

## Making music in *Orquestra Geração*: From discipline to empowerment?

Pedro Santos Boia

*CIPEM – Centro de Investigação em Psicologia da Música e Educação Musical / INET-md, School of Education, Porto Polytechnic, Portugal*

psboia@ese.ipp.pt

Graça Boal-Palheiros

*CIPEM – Centro de Investigação em Psicologia da Música e Educação Musical / INET-md, School of Education, Porto Polytechnic, Portugal*

gbpalheiros@ese.ipp.pt

### Abstract

This paper presents results from a larger research study that investigates how social inclusion through music may be promoted in *Orquestra Geração* [OG], the Portuguese version of Venezuela's *El Sistema*. A case study of OG is examined in order to gain a better understanding of the actual mechanisms through which music making may eventually be "transformative" and produce changes in the lives of the young participants through the acquisition of dispositions and skills. Selected videos of rehearsals combined with semi-structured interviews with OG young players were gathered and analysed. Results of the interviews indicate that orchestral socialization in OG has consequences for the participants' sets of dispositions and skills. As such, OG may successfully empower participants, fostering inclusion and eventually social mobility. Rehearsal practices and processes through which these dispositions are generated and internalized by participants were examined using a video recording of a rehearsal. The findings show that the interactions between conductor and players, the production of order and discipline, and music making (sonic materials, instrumental playing) constitute an active part in these internalization processes. A critical reflection about discipline and its wider implications for education is presented. Rather than providing definitive answers, the data here should serve as a catalyst to stimulate discussion.

**Keywords:** El Sistema, discipline, dispositions, skills, social inclusion

## **Introduction**

*Orquestra Geração* [OG] is the Portuguese incarnation or appropriation of *El Sistema*, primarily aimed at children and adolescents that are more vulnerable or at risk socially or educationally. Participation in these types of programmes may foster the acquisition of dispositions and skills through music learning and making. By approaching OG as a case study, our aim is to increase our understanding of the actual processes through which music and musical practices may have "transformative power" (Tunstall, 2013) in the lives of young participants. This study is part of a larger investigation of how social inclusion may be promoted through music making in OG<sup>7</sup>.

We approached the socialization process within the orchestra by investigating how dispositions (Bourdieu, 1977[1972], 1990[1980]; Lahire, 2003, 2011) are generated and internalized in real-time during orchestra rehearsals. Defined as socially produced predispositions for acting, thinking and judging in certain ways rather than others, these dispositions may potentially configure themselves as skills and these skills may then empower young people by promoting their social inclusion and eventually social mobility.

'Musicking' (Small, 1998), understood both as collective and organized activity and a means of socialization, generates dispositions and ways of acting that are potentially transferable to other realms of life (e.g. academic performance, future professional trajectory). Furthermore, being "active ingredients" of social life (DeNora, 2000, 2003), sonic and music materials, musical instruments and instrumental playing are constituents of both 'musicking' and socialization, which become resources for the production of social order, cognition, embodied action and identities (ibid).

This paper addresses the musical practices and the interactions between participants that occur as part of the work carried out collectively to achieve a common goal: effective and productive rehearsals followed by good public performances. Particular attention is given to how order is produced in rehearsals and to how the participants' practices are organized and disciplined.

---

<sup>7</sup> This research is supported by FEDER Funds through the Competitiveness Operational Programme - COMPETE and National Funds via the FCT – Foundation for Science and Technology within the project PTDC/CPE-CED/120596/2010.

## Method

This study investigated selected rehearsals of the annual OG summer camp in July 2013. Summer camps are special events in which OG nuclei from various locations gather in one school to play together under guest conductors, some of whom from Venezuela's *El Sistema*. During these events, children spend a few days away from home, daily schedules are fully devoted to section and tutti rehearsals, and there are several concert performances. Summer camps are intended to be a response, even if temporary, to the quest for "intensity" (in terms of work, number of participants and sonic outcome) which in OG is not as high as in *El Sistema*, but is nevertheless an explicit concern of the project implementers and leaders<sup>8</sup>. Even though more intense, the activities carried out at summer camps have features in common with the everyday routines that take place during the rest of the school year. Participating in summer camp activities and working with guest conductors represent specific moments of OG's life, which have their own contingencies. However, to a certain extent, they also reflect aspects of the orchestral training that takes place during the academic year.

