Metaphor framing and distress in lived-experience accounts of voice-hearing

*Zsófia Demjén (University College London), Elena Semino (Lancaster University), Agnes Marszalek (University College London), Filippo Varese (University of Manchester)*

# Introduction

Voice-hearing is often seen as a characteristic symptom of schizophrenia-spectrum disorders; approximately 70% of individuals with such diagnoses report hearing voices (McCarthy-Jones, 2012). These experiences cause hearers varying degrees of distress, with a sizable minority coping well with their voices (Jenner et al., 2008), but many others finding these experiences disturbing and impairing. It is perhaps unsurprising therefore that the phenomenology of voice-hearing is extremely heterogeneous in terms of both form (sensory and conversational qualities, such as loudness, pitch) and content, with huge variations in terms of their affective impact.

 Distress is generally not caused by the mere presence of voices, but depends on: what the voices say, and how; the relationship that voice-hearers establish with their voices; how voice-hearers make sense of their voices and their perception of the “power” of the voices; voice-hearers’ perceived control over the voices and their ability to control important aspects of their lives (e.g. Mawson et al., 2010; Varese et al., 2017). While assessments of voice-related distress and the determinants of distress are generally language-based, (e.g. clinical interviews such as the Psychotic Symptom Rating Scales, Haddock et al., 1999) linguistic analysis is not typically used to explore individuals’ descriptions of their experiences. With this paper, we illustrate how linguistics, specifically metaphor theory, provides useful analytical and conceptual insights into distressing voices, and we suggest how these insights may have significant implications for clinical practice. We draw out two aspects of voice-hearing described metaphorically by our participants: their relationships with voices and the phenomenology of the experience itself.

 In linguistics, including particularly discourse analysis and metaphor theory, there are systematic and theoretically-based ways of investigating people’s linguistic choices, i.e. *how* people say what they say. These involve looking at what linguistic choices are made (consciously or not) in contrast with choices that could have been made, how such choices pattern systematically, and what the implications are for people’s views, experiences, challenges and needs. In this paper, we focus specifically on metaphors because metaphors are well known to both reflect and reinforce particular ways of making sense of subjective and sensitive experiences (e.g. Semino et al., 2018b). We demonstrate the use of linguistic metaphor analysis as a tool for making more of the lived experience accounts of voice-hearing in a clinical sample. We are specifically concerned with how different metaphors frame the experience of voice-hearing in terms of agency and (dis)empowerment. These aspects of metaphorical framings are closely linked with perceptions of control and power, which, as mentioned above, are known to correlate with the degree of distress experienced by voice-hearers. We therefore propose that metaphor analysis can contribute to both understanding and addressing distress in voice-hearers.

 Metaphor, for our purposes, is defined specifically as talking and, potentially, thinking about one thing in terms of another, where the two things are different, but some form of similarity can be perceived between them (Semino, 2008). In linguistic metaphor analysis, this translates into parsing the language people produce and identifying relevant expressions, including: explicit statements of comparison between unlike things, such as similes (e.g. “Cancer is just like a long and winding country road”; Semino et al. 2018b: 135); and implicit comparisons conveyed by words that, in context, are used differently from what could be considered their most ‘basic’ meaning (i.e. a meaning that is more concrete; related to bodily action; more precise; and, sometimes, historically older) (Pragglejaz Group, 2007). An example of the latter is the use of ‘battle’ in “I feel such a failure that I am not winning this battle” (Semino et al. 2018b: 110). The most basic meaning of ‘battle’ is “a fight between two armies in a war” – the first-listed meaning in the Macmillan English Dictionary ([www.macmillandictionary.com)](http://www.macmillandictionary.com)). However, the meaning of ‘battle’ in the quote above is to do with being ill with cancer, and corresponds to the fourth-listed meaning in the Macmillan Dictionary: “a situation in which someone is trying very hard to deal with a difficult situation”. The basic meaning is more concrete and more closely related to bodily action than the contextual meaning, and is also the oldest meaning recorded in the Oxford English Dictionary (www.oed.com). However, the contextual meaning can be understood by comparison with it: having cancer can be compared to a battle in that it is difficult and dangerous, and requires resilience and determination.

