Flow, Play, Feel and Creativity: Some of the Potential Outcomes of Playing by Ear from a Recording

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Vignette

I go into the drum room at the end of the corridor. A boy in there is trying to get the riff GGG D B-flat on a keyboard. He has got the pitches from the sheet, but he's playing a completely different rhythm to what's on the recording. I show him the rhythm and ask him to imitate mine; he watches and listens, then tries but still can't get it. I suggest he plays along with me; again he tries, but stops every time he makes a mistake, then has difficulty picking it up again, so the whole thing grinds to a halt, then we try again and the same thing happens. I put the CD on and suggest he plays along with that. This has a different effect. As before, he stops after the first three notes because he has made a mistake, but this time he then waits, listening, and picks up the riff again when it comes round. Again he makes the mistake, stops and picks up. Next time he plays the whole riff, but not in exact time. After a few bars like this he gets it in time. When he was playing along live with me he didn't seem able to pick up and carry on like this but kept stopping. Maybe it is to do with the unrelentingness of the CD, its total reliability, i.e. he knows it will just keep on going, whereas another person is likely to stop, tell him he's getting it wrong, act unpredictably. Also a CD is non-judgemental.[1]

A New Kind of Teacher

Playing by ear from a recording is, in the history of human music-making, a relatively new activity, stemming as it does from only the last one hundred years or so, since the invention of audio recording and play-back technologies. It can be done within or outside a range of formal, non-formal and informal contexts, and with or without the presence of a teacher, other instructor or other music-makers. It can be a purely aural activity, as when the recording is an audio-only one, or it can be mixed with visual learning, as when the recording is an audio-visual one. How does this activity foster musicianship and the ability of children to be musical people?

Playing by ear from a recording is not to be confused or conflated with playing by ear along with other live musicians, a live teacher or indeed any human being or group of human beings who are simultaneously participating in the activity. Rather, in the position usually occupied by a human co-musician or teacher, here we have the recording itself as the ultimate authority as well as the model. The recording may, to be sure, involve a video of a person teaching and may be specially designed for that purpose. But that is not the same thing as a live teacher. For one thing, the recording – whether it is purely audio or audio-visual – is under the control of the learner, who can turn it off, wind it back or forwards, and with the increasing sophistication of technology, change the tempo, manipulate individual voices and so on. For another thing, and somewhat conversely, when being used as a model to be copied, the recording exists at one level as an independent object, and thus, a much more *inflexible* teacher than any human being.

Benefits of Using Recordings

In our work using ear playing in schools, instrumental lessons and higher education[2] we observe that students of all ages, from young children to teachers themselves, find a recording inviting and enjoyable to work with; that it frees them up by reducing a tendency to fear making mistakes or to be wary of the teacher's authority; and that the results tend to be notably fluid and

"musical", invoking notions of "flow", "play" and "feel", whilst students' creativity is also fostered. These findings are supported in a range of other research too[3].

One reason for this increased fluidity and musicality is undoubtedly that playing along with a recording usually involves playing in tempo. Although the speed of the recording can be manipulated, the regularity of the beat will remain stable whatever the speed. There is therefore a constant underlying musical model into which the ear player must insert themselves mentally and bodily if they wish to play along. Some ear players, such as the one in the vignette above, will stab at a note or two as the music flies past in time, then on repeated attempts, will try to fill in what goes between to the best of their ability, whilst the music unrelentingly goes onwards. Others will listen carefully before they start to play, and approach pitch-location systematically. Some will be so hesitant that they can't even start to play until they have had some reassurance from another source, such as a teacher or a notated score. However; in all cases by definition, once they are playing along either "correctly" or "incorrectly", either fully or partially, they are playing at the speed of the recording. In Christopher Small's terms we could say they are "musicking" at the speed of the recording because even in passages where, say, they play nothing, so long as they are still listening with a view to copying, they must remain absorbed in the recording. Learning a piece this way is more like sketching the broad contours of a picture holistically, than painstakingly tracing the details one at a time. The results may initially be less accurate in detail than would be expected if a score was being followed, but are likely to be more fluid, or more musical.