During the OG summer camp, a video camera was positioned strategically in the rehearsal room. Placement of the camera was as unobtrusive as possible while maintaining an angle that captured as much of the action as possible (see Heath, Hindmarsh & Luff, 2010). All rehearsals were recorded and recordings were subsequently viewed, in full, multiple times. Relevant excerpts were categorized and systematically analysed both quantitatively and qualitatively. The analysis focused on what conductors, teachers and students say and do and how they interact, considering bodily actions, gestures and embodiment, as well as aspects of musical interactions and performance.

In addition to the video recordings, semi-structured interviews were conducted with OG participants. This paper reports the results of seven semi-structured qualitative interviews with children and adolescents from the *Apelação* OG nucleus. Interview questions addressed their socialization and trajectories before participation in OG, as well as their experiences as members of OG and the subsequent impact of those experiences in other realms of their lives. The aim was to understand to what extent orchestral socialization within OG may change the participants' internalized sets of dispositions and skills.

---

<sup>8</sup> Interview data



## **Results and discussion**

Semi-structured interviews: Dispositions and skills as resources for inclusion and empowerment

Dispositions, as defined in sociological theory, are "principles which generate and organize practices and representations" of social subjects (Bourdieu, 1990[1980]:53). They are produced and structured by the conditions of existence specific to their positions in social space (*ibid*; see 1977[1972]:72). The dispositions are internalized – or 'incorporated' – by subjects through the socialization that occurs within family, at school, at work, etc., and they are "durable" and "transposable" (*ibid*). The purpose of this study was to detect dispositions that are produced by music making and learning, and are potentially transferred to and active in other realms of life (Lahire, 2003, 2011) such as school, family, and peer groups.

The accounts of OG young participants from the *Apelação* nucleus collected through interviews indicated that new dispositions were developed or old ones changed as a consequence of being part of OG<sup>9</sup>. Broad categories of these dispositions include:

- Group work, including collaborative peer teaching and learning and mutual help
- Relational skills (e.g. "I learned to interact with people")
- Heightened sense of responsibility
- Better concentration (at school)
- Discipline, attention and mutual respect
- Time management and self-regulation skills
- Widened musical tastes and cultural practices – starting to enjoy 'classical' music and going to concerts

In addition to learning how to play an instrument or read a musical score, musical practices in OG shape participants' socialization by generating ways of thinking and acting (and 'behaving') that may configure themselves as skills and abilities potentially transferable to extra-musical settings (on transferrable skills see Bridges, 1993; Pellegrino and Hilton, 2012). "Concentrating better" is a cognitive skill, while "discipline, atten-

---

<sup>9</sup> The preliminary analysis of a total of 35 interviews with young participants from four OG nuclei (*Amarante*, *Apelação*, *Vialonga* and *Miguel Torga*) has shown similar results. The accounts of school class directors and teachers also suggest an improvement in school performance of students who participate in OG.



tion and mutual respect", an increased ability to interact and work with others and to manage one's time, and a "heightened sense of responsibility" refer to ethos and ethics, attitudes, and postures. These are by no means less important as skills often seen as 'personal qualities' that are valued by society (including the school and job market). Objectively, by facilitating access to certain positions in the social space and thus widening up the range of possibilities, these dispositions and skills are resources that may empower individuals and foster their social inclusion and social mobility.

Musical socialization in OG may have consequences. However, what are the actual practices, processes and mechanisms that lead to those changes? A careful analysis of the video-recorded rehearsals served as a means to investigate this issue. Below we present the results of a portion of a video-recorded rehearsal.

Video recording analysis: aspects of orchestral socialization in real-time

The first half of a rehearsal with a guest conductor from Venezuela's *El Sistema* was analysed. This part of the rehearsal was exclusively devoted to the practising of "scale techniques". The categorization and frequencies are shown in Table 1.