 Metaphors are often used to talk about abstract, subjective, sensitive and sometimes taboo subjects (Semino, 2008), and the experience of mental health issues is a prime example of these (Tay, 2017). Of course, the metaphors that people use at any particular point in the course of speaking or writing are influenced by a number of interacting factors, including: conventional metaphors in the relevant language; conventional metaphors in the specific domain of activity or interaction; what metaphors have been used previously in a particular interaction; the relationship among interactants; the speaker’s/writer’s communicative goals; and so on (Gibbs and Cameron 2008). These influences notwithstanding, different metaphors reflect and facilitate different ways of making sense of and evaluating a particular topic or experience. They highlight some aspects and background others, leading to a so-called ‘framing’ effect (e.g. Lakoff & Johnson, 1980; Semino et al., 2018a). For example, the ‘battle’ metaphor for cancer frames the illness as an enemy and the relationship between the person and the illness as an antagonistic one. This can explain why someone who does not get better can perceive themselves as a “failure”. In contrast, the ‘journey’ metaphor suggested by the simile above frames the illness as a road and does not imply an antagonistic relationship. Among other things, different framings can suggest different degrees of agency for the various participants within a particular metaphorical scenario. The person who uses the ‘battle’ metaphor above, for example, represents him/herself as “not winning”. Agency, in this sense, includes the linguistic representation of oneself and/or others as acting on, affecting or controlling people, states of affairs, situations and/or events. The degree of agency that a voice-hearer might attribute themselves in their metaphor use is therefore representative of their relative (dis)empowerment (cf. Semino et al., 2018b).

Importantly, there is evidence that different metaphorical framings lead to different ways of thinking and reasoning about the topics or experiences at hand. In an experimental study, Thibodeau and Boroditsky (2011) showed that metaphor influences how people think social problems like crime should be solved. They presented two groups of university students with different versions of a media crime report. In one, crime was described in terms of a virus (e.g. “Crime is a virus infecting the city of Addison”); in the other, crime was described in terms of a beast (e.g. “Crime is a wild beast preying on the city of Addison”). Presented with the ‘virus’ scenario, participants tended to reason consistently with the biological or organic framing and propose “investigating the root causes” of crime. Presented with the ‘beast’ scenario, they preferred capturing and jailing criminals. In addition, participants did not recognize metaphors as influential in their decisions and argued instead that they had reached their conclusions based on other (often numerical) information. Several subsequent studies have identified similar tendencies for metaphor framing to affect reasoning about (e.g. Thibodeau and Boroditsky 2013; Thibodeau et al. 2017; Thibodeau & Flusberg, 2017), as well as emotional appraisal of illness experiences (Hendricks et al. 2018).

 There are already several applications of metaphor work in the context of therapeutic interventions for mental health difficulties, such as cognitive behavioral therapy (Stott et al., 2010) and acceptance and commitment therapy (Hayes et al., 1999), although these interventions tend to use ‘metaphor’ differently from our definition here. It has been proposed that metaphors are a prominent communication strategy used by people with psychosis to describe or conceptualise perceptual experiences and internal states that are otherwise difficult to articulate in objective, clinical terms (e.g. Parnas et al., 2005), and might even represent psycho-linguistic factors that increase vulnerability for the formation of certain psychotic experiences (e.g. by framing perceptual input and meaning-making, leading to the formation and “crystallization” of unusual beliefs, e.g. Rhodes & Jakes, 2004). Several potentially beneficial applications of metaphor in those with psychosis have been proposed, including the examination (and potential modification) of metaphors describing the models of mental health difficulties clients use to understand their presenting difficulties. For example, ‘medical model’ metaphors, where psychosis is viewed as a physical illness, and those describing how clients perceive and/or feel about themselves, may highlight potential areas of difficulty and facilitate the promotion of a shared understanding of psychotic experiences in interventions involving family members and other health professionals (e.g. Stott et al., 2010).

 Despite such interest in the study and use of metaphors in people with psychosis, to the best of our knowledge there are no studies using metaphor analysis to better understand the lived experiences of voice-hearing, nor more specifically for investigating how and why some voices might be more distressing than others. These are the objectives of this paper. Examining the metaphors participants use allows us to explore: the particular framings of the experience that metaphorical patterns convey; what participants are involved in these and what kinds of agency they have; and finally, where metaphorical framings appear to be reflecting or contributing to distress, what alternative ways there might be of conceptualizing similar experiences.

