

‘Hello from the other side’: Listening to Data, Slow Science and the Quest for Validity in Qualitative Content Analysis Processes

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Abstract

This paper explores examples used by the author in a pedagogical, higher education context as a way to discuss strategies of enhancing validity in qualitative content analysis. ‘Listening to data’ is presented as a strategy that can uncover ‘hidden truths’ and soundness in research, specifically when engaging in a qualitative content analysis of transcripts of oral interviews. To listen to data is about giving it sufficient time and to be attentive to the data both inside and outside. Listening to the data inside entails looking at utterances and their structure, as well as attending to the rhythms and sequences of the speech. Listening to the data outside refers to how data echoes and resonates in sensory images through which the readers are transported by way of colours, sounds, smells, gestures, and emotions. While ‘listening to data’ might appear to be a passive and asynchronous exercise between the speaker (there/then) and the listener (here/now), by using this strategy the researcher can dialogue with the data and hear surprising, revealing, and unexpected voices from that ‘other side’.

Learning to listen

Some years ago, in a National Congress of Pedagogical Practices in Higher Education¹, I spoke with a teacher who introduced me to the challenging task of teaching students from health sciences how to hear a patient’s breathing and heartbeat. I often recall this discussion when, as a teacher, I am frequently confronted with the need to teach research methodologies for undergraduate sociology students. How should one teach the qualitative strategy of ‘listening to data’? And what can such a listening exercise add to the existing knowledge whilst interpreting data and seeking validity?

This paper advances some answers to such questions which intertwine with the search for soundness in qualitative inquiry. Methodologically, it brings together examples used by the author in a higher education context while working with students who want to become qualitative researchers (Clesne, 1999). Original data were collected through pedagogic exercises developed in the framework of a course titled ‘[Inter]views: designing, conducting and analysing interviews in social research’, offered as a summer course at the University of Évora (Portugal), which has been running since 2014². Using the technique of role playing, students were asked to take on the roles of interviewer and interviewee, using a short interview script. Data collected through audio recordings were subsequently subjected to a verbatim transcription and then explored using qualitative content analysis techniques (Krippendorff, 2018). While these various tasks comprised the development of the knowledge and competencies set for the course, they allowed students to gain a finer insight into how the different stages of research are intertwined, namely the phases of data collection and data analysis and interpretation.

Showcasing the author’s previous empirical work allows discussions of both the potentialities and obstacles presented by the strategy of ‘listening to data’ in the broader context of seeking ‘validity’ in qualitative studies. This article concludes by providing a short yet striking contribution on the place of ‘listening to data’ as a strategy to uncover ‘hidden truths’ and claiming validity in social sciences, specifically when engaging in a qualitative content analysis of transcripts of oral interviews. While ‘listening to data’ appears as a passive and asynchronous exercise between the speaker (there/then) and the listener (here/now), experience shows that by formulating and using the right questions, the researcher can dialogue with data and hear surprising, revealing, and unexpected voices from that ‘other side’³.

Play, pause. Searching for validity in the transcripts

Validity issues are crucial when referring to the scientific procedure. There is a common understanding that scientific research is considered valid if it provides a ‘true picture’ of reality (Creswell, 2018). Internal validity usually refers to the degree to which an instrument measures what it is intended to measure, whilst external

¹ CNaPPES 2015 – Congresso Nacional de Práticas Pedagógicas no Ensino Superior [National Congress of Pedagogic Practices in Higher Education], Leiria (Portugal), 3 July 2015, <http://cnappes.org/cnappes-2015/>

² The course has been taught in b-learning with a total number of 15 hours. Detailed information about the 2018 edition can be found online via the School of Social Sciences: https://www.ecs.uevora.pt/divulgacoes/cursos_livres/Entre-vistas-desenho-aplicacao-e-analise-de-entrevistas-em-investigacao-social-4a-edicao

³ The title of this paper is inspired by the verse ‘Hello from the other side’, from the song ‘Hello’, by the British musical artist Adele. The song appeared on her third studio album, 25 (XL, 2015).

validity pertains to the generalizability or broader applicability of the study's findings, results, and conclusions beyond the immediate study (Miles and Huberman, 1994; Silverman, 2011).

Despite the different interpretive frameworks and philosophical underpinnings, qualitative inquiry questions the framework of validity that is commonly accepted in the quantitative or 'hard-science' research paradigm. Qualitative inquiry is based on some general assumptions, including: there is no observation without a subject who observes within a particular social time and place; the researcher is part of the study and constructs the reality he or she observes; and each researcher brings a different and unique perspective to it (Mason, 2002; Denzin and Lincoln, 2018). As a consequence, when envisaged from a more quantitative paradigm, validity and qualitative research are often seen as fundamentally incompatible, that is, as "an oxymoron", in the words of Onwuegbuzie and Leech (2007).