Table 1. Categorization of selected rehearsal events

Categories	Subcategories		Events
1. Conductor's leadership and mutual tuning-in of participants	1.1-pitch		[numerous]
	1.2-rhythm		
	1.3-dynamics		
	1.4-articulation		
	1.5-playing in sequence/'canon'		
2. Manifestation of authority and motivation	2.1-negative reinforcement		[twice]
3. Conductor's verbal orientation & feedback	3.1-general verbal feedback	i) stimulating self-assessment	[1]
		ii) highlighting importance of being focused	
		iii) expressing trust/ but no condescendence	

Conductor's leadership and mutual tuning-in of participants

Through body gestures, moving his arms, but also clapping the beat and counting loud "one, two, three, and...", the conductor leads the OG ensemble socially and aesthetically through an ongoing relational process between conductor and musicians, "showing them the sound" (Koivunen,

2011). Sometimes, he also gives instructions related to instrumental technique.

In the development of the orchestra, discipline has been crucial. "Because orchestral music requires many instrumentalists to play the same thing at the same time, orchestras demand a high degree of musical discipline" (Spitzer and Zaslav, n.d.). The aesthetical aim of achieving similar intonation, attack, articulation, dynamics, phrasing, bowings (in the case of string instruments) and even fingerings explains the emergence and the institutionalization of the role of the conductor, particularly from the 19th century onwards (see Spitzer et al, n.d.). Having developed from the earlier "time beaters", the conductor stands on the top of the orchestra hierarchy. With his conventionalized conducting gestures, he plays a crucial role in helping the musicians "play the same thing at the same time".

As they rehearse the scales, the players progressively begin to play more in tune and more precisely together. The maestro 'orchestrates' their cognitive and embodied actions. Not only do they adjust to the conductor, but there is also a mutual 'tuning-in' to each other (Schutz, 1951). Playing scales is above anything else about playing 'in tune' and together – therefore, in such performance, it is particularly observable how 'tuning-in' is simultaneously a social and a musical process. Embodied interaction and visual and aural awareness are crucial in the production of intersubjectivity (Schutz, 1951). These "scale techniques" consist of playing scales in the same keys as those of the musical pieces from their concert programme, with variations of rhythm, dynamics (*f*, *p*, *crescendo*, *diminuendo*) and articulation (*legato*, *staccato*).

Since the orchestral tutti plays the same thing most of the time, togetherness in bodily-instrumental action is practiced and learned. In terms of pitch, the goal is to achieve similar intonation while rhythmically they aim at synchronized togetherness. They also play the scale in canon (each section playing in sequence), which enacts orderly, disciplined action and may favour the internalization of representations of hierarchy and order. Repetition during individual practice, lessons, and rehearsals is crucial to acquire the skills needed for musical performance. Simultaneously, such repetition potentiates the internalization of dispositions for self-control, social interaction and group work. This may be seen as an embodied, experiential way of learning discipline and orderly conduct.

Sonic materials (scale notes, intervals, rhythms), instruments and playing techniques (learned psycho-motoric actions on/with instruments) work here as 'technologies of self' (see DeNora, 2000, on music as a technology of self from the perspective of 'users'; Foucault, 1988) in the sense that

they discipline participants' bodily and cognitive actions. This happens through 'entrainment' – "the alignment or integration of bodily features with some recurrent features in the environment" (DeNora, 2000:77-78). In this case, the sonic properties of the scales and the musical instruments' own sonic and material properties serve as the environmental features. These situated ways of music making do not happen randomly. They are framed by historically rooted and institutionalized forms of organization such as the orchestra, as well as by roles, practices, repertoire, goals and aesthetic values.

#### Manifestation of authority and motivation

The conductor often counts and claps loudly to give the beat, saying "[we're tired and it is hot but] come on!", "wake up" "we must play", sometimes walking around with a very prominent posture. This is a strategy to discipline, motivate and energize the players. The rehearsal and concert routine is very intense during summer camps and the players, who had given a concert the previous evening, are visibly tired. Later in the rehearsal there is a clearer and explicit manifestation of the conductor's authority through the use of negative reinforcement (see Skinner, 2014[1953]:174-178). He threatens to delay the break until participants play the scale accurately. He then urges them to "put a smile in your face (...) and play C major, because if you don't do it..." He then claps to re-energize and motivate them.

What happens here? The conductor threatens twice to remove or postpone a previously scheduled pleasant stimulus (the break). The threat of an aversive stimulus (postponing the break until players play the scales accurately) is a strategy that intends to increase a desirable behaviour in participants (concentrating and playing well). The expected behaviour is that players will do their best to 'get it right' as soon as possible in order to avoid the negative stimulus.