 In the following sections, we introduce our methods before moving on to the metaphors that voice-hearers in our data-set used for their relationships with voices and the phenomenology of voice-hearing.

# Method

## Participants

This small scale, pilot study involves secondary analyses of semi-structured interviews with 10 voice-hearers with diagnoses of schizophrenia-spectrum disorders, drawn from a larger sample of clinical and non-clinical voice-hearers recruited for a previous mixed-method investigation (Varese et al., 2016; Varese et al., 2017). Participants were selected from this pool of participants by one researcher (FV) not directly involved in the linguistic analysis according to two criteria: diagnostic homogeneity (to avoid criticism that variations in our linguistic findings may be due to differences in other clinical features of participants) and ‘spread’ of voice-related distress scores (to ensure ability to contrast participants with differing levels of distress in the present analyses and allow for the identification of linguistic features associated with heightened distress). We aimed to achieve a gender balance and participants also met the following eligibility criteria: (i) aged above 16 years, (ii) had experienced voices in the two weeks prior to participating in the study, (iii) history of voice-hearing for a minimum of 6 months, (iv) the experience of voices was not due to organic illness (e.g. brain injury), hypnagogic/hypnopompic states, or alcohol/drugs intoxication. Only 10 participants from the original study fit all these criteria (see Table 1 below for details on each participant).

## Measures and procedure

The semi-structured interviews involved the administering of the auditory hallucinations subscale of the Psychotic Symptoms Rating Scale (PSYRATS-AH; Haddock et al., 1999), sections of the Cognitive Assessment of Voices interview (CAV; Chadwick & Birchwood, 1994) as well as questions developed by the study investigators to assess and quantify features of voices not covered by the instruments above (e.g. self-report ratings of voice-related distress and pleasantness of voices; Varese et al., 2017).

 Participants were recruited from a range of NHS services in the Greater Manchester region in the UK, including in-patient units, community mental health teams and Early Intervention for Psychosis service. Furthermore, a number of participants were recruited from relevant mental health charities, support groups and independent service providers in the region (e.g. groups affiliated with the Hearing Voices Network). After providing informed consent, participants completed the above interviews with one of the authors (FV) as part of a large battery of measures described in Varese et al. (2017). Interviews were conducted in suitable quiet rooms on NHS or University premises, or at the participants’ residence, depending on their preferences and circumstances. The interviews were recorded using an encrypted Dictaphone and were subsequently fully transcribed and anonymised. To avoid preempting the linguistic analysis, one of the authors (FV) removed all content that related to PSYRATS-AH or other quantitative ratings of voice-related distress before the transcripts were shared with linguistic researchers (ZD, ES, AM).

 For descriptive purposes, Table 1 displays the participants’ basic demographic characteristics (age, gender, education level), the number of years they have heard voices for, their scores on the amount and intensity of distress items of the PSYRATS-AH (ranging from 0 to 4), their self-reported ratings of voice-related distress and voice-pleasantness, and their scores on a measure of severity of anxiety, depression and stress symptoms in the week preceding the interview (the DASS-21; Lovibond & Lovibond, 1995). Again to avoid preempting the linguistic analysis, the information contained in Table 1 was not shared with linguistic researchers (ZD, ES, AM) until the analysis was complete.

[Insert Table 1 approximately here. Caption: Details of study participants]

## Data analysis

Verbatim transcription of the recorded semi-structured interviews was carried out during the course of the original study. All secondary analysis was conducted on the basis of the anonymised transcripts, as the recordings were no longer accessible. Interviews (excluding PSYRATS-AH and other quantitative content) ranged from 1,125 to 6,526 words (average = 3,326; median = 2,885) and totaling 33,257 words. The linguistic analysis involved a clause-by-clause coding of the voice-hearer’s speech for a number of different linguistic components, including metaphorical use of individual words or phrases. This was conducted on the basis of the well-established Metaphor Identification Procedure proposed by Pragglejaz Group (2007).

