolinách, mám ho rád”. Another fact of interest is that he does not use the distortion despite its – we can say – stylistic necessity. Let us also mention the fact that “Kuly” does not use either falsetto or head register on his recordings or concerts.
Conclusion

Proper vocal technique generally helps with easy singing, juggling the voice and materializing the singer’s image into particular tones, having the best possible expression. This is also the only way how to help protect one’s vocal cords from the excessive number of performances. It is one thing to practice the technique at home or to record it in a studio, but quite another thing to perform the song in front of a live audience at some major concert. Routine/habit, practice, musicality, singing techniques and effortless of singing, all these contributes are needed in order to become a good singer; to manifest into an idle for the next generation of singers. Simultaneously, all of the analysed singers that we referred to, are not only performers or singers, but are also composers. Their songs became world-renowned hits and addressed a large audience at the time, and could possibly still influence a younger listener. Musicality is the way and singing techniques are the tools to materialize our imaginations.

Funding: This work was supported by VEGA grant 1/0086/15.

References