The aim is to improve their musical performance. The conductor's level of authority in this rehearsal is partially a consequence of his own style and personality, since we observed variations among different conductors: some are more authoritarian while others interact with participants in a more relaxed way despite a similarly intense rehearsal environment. This reinforcement strategy is nevertheless related to intense repetition, which has been pointed out as a feature of *El Sistema* music pedagogical practices. This is intentionally used as a resource for learning and teaching with the aim of increasing the players' ability. They played eight scales for more than one hour. As a "labor-intensive organization" (Baker, 2014:133; e.g.

see Tunstall, 2013:28-29), discipline and authority have been also referred to as strong features of *El Sistema* orchestras (see Baker, 2014:190-198). Again, situated musical practices are framed by institutionalized practices, routines and pedagogies.

#### Conductor's verbal orientation and feedback

Throughout the rehearsal, the conductor often gives specific feedback, telling or reminding the participants about the structure of scales. Shortly before the break, he stimulates their self-critical awareness and self-assessment by asking "Do you think it was ok?" In silence and completely focused, they reply assertively "No". "But... do you know what happened?" [silence] "Can anyone tell me why we did it well when we played it in sections and now that we played the whole scale it didn't work?". Spontaneously, some say "lack of concentration". "Exactly!" the maestro replies, stressing this was the reason why some things during the previous night's concert did not go well. "When students lose their focus, all the work we have done is worthless: the cellos run, [etc.]" "So one must focus towards the great aim [the concert]".

Highlighting the importance of being focused in order to perform well, the conductor expresses trust in the participants: "well, I trust you and what you have learned". However, waving "no" with his finger, he shows no concession for them being tired or unfocused. It sounds as if he is 'lecturing' them, to make them realize the whole point of the *tour de force* of playing scales during the entire half of the rehearsal: practicing stamina, persistence and concentration. The internalization of such dispositions may be useful for performing both musical and extra-musical activities. Before they restart playing he tells them for the second time that they will not get the break until they play the scale correctly.

### **Conclusions**

Music may have "transformative power" (Tunstall, 2013), at least upon some of OG's young participants. This study sought to increase our knowledge of those changes and the actual processes through which they occur, through empirical observation and semi-structured interviews. The generation or reshaping of participants' dispositions through music learning and orchestral socialization is a key element of that change.

As shown in the analysis of the OG rehearsal, the transformative capacity attributed to music does not simply emerge from its aesthetic ('transcendent') 'powers', but very much from mundane practices and so-

cio-musical interactions<sup>10</sup>: the production of order and discipline, verbal, embodied and gestural communication and leadership, sensorial 'tuning-in', music materials, instruments, and embodied performance, all play a role. Music materials, instruments and music making practices are "active ingredients" of social life and identities (DeNora, 2000, 2003) by becoming *constituents* of the internalization processes. Acting as "technologies of self", music and instruments do not achieve that in themselves. Combined with words, gestures, ways of rehearsing, performing and teaching music, as well as with social, ethic and aesthetic values, music and instruments co-discipline the practices and postures of participants. Those practices are framed by Sistema pedagogies and modes of organization and by the conductor and the orchestra as historically rooted institutions with underlying structure, roles and hierarchies.

In his recent book, Baker stresses the need for a rational rather than emotional approach to *El Sistema* (Baker, 2014 - Introduction), deconstructing the tendency to idealize it. Dispassionate studies and debates on whether and how Sistema projects produce change are needed, but one must also reflect about the positive versus negative aspects of discipline in social and educational projects, as well as about which kind of discipline. However, both *a priori* idealism and over-criticism should be avoided.

The orchestra as a hierarchical and authoritarian model of society as well as the over-use of repetition in Sistema pedagogies have been the objects of criticism (see Baker, 2014, chapter 6). It is indeed important not to reify them but rather to explore the possibilities of alternative, more democratic models of the orchestra as well as opening up to a plurality of pathways for becoming a musician, while continuously assessing and, if necessary, re-designing music pedagogies. An authoritarian approach is certainly not desirable, but a moderate degree of discipline may be empowering, particularly for children and adolescents with less structured trajectories.