# Results and Discussion

In this section, we describe the metaphors that participants used to describe their relationships with their voices and the phenomenology of voice-hearing. We focus mostly on metaphors used by those who were most distressed, presenting alternative metaphors used by those coping well with their experiences, where appropriate. We emphasize the degree to which different metaphors construct the participant as (dis)empowered and link this to reasons for distress.

## Metaphors for the relationship with voices

The main type of metaphor describing the relationship with voices prevalent among the most distressed participants (see Table 1) involves metaphorical scenarios of physical aggression and violence. These metaphors, which we refer to as Violence metaphors, are particularly frequent and varied in one of the longest interviews in our data, with Participant 6 (P6). In the extract below, for example, P6 uses a lengthy simile to describe the voices as malicious and persistent aggressors:

1. ‘it’s just like sitting where you are now [name] […] and someone’s sat next to ya, shoving ya, prodding ya, slapping ya, pulling your hair – can’t pull mine but they could pull yours – and slapping ya across the face and disturbing ya all the time.’ (P6)

While the metaphorical physical violence in Example 1 is relatively moderate, P6’s Violence metaphors often involve extreme aggression on the voices’ part or an uneven fight:

1. “If you’ve got anything like you thought was positive, a good thing on the horizon, they will totally destroy it. They’ll rip it apart” (P6)
2. “just imagine […] a gang of men waiting to batter you now you'll do everything you can to stay in here” (P6)
3. “it is like trying to fight with one hand tied behind your back.” (P6)

Violence metaphors are highly conventional in English to describe verbal arguments (e.g. ‘attacking’ someone else’s ideas in interaction and having a verbal ‘fight’; Lakoff and Johnson 1980) or difficult enterprises more generally (e.g. ‘the war against drugs’). Their use in relation to illnesses such as cancer has been criticized, however, on the basis that they position patient and illness as opponents, and suggest that not recovering is a personal defeat (e.g. Miller, 2010). In a similar vein, some psychological therapies for voice-hearing discourage ‘psychic civil wars’ and focus on changing the hearer’s relationship with their voices to a more compassionate and understanding one (e.g. Thomas et al., 2014). On the other hand, there is evidence that their effect depends on who uses them, when and how, and the extent to which they are used to present patients as empowered (Semino et al., 2018a; Semino et al., 2018b, Reisfield & Wilson, 2004). As the above examples show, however, P6’s Violence metaphors tend to be relatively creative, and extended beyond a single word or phrase. This in itself is interesting since it has been argued that novel or creative metaphors tend to be used more in the context of intense emotions (Gibbs et al., 2002; Ortony & Fainsilber, 1987). Furthermore, P6’s metaphors evoke extreme physical aggression which he cannot resist or avoid. As such, they emphasize the perception of his own disempowerment relative to the voices, and the persistence, intensity, unpleasantness and negative consequences of what they say to him. This perception of being at the mercy of more powerful and aggressive opponents arguably reflects and potentially contributes to distress.

 Similarly to P6, Participant 11 (P11) and Participant 14 (P14) present their voices metaphorically as agentive aggressors. P14 describes the voices as “aggressive”. P11 characterizes her relationship with her voices as a “daily battle” and “a vicious fight”, where the voices are “powerful” and “just constantly battling with me”. All three participants also use Violence metaphors to describe trying to ignore the voices, and arguing with them:

1. “And sit in my flat, and hopefully fight it and make it calm down” (P11)
2. “I am trying to like defend myself” (P14)
3. “when I’m not weak I can fight it […] I have got to feel strong” (P11)
4. “I feel like lying down, cause I get tired of fighting him.” (P11)
5. “you try to shout back or fight back or anything like that and you can’t” (P6)

In all these extracts it is the voice-hearer who is cast as the agent perpetrating or responding to the metaphorical violence, suggesting initiative and the potential for greater control. However, this agency is either hedged (“hopefully”, “trying”), limited/finite (“I get tired of”) or contingent on other mental states (“when I’m not weak”). Participant 22 (P22) frames her experience in much the same way, but is additionally discouraged from asserting her own agency by the negative consequences of trying to do so:

1. “But if I try to fight through it, he shouts really loud”.

And for P6, the contingency is not just on his own mental state, but also on the interactions with an additional participant in the Violence scenario, the doctor/nurse:

1. “if I go to a doctor or nurse or anybody like that and I feel as though they’ve not believed me or underestimated me, then it’s like them giving the voices some sticks and saying hit him with these. Right? (0:06:12) Now if they believed me I’m supposing they give me sticks to hit them with.”