That said, over the years, qualitative methodologists have presented and described different or alternative criteria and categories with which to judge and define validity in line with the qualitative paradigm (Miller, 1986; Silverman, 2011). To this end, issues regarding the 'truth' or 'falsity' of an observation are usually replaced by discussions concerning the 'goodness' (Miles and Huberman, 1984: 277) of the research, since ultimately 'some accounts are better than others' (Miles and Huberman, 1984: 277). What, then, are the different standards for judging the worthiness of such research?

In a seminal work on the naturalistic inquiry, Lincoln and Guba (1985) proposed four criteria for judging the soundness of qualitative research. They explicitly offered these criteria as an alternative to more traditional, quantitatively-oriented criteria: credibility; transferability; dependability; and confirmability. Pairing traditional terms with those alternatives for assessing the degrees of 'trustworthiness' and 'authenticity' in naturalistic and qualitative research, Miles and Huberman (1994) discuss five main issues regarding the criteria: the objectivity/confirmability of qualitative work; reliability/dependability/auditability; internal validity/credibility/authenticity; external validity/transferability/fittingness; and utilization/application/action orientation. As for Patton (2002), the credibility of qualitative inquiry depends on three distinct yet related topics: rigorous methods for conducting fieldwork; the credibility of the researcher; and a philosophical belief in the value of qualitative inquiry. More recently, Onwuegbuzie and Leech (2007) have introduced the 'Qualitative Legitimation Model', through which they attempt to integrate the various types of validity identified by qualitative researchers. They described twenty-four methods for assessing the true value of qualitative research (Onwuegbuzie and Leech, 2007).

Although the criteria and terminology for judging soundness vary among qualitative researchers, the quality of the transcripts – particularly the option for a verbatim transcript – is often given as an example of a specific procedure when assessing trustworthiness, authenticity or credibility (Arksey and Knight, 1999; Gillham, 2005; Kvale, 2007). Two excerpts of verbatim transcriptions were selected as empirical illustrations for this paper. Whether used for the purpose of exemplifying how the researcher should 'listen to data', both 'inside' and 'outside', the two quotations describe how listening to the data as represented in the transcript constitutes a way of enhancing the validity of interpretation in qualitative content analysis processes. As discussed below, it is true that to transcribe is a common procedure when dealing with data collected through oral interviews, yet rather than seeing this act as an end in itself, it ought to be understood as allowing for a richer, deeper, more colourful and audible representation of social reality. Ultimately, the act of 'listening to data' can increase the levels of validity within qualitative content analysis.

More broadly, this paper can be situated alongside recent calls in academia for more time. Slow Science is part of the broader 'slow' movement and draws attention to the 'slow timescale' in which science moves, declaring: 'Science needs time to think. Science needs time to read, and time to fail' (The Slow Science Academy, 2010). In the domain of sociology, the work of Les Back (2007 and 2008) has been particularly important in denouncing the pitfalls created by the quantitative measurement of academic value and performance that has become so characteristic of the accelerated science of the early twenty-first century. Moreover, it calls for an urgent turn towards listening, paying 'attention to the fragments, the voices and stories that are otherwise passed over or ignored' (Back, 2007: 1). Taking inspiration from the work of Back, it is argued here that time is a key factor for listening, and that validity, in turn, depends on listening.

Listening to the data inside: Utterances, structure, rhythm, and sequence

To work with interview transcripts is a demanding process of attentive, mediated listening of the data. In this article, it is argued that the listening exercise is comprised of two moments: one of listening to the data inside; the other of listening to the data outside. Both moments are vital in searching for meaning and, as such, in establishing the basis for the validity of data interpretation. Specifically, listening to the data inside implies looking at the utterances and the structure of these utterances, yet it also involves paying attention to the rhythms and sequences that mark the pace of the speech.

The following excerpt was drawn from an exercise that aimed to explore whether individuals remember their first day of work and, if so, to collect such descriptions. João⁴, a Portuguese man, born in the Alentejo region, aged 45 and working in agriculture, gave the following answer to the guiding question from the interviewer⁵:

Interviewer: Let's talk about your first day at work. Do you remember how it went? How was it? What did you do?

Interviewee: So ... in agriculture ... you know how it is ... we are born for this, and we start from an early age helping our father, digging ... We are ..., we are here ..., so ..., now you ask me when did it begin? Uhm, it started ... well, it started since I started playing there on the ground and all that ... uhm... I don't know, I don't know, I don't know, I don't know when it started. It began from the time I was born, since I began to walk, since I began to help my father to water a few ... a few plants, and now ..., having to say when it started ... [...] Let's say ... it has begun, it started, started many years ago [emphasis], oh ... I don't know ... now, now, now I cannot say to you, I cannot say to you, that's it, that's it, I cannot say to you when it was.