Connected with the necessity to play at the speed of the recording, is a tendency amongst ear-players to carry on playing over mistakes. This contrasts with the notation-reader, who is likely to stop to correct errors. Indeed teachers often find it an uphill struggle to get novice readers to carry on over mistakes without losing the pulse. When there is a recording present, the recording itself will continue to play even if the learner stops: continuity is already given. The player can turn the recording off, but if so, the activity of playing along is at an end. So long as the activity is on-going, the recording is on-going. Unlike a teacher, it will not keep on stopping every time the player makes a mistake, turn around the tell the player to concentrate, or to get the player to stop messing about. Moreover, it is in fact the case that ear-players do not tend to keep stopping the recording unless they have made a decision to focus on details for a while. They are least of all likely to keep stopping the recording when they are working in groups. Rather in most cases for most of the time, they get into the "flow".

Csikszentmihalyi's concept of "flow"[4] identifies an optimal state of psychological engagement, or a "phenomenology of enjoyment."[5] He conceived of flow as a result of both an activity, and of the individual's attitudinal state. On one hand, some activities, especially games and the arts, are more likely to induce flow than most, and are actually designed to do so. On the other hand, some people have "autotelic personalities", that is, they tend to orient themselves to whatever they are doing as ends in themselves, and thus to get flow experiences more often or more fully. Playing by ear has all the qualities required for getting into a state of "flow": that is, it involves clear goals; immediate feedback; and a high level of concentration on a task, without distractions getting in the way. There is also, importantly and perhaps surprisingly, a balance between the challenges presented by the music, and the skills possessed by the player, in such a way that the player feels their abilities are well matched to the action. This arises because players approach the task at their own level, regardless of the match between the final product and the skills they possess at the time. High levels of enjoyment, too, have been reported by participants throughout our work.

Learning as Play

In connection with the concept of "flow" it is also worth considering music-making as a form of "play". Educational psychologist J. S. Bruner suggested that "engagement in play involves reduction of the consequences of error or failure."[6] Although it is a serious activity for the child, play is "without frustrating consequences"[7], and does not involve an excessive attachment to accurate or correct results. In play, children will often:

> …change their goals *en route* to suit new means, or change the means to suit new goals. Nor is it that they do so only because they have run into blocks, but out of the sheer jubilation of good spirits. It provides not only medium for exploration, but also for invention.[8]

The same things could equally be said of an adult engaged in play. Keith Swanwick argued that the most crucial aspect of play lies in the imagination, and connects this with the processes of learning in music, from the initial "transformation of pure sensory delight in sounds into an urge for mastery; an emphasis on the exploration and control of the materials of music."[9] He puts forward an understanding of musical development, and the arts in general, in which the concept of play is intertwined throughout the learning process.[10] Similar emphasis is placed upon the connection between the arts and, implicitly the notion of play as "the absence of rule" by Elliott Eisner when he states:

> …the arts teach students to act and to judge in the absence of rule, to rely on feel, to pay attention to nuance, to act and appraise the consequences of one's choices and to revise and then to make other choices.[11]

Tendencies towards treating music-making as play, defined in the terms suggested above, can be discerned in ear playing from a recording. This is the case, both in relation to play as involving an absence of concern about the consequences of one's actions, and in relation to the role of the imagination in play. A playful approach to music-making can be seen as both a part of, and a desirable precursor to musical learning. It can unleash aspects of musicality which may be necessary for musical growth to take place, yet may be obscured by too many demands, too soon, for observable progression towards specified outcomes.

From Flow to Feel

"Feel" is something that is both hard to define and hard to teach. It is connected partly with the ability to keep going in a perpetual "flow", playing or singing each note at a precise point on or around a beat according to the style of the music, manipulating textural and dynamic qualities of the sound in fine ways, and many other aspects. In the case of a novice player it is rare, not only because the novice has insufficient control over the instrument, but also because "feel" requires confidence and, amongst other things, the ability to pick up and carry on regardless of stumbling. "Feel" is particularly liable to develop through the tendency towards achieving a state of "flow" and the tendency to approach music-making as play, which are characteristic of ear-playing from a recording.