In this example, the doctors/nurses are constructed as a weapons supplier, but one without allegiances: they will supply to either side (voice or hearer). What determines which side gets the weapon is how the visit with P6 goes. Therefore the only scenario in which P6 is able to assert himself, displaying agency, is contingent on something over which he has limited control, and which additionally undermines his confidence in one of the few social relationships that he still has at the time of the interview.

 The more distressed individuals in our data also use other metaphors that suggest an imbalance of power in favour of the voices. Below, Participant 17 (P17) likens the authority of the voices to that of a poolside attendant, while Participant 24 (P24) describes his voice as an uber-boss:

1. “You know when someone is being straight, and it’s a no-go area. Like when the pool attendant blows his whistle and points … you know to stop running.” (P17)
2. “In the absence of religious beliefs, I put them down as who I think of or name as the supreme commander of the universe. The boss of the whole universe.” (P24)

In both cases, the participants use lengthy and creative figurative descriptions to attribute a kind of institutional or default power to their voices within the metaphorical scenarios, which is generally difficult to resist or influence. This becomes clear when P17 and P24 describe the consequences of this power imbalance:

1. “I don’t go out. So that is the knock on effect. The voices are keeping me in all the time.” (P17)
2. “And there are sorts of things he says that makes me paranoid, or makes me feel as though I’ve got the world on my shoulders.” (P24)

P17 is effectively held captive by the voices, while for P24 the impact is more on his mental states. P24 does recognise that, despite the voice being the “commander of the universe”, there is still “a slight area of influence that is under my control, and if I can perhaps modify the nature of where they are coming from, then it might have a bit more a positive effect in the future.” However, as in the Violence metaphors with the voice-hearer as agent in examples 5-9, P24’s agency here is conditional and hedged (“if I can perhaps”, “it might”, “slight area”).

 All these metaphors evoke scenarios in which the participant is in a disempowered position, their agency restricted, limited or contingent, while the voices are able to assert themselves without limits. The level of participant disempowerment in these cases explains why these metaphors might be used by those who are more distressed. If the relationship with voices is framed in ways that show reduced agency on the person’s part, this is likely to reflect reduced control and a restricted ability to live the life they want to live more broadly. This in turn can also lead to more distress, since metaphors don’t just reflect, but also influence thinking and reasoning about and appraisal of a particular topic or experience (cf. Thibodeau & Boroditsky, 2011; Hendricks et al., 2018).

 The importance of metaphors as a potential signal and determinant of distress is further supported by the fact that participants who were less distressed by their voices tended to use different metaphors to describe their relationships with their voices, and that, crucially, these metaphors do not place them in a disempowered position. Participant 13 (P13) and Participant 33 (P33), for example, both use what can be called Construction and In-group metaphors to characterize their relationships with their voices. These tend to involve conventional metaphorical expressions (e.g. ‘support’) and less elaborate similes than in some of the earlier examples:

1. Construction
	1. “I try and support her” (P13)
	2. “they try to support me” (P13)
	3. “I do have to build myself up, and the voices do build me up a little bit.” (P33)
	4. “So it’s keeping me grounded.” (P33)
2. In-group
	1. “Yeah, it is a bit like a little group gathering that’s all working together.” (P33)
	2. “I treat her like a sister.” (P13)
	3. “they treat me as a friend” (P13)

These metaphors are not just inherently more positive because of the absence of violence and its negative associations. They also frame the relationship as much more symmetrical and egalitarian. The voice and the person are constructed as doing the same kinds of things to each other in equally (un)mitigated ways. In the examples from P13 above, the parallel structures used to describe what the person and the voice do are particularly striking in this regard. In addition, the fact that these figurative expressions are, in general, less creative than the earlier ones could suggest that the emotions involved are less intense (cf. Gibbs et al., 2002; Ortony & Fainsliber, 1987).

 In the next section, we show how different degrees and kinds of (dis)empowerment could also be observed in the metaphors participants used to describe what voice-hearing feels like.