At first sight, reading this excerpt leads to the conclusion of a non-answer. It would appear that the interviewee is saying that he does not remember his first day at work. And in fact, he uses several language resources to 'convince' the interviewer of this, for instance, when he insistently repeats negative statements such as 'I don't know' or 'I cannot say to you'.

What is the interviewee saying? To be able to answer this question implies listening more deeply to the data⁶. It means paying greater attention to what is being read, trying to link the sentences, now separated in the written narrative by suspension points, commas or end points. In their place, the researcher should reintroduce the pace that the orality has lost since the audio has been transcribed, that is to say, the various hesitations and pauses, the suspension and resumption of speech.

The result of this process can be as surprising as it is theoretically rooted. When reread in such a way, the data tell us more and in more complex ways. Multi-layered meanings can be extracted from this quote. Without entering into theoretical considerations in the framework of sociology and socialization processes, being attentive to the interviewee's repetitions allows us to conclude, in this particular case, when, after all, 'it' all started. Simply put, 'it' was always there. In this particular case, there was never, in fact, such a thing as the 'first day at work'. Since he was a child, João has lived the life of someone deeply immersed in the countryside, just as his father was. In fact, this is (also) what he is saying in the interview. João was, in fact, focused on answering the interviewer's question, using expressions such as 'I don't know', 'I don't know when it started', 'I don't know', 'I cannot say to you', 'that's it, I cannot say to you when it was', while also answering by way of other expressions: 'in agriculture [...] we are born for this', 'we start from an early age helping our father, digging', 'it started since I started playing there on the ground and all that', 'it began from the time I was born, since I began to walk, since I began to help my father to water a few ... a few plants', '[it] started many years ago', etc.

Being attentive to the utterances that form the narrative, and to the structure of such utterances, as well as paying attention to the sequence and rhythm of the speech entails reading but also stopping and resuming. Following Les Back, in the exercise of listening, it is important to focus on 'the fragments' and 'the voices and stories' (Back, 2007: 1). As illustrated above, making those voices audible and being able to tell those stories via rich and thick description greatly depends on the quality of the verbatim transcripts. The relationship between the quality of the transcription – sometimes seemingly chaotic, confusing, and repetitive – and the quality of

⁴ All names used hereafter are pseudonyms for data anonymization.

⁵ Data collected on 2 July 2014.

⁶ When teaching this topic and working with students, and this excerpt, in particular, I often make a gesture that challenges them to bring their ears closer to the data, with the latter figuratively represented by the computer.

interpretation is crucial in assessing the trustworthiness, authenticity, and credibility of qualitative research, as well as judging its soundness (Arksey and Knight, 1999; Gillham, 2005; Kvale, 2007).

Listening to the data outside: Colours, sounds, gestures, and emotions

When the process of looking for validity means obtaining a true picture of reality by reading interview transcripts, one needs to go beyond listening to data inside. This implies being attentive and able to listen to the data outside. In doing so, data, as an echo, resonates in sensory images to which the reader is led through colours, sounds, smells, gestures, and emotions. In this way, the researcher is brought closer to the reality described and thereby to the ‘truth’.

The following quotation is the start of a dialogue between the interviewer and interviewee in an exercise developed for the purpose of collecting an in-depth narrative about the first day of classes. Eduardo, a 57-year-old Portuguese man born in Inhambane, Mozambique, described that day as follows⁷:

Interviewer: Do you remember the day you entered the school?

Interviewee: 10 September 1963.

Interviewee: Was there any reason for you to remember that date?

Interviewee: Yes, there was. A colleague of mine who was not silent, redheaded, whose name I cannot remember, he kept interrupting, with his finger in the air, asking Professor António if he was going to give him a notebook. Because he had no notebook, and his mother had told him that the teacher was going to give him a notebook. ‘Mis::ter!’⁸, he had a sibilant ‘S’, ‘Mis::ter, Mis::ter, my mother told me that Mis::ter would give me a notebook’. I never forgot it! The permanent interruption that boy was making ... I was very small ... looking like ... as any small child. Standing there, very shy and looking at that ... for that ... and that, in fact, impressed me a lot. And still today, I remember ... I don’t know what happened to that person, the little redhead, who sat down ... a little ahead of me, on the left side. I remember as if it was today.