In the *tour de force* and final 'lecture' given by the conductor to OG participants in the rehearsal analysed here, he expressed trust in their work but also pushed their limits, highlighting the importance of concentration, effort and persistence in order to get the scales 'right' and play 'well' in concerts. As a performing artist a musician is given one attempt only in a given performance. There was a degree of authoritarianism (e.g. negative reinforcement) and one wonders whether more efficient and pleasurable approaches might have been used as an alternative to repetition of scales.

---

<sup>10</sup> We observed that some participants acquired dispositions of attachment to music and their instruments as a consequence of participating in OG. Therefore, we must acknowledge the importance of aesthetic experience in that "transformative power" as well.

Sometimes participants looked tired and perhaps bored. More than an hour of collective practice of scales could have been demotivating. But one also wonders if that *tour de force* of insistence and persistence – where discipline played a major role – besides training the participants' ability to focus and work hard, was perceived by them as a 'life lesson', in terms of attitude towards effort and work. "Raising expectations and challenging comfort zones" (Tunstall, 2015) through collective hard work may be empowering through the internalization of certain dispositions and skills.

What kind of discipline and how it is woven into educational practices, as well as the distinction between positive (gentle) authority and authoritarianism are aspects worth discussing. We should neither neglect the importance of pleasure in learning and making music nor undervalue positive forms of discipline and effort. Rather than providing clear-cut answers, the data presented here will hopefully stimulate this discussion.

## References

- Baker, G. (2014). *El Sistema: Orchestrating Venezuela's youth*. Oxford: Oxford University Press.
- Bourdieu, P. (1977) [1972]. *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Bourdieu, P. (1990) [1980]. *The logic of practice*. Cambridge: Polity Press.
- Bridges, D. (1993). Transferable skills: A philosophical perspective. *Studies in Higher Education*, 18(1), 43-51.
- DeNora, T. (2000). *Music in everyday life*. Cambridge: Cambridge University Press.
- DeNora, T. (2003). *After Adorno: Rethinking music sociology*. Cambridge: Cambridge University Press.
- Foucault, M. (1988). Technologies of the self. In L. Martin, H. Gutman & P. Hutton (Eds.), *Technologies of the self*. London: Tavistock.
- Heath, C., Hindmarsh, J. & Luff, P. (2010). *Video in qualitative research: Analysing social interaction in everyday life*. London: Sage.
- Koivunen, N. (2011). Show us the sound! Aesthetic leadership of symphony orchestra conductors. *Leadership*, 7 (1), 51-71.
- Lahire, B. (2003). From the habitus to an individual heritage of dispositions: Towards a sociology at the level of the individual. *Poetics*, 31 (5-6), 329-355.
- Lahire, B. (2011) [2001]. *The plural actor*. Cambridge: Polity Press.
- Schutz, A. (1951). Making music together: A study in social relationship. *Social Research*, 18 (1), 76-97.

- Pellegrino, J.W. and Hilton, M.L. (Eds.) (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. Washington: National Academy of Sciences.
- Skinner, B. (2014) [1953]. *Science and human behavior*. The B. F. Skinner Foundation. [Ebook available at <http://bfskinner.org/store/>]
- Small, C. (1998). *Musicking: The meanings of performing and listening*. Hanover, NH: Wesleyan University Press, University Press of New England.
- Spitzer, J. and Zaslaw, N., (n.d.). Orchestra. *Grove Music Online*. Oxford Music Online. Oxford University Press. Retrieved from <http://www.oxfordmusiconline.com/subscriber/article/grove/music/20402>
- Spitzer, J., Zaslaw, N. and Kennedy, M., (n.d.). The conductor. *The New Grove Dictionary of Opera* (Ed. Stanley Sadie). *Grove Music Online*. Oxford Music Online. Oxford University Press. Retrieved from <http://www.oxfordmusiconline.com/subscriber/article/grove/music/O901114>
- Tunstall, T. (2013). *Changing lives: Gustavo Dudamel, El Sistema, and the transformative power of music*. New York: Norton.
- Tunstall, T. (2015). "Do we have to rehearse again?". *The Ensemble – A Newsletter for the U.S. & Canadian El Sistema Movement*, September 2015. Retrieved from <http://ericbooth.net/the-ensemble/>