## Metaphors for the phenomenology of voice-hearing

There was significant uniformity in descriptions of the phenomenology of voice-hearing across all our interviews. All participants tended to describe the experience of perceiving the voices, and particularly the beginning and end of those experiences, in terms of metaphors to do with physical location and movement (henceforth Space and Movement metaphors). A person’s awareness of the voices is described as the voices being “here/there” (i.e. as presence nearby), while the start and end of the sensory experience are described as “coming”, “coming up”, “coming in” or “coming back” and then “going away” (i.e. as physical movement). This uniformity is likely to be related to the clinical discourse of voice-hearing, which interviewees had already been exposed to over the years since the onset of their voices (see Table 1), and is also a potential artefact of the specific questions used in this interview schedule, which were formulated prior to the current study and without specific attention to metaphor use. One PYSRATS question, for example, asks “When you hear your voices, where do they sound like they’re coming from?”. However, despite their conventionality and semi-technical nature, these metaphors also frame the sensory experience in particular ways and have potentially important implications for how the voices are perceived.

 The idea of the voices “coming” and “going”, for example, attributes to them a certain amount of independence and agency. P17 makes this explicit:

1. “They come and go and please themselves”.

Consistently with how these metaphors for voice-hearing frame the experience, the continued unwelcome perception of the voices is described as the voices “staying” (P11), getting “stuck there” (P11) or even “something’s gone inside me and festered” (P11), or “they don’t leave you alone” (P6). In all these cases, the voice-hearer cannot force the voices to move away, and is therefore cast in a disempowered position. In our interviews, these metaphors were used mainly by people who had higher levels of distress (see Table 1).

 Some of the metaphors we have just discussed share an additional element that some participants exploit further: the person or the person’s head is implicitly constructed as a Bounded Space or Container that the voices move in and out of (“inside” vs. “outside”, “coming in”, etc.). P6 uses the conventional idea of his head as a container, and develops it creatively over several examples to frame his experience in particularly disempowering ways. The example below is continued from example (1) above:

1. “in that situation with you, you can get hold of them and shove them out the way, but you can’t when they’re in your head. I mean, it’d be great if you could put your hand in your head, pull ‘em all out, flush them down the toilet and they’re gone. But it don’t work like that, no.” (P6)

P6 explains that the voices being “in your head”, makes them harder to control. One can do something about annoying things in one’s external environment, but the bounded nature of the head as a container actually protects the voices from him, thereby disempowering him. P6 also uses the idea of his head as Container when he explains why he is not able to focus on positive things even though he is trying:

1. “you could say I’ve got some good news for you and give me some good news now I try and fit that into my head but there’s no room for it”

This metaphor of the head or mind as a Full Container is well-known in research on metaphor and emotion and has been found to be associated with impending loss of emotional control (Kövecses, 2000). In example 20, this intensity once again underscored by the elaborate way in which P6 uses an otherwise conventional metaphor. In his case, because the container is sealed and already filled with voices, he is unable to think about and appreciate any additional (positive) experiences. Although the Container is P6’s head, he does not have control over its contents. P17, suggests a similar experience, albeit more conventionally, in “I can’t control what comes in.”

Overall, even highly conventional, semi-technical metaphors to do with Movement and Containers can still have consequences for how voice-hearers might perceive and interpret their experiences. In fact, the conventionality of these metaphors in English generally, and in some cases, in discourses of the mind and body (e.g. the mind as an information processing container, or the head as the container of the soul or mind), can make them harder to question and, potentially, change when they seem to exacerbate a sense of powerlessness and the accompanying distress in voice-hearers’ experiences.

# Concluding remarks

This paper illustrated how linguistic metaphor analysis can contribute conceptual and analytical insights into distressing voices. We focused on novel and conventional metaphors describing two aspects of voice-hearing: people’s relationships with voices and the phenomenology of the experience itself. We highlighted how different metaphors, even conventional and semi-technical ones, frame the experience of voice-hearing in particular ways in terms of agency and (dis)empowerment, and how this correlates with varying degrees of distress in our sample. We reported that, in our data, people who constructed themselves as disempowered and the voice as empowered – through, particularly creative, Violence, Movement, or Full Container metaphors, for example – were more likely to be distressed by their voices. This was linked to the broader notion of control, specifically the absence thereof. Of course, numerous contextual and social factors influence individuals’ specific choice of metaphor in a given situation. However, the framing effects produced by different metaphors are less variable in this sense, given that the same framing effect (e.g. in terms of (dis)empowerment) can be suggested by many different metaphors (cf. Semino et al. 2018a and 2018b). In fact, as the different metaphors used by P33 and P13 show, the experience of voice-hearing need not be framed in disempowering ways.