In this case, the researcher is confronted with a specific situation in which the interviewee is quite affirmative. He immediately answers ‘Yes, there was’, leading the interviewer through a detailed description of what he remembers about the first day of school. Yet, is there more to see in this account beyond Eduardo’s detailed description? The answer here seems to be just as definitive as that given by Eduardo. Again, since the aim of this text is not to undertake a sociological interpretation of the data, for our purposes it is worth drawing attention to how this quote says something deep about the experience of the first day of school for Eduardo. Behind such an impressionistic memory around the behaviour of the ‘redheaded boy’ seems to be the fact that in 1963⁹ the school was a space of visibility for Eduardo, confronting the difference between himself and that other boy. Though not direct or sequential, the description does include clues that signal such difference; these clues are not simply physical or behavioural but predominantly social. The differences between the two boys seem to be as noteworthy as they are unwieldy, as the boy ‘was not silent’, was ‘redheaded’, ‘kept interrupting’, ‘had no notebook’, and ‘had a sibilant “S”’, while Eduardo ‘was very small’, ‘looking like ... as any small child’, was ‘standing there’, and ‘very shy’.

As illustrated in this quote, data carries with it multiple sensory images, colours, sounds, smells, gestures, and emotions. Again, the quality of the transcript is central in portraying such a sensory landscape. Yet, the task of listening to data goes beyond being impressionistically touched by the data. As Les Back argues, listening is not just about hearing more carefully; rather, it involves ‘a mode of thought that works within and through a “democracy of the senses”’ (Back, 2007: 25). The transcript analysed above clearly exemplifies how such a democracy of the senses must be used to question data and to unveil the clues in ‘searching for latent meanings’ (Costa, 2015). ‘Within and through’ data, it is possible to develop a ‘true picture’ of reality (Creswell, 2018), and therefore to reach soundness in research.

⁷ Data collected on 8 July 2015.

⁸ In the transcription, :: is used to highlight the stretching of the consonant (Costa, 2014). The number of points is usually proportional to the duration of the extension. In this case, two points were used because the interviewee pronounced the word with a stretching of the consonant ‘S’; moreover, he explicitly stated that the other boy had a sibilant ‘S’.

⁹ In this period, and until 1975, the year of independence, Mozambique was a Portuguese overseas colony.

Rewind, forward. Finding validity with the voices from the field

This paper was written to provide empirically grounded insights into the importance of listening to data as a strategy for enhancing the search for validity when teaching and learning qualitative research methodologies. Based on the author's own experience of researching and teaching qualitative content analysis techniques, the text brings together short excerpts of verbatim transcripts from oral interviews, which allow for considerations of listening to data while discussing current debates about content analysis and issues around validity.

The current way of carrying out qualitative content analysis – highly computerized through the widespread use of qualitative software such as NVivo (QSR, International) or MAXQDA (Verbi GmbH) – favours a kind of analysis that appeals to the speed of processing information, rapid coding and categorizing, and easy data reading and visualization (e.g. through summary charts, tables, graphs or word clouds) (Krippendorff, 2019). Focusing on the participants' own words is one way of reconnecting the flow of the speech that is otherwise broken through the act of transcription. Given that it is sometimes difficult to listen back to the recorded audio files, the researcher should allow sufficient time to listen to data and to practice slowness and attentive listening.

Whether technological advancements are revolutionizing forms of dissemination in qualitative research, allowing us to better listen 'to the sounds of research' (Salmons, 2016) and to use hypermodal dissemination possibilities – such as embedding audio clips and infographics in written papers (Chandler, Anstey, and Ross, 2015) – this text underlines the importance of time, slowness, and focus. In the context of qualitative content analysis processes, being able to listen to data entails being attentive both 'inside' and 'outside'. Listening to the data inside implies looking at the utterances and their structure, as well as to the rhythm and sequence of speech. Researchers should also dedicate more time to listening to data outside. As an echo, data resonates in sensory images where readers can be transported by way of colours, sounds, smells, gestures, and emotions. In this way, it is possible to hear the actual voices of the research participants while transforming a passive and asynchronous exercise into a rich and colourful dialogue that seeks to enhance the soundness of research.

Listening to data is a key strategy in enhancing validity in qualitative content analysis processes. When given sufficient time, it is possible to search for – and indeed to find – latent (hidden) meanings. In so doing, the researcher comes closer to the reality he/she intends to study and, as a result, the conclusions become more trustworthy, authentic, and credible. In this sense, listening to data is rooted in a profound ethical commitment between the researcher and the subjects of the analysis. In an accelerated global culture, 'The Art of Listening', as Back aptly calls it, is a commitment that ought to be pursued and strengthened, as it realizes 'the value of sociological attentiveness, a compound of dialogue and critique that is the hallmark of sociological imagination' (Back, 2008: 1.20).

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