Finally, we consider that both personal and collaborative creativity can be nurtured and enhanced through ear playing from a recording, especially in groups. Creativity linked to experimentation and improvisation tends to come relatively easily when playing by ear, as

distinct from playing from notation, partly because in ear playing, even when an aural model is being copied, there is not a visible, fixed instruction of which notes have to be played. There is always-already relative freedom in the choice of pitches, rhythms and harmonies. Improvisation is invited by the task itself. Furthermore, group ear-playing allows musicians to play along with each other, either instead of or as well as with a recording, in ways which foster collaborative improvisation.

Playing in a Social Context

Sawyer has argued that, rather than genius being in the possession of an individual, it is "group genius" that "generates breakthrough innovation."[12] He identified seven attributes of effective collaborative teams, all of which can be shown to be developed through, amongst other things, ear playing.[13]

The first of these concerns the development of innovative ideas. Such ideas emerge over time through group performances resulting from playful experimentation with musical material. Secondly, creative ideas emerge through the process of deep listening both to the music and to group members' ideas. In Sawyer's words "listening to each other with a degree of concentration and intensity" allows group members to "coordinate their voices and negotiate a musical synergy."[14] Thirdly, team members regularly build on collaborative ideas. Likewise, playing by ear in groups encourages group members to create successful renditions of the pieces through imitation, invention and improvisation on fellow members' musical ideas. Peer learning can support the development of music learners' technical instrumental skills, their familiarity with different musical genres and the process of experimentation and improvisation. Fourthly, according to Sawyer, after several elaborations the meaning of each idea becomes clear. Similarly, the process through which copying music by ear can act as a scaffold for the creation of "new" musical version of the pieces copied becomes clearer the more the music learners engage with it in their groups. Fifthly, as an idea is developed it generates new questions. Sixth, after several rejected ideas innovation finally emerges. In playing by ear in groups, as musical ideas develop groups tend to explore a variety of ways of organising, orchestrating and staging their performances and the musical products can illustrate how creativity and innovative ideas emerged through the constant process of imitation, invention and improvisation. Finally, for Sawyer, innovation emerges from the bottom up and not from the top down. Similarly, the creative outputs of group playing by ear processes result from collaborative peer interactions.

Final Thoughts

Through individual or collaborative music making launched from copying a recording as a basis, learners not only develop creativity but also a wealth of musical skills, including listening, musical appreciation or "critical musicality", improvisation, composition, harmonisation and technical instrumental skills; and in the case of collaborative music-making, social skills as well. Peer learning, opportunities to engage with others' opinions, communicating to others, appreciating and acknowledging others' contributions, and gaining confidence by playing with others are some of the core social skills nurtured through group interaction and music making.

All in all, we suggest that ear playing from a recording is a convincing way to foster musicianship and help learners to become musical people, potentially inducing "flow",

"playfulness", "feel" and "creativity". To be sure, it is not the only way, but it is a powerful and rich one, which deserves to be firmly on the map of music pedagogy in the 21st century.

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Notes

[1] Green (2008), pp. 55-56
[2] Baker (2013); Baker & Green (2013); Green (2008, 2012a, 2012b, 2014); Varvarigou & Green (2015); Varvarigou (2016)
[3] Chua & Ho (2013; Gower (2012); Hallam et al., (2008); O'Neill & Bepsflug (2012); Jeanneret et al., (2011)
[4] Csikszentmihalyi (1990, 1996)
[5] Csikszentmihalyi (1990), p. 46
[6] Bruner (1979), p. 57
[7] Bruner (1983), p. 91
[8] Bruner (1983), p. 91
[9] Swanwick (1988), p. 71
[10] Swanwick (1988), pp. 50-51

[11] Eisner (2004), p. 5
[12] Sawyer (2007), p. 7
[13] Varvarigou (forthcoming 2018)
[14] Sawyer (2007), p. 35