Overall, this proof of concept paper aimed to evaluate the application of linguistic methods to identify metaphors that can be used to frame the lived experience of voice hearing. Although we have pointed out the conventional basis of some of these metaphors in English generally and in voice-hearing discourse specifically, the process of formation of these metaphors in each individual case remains unaccounted for in our data. Future research could attempt to evaluate whether the lived accounts of individuals who endorse particular explanatory frameworks of psychosis (e.g. people endorsing psychosocial vs. biogenetic explanations of voices and other unusual experiences, e.g. Carter et al., 2018) might display differential voice-hearing metaphors. Similarly, the collection of more tailored contextual information and the purposive sampling of voice hearers with a range of background experiences (age groups, gender, cultures/ethnicities etc.) could enable a disentangling of the possible circumstantial and contextual factors that might underpin the specific metaphors we started to explore in this study.

 Our findings add to the growing literature suggesting that the relationship that voice-hearers establish with their voices represents a critical determinant of voice-related distress (e.g. Hayward et al., 2018). The importance of the relationship between hearers and their voices is further supported by multiple psychological and social theories that have been previously used to understand why voices can become distressing and problematic in some individuals, such as social rank theory (e.g. Byrne, Birchwood & Trower, 2007) and attachment theory (e.g. Berry & Bucci, 2016; Berry, Varese & Bucci, 2017). We argue that linguistic methods provide novel methodological approaches that can enable a nuanced and ‘molecular’ understanding of the relational patterns at play in distressing voices and also begin to look at how such relationships are established using language. Although there have been previous attempts to employ linguistic approaches to the study of voice-hearing experiences (in particular Leudar & Thomas, 1997; 2000), their full potential remains to be exploited in this research area. Our paper adds to this literature by providing a linguistic method that has the potential to identify more precisely metaphors that could be conducive to helpful and unhelpful ways of relating to voices. Future applications of the method could include the evaluation of the mechanistic pathways through which novel therapies that aim to promote more helpful relationships with voices achieve their treatment benefits (e.g. the Voice Dialogue approach, AVATAR therapy and Relating Therapy for distressing voices; Corstens et al., 2012; Leff et al., 2014; Hayward et al., 2018).

The more general implication of this study, however, is that deeper insights into experiences of voice-hearing can be gained from making more of how voice-hearers describe these. While semi-structured interviews are not necessarily the ideal type of data for such an analysis, even these can yield valuable insights, as we have demonstrated. The linguistic approach does not require explicit questions, as in PSYRATS, which can themselves introduce metaphors that involve specific framings. Moreover, and the same kind of analysis can be performed on any detailed lived-experience account, including in narrative interviews or diaries.

Finally, our study also suggests that it might be useful to actively question the semi-technical metaphors that have become so conventional in clinical practice as to be barely noticeable, but which can nevertheless have important framing effects. In fact, spelling out the associations of different metaphors, exploring various aspects of metaphorical scenarios together with voice-hearers and questioning some of the assumptions that seem inherent to different framings, might provide useful resources for clinicians.

# Acknowledgements

This study was funded by a UCL Institute of Education Seed Grant (2017/18). It also supported by the Lichtenberg-Kolleg at the Georg-August-Universität Göttingen, Germany.

# References

Berry K, Bucci S. What does attachment theory tell us about working with distressing voices?Psychosis (2016) 8:60–71.10.1080/17522439.2015.1070370

Berry, K., Varese, F., & Bucci, S. (2017). Cognitive Attachment Model of Voices: Evidence Base and Future Implications. *Frontiers in psychiatry*, *8*, 111. doi:10.3389/fpsyt.2017.00111

Byrne, S., Birchwood, M., Trower, P. E., & Meaden, A. (2007). *A casebook of cognitive behaviour therapy for command hallucinations: A social rank theory approach*. London: Routledge.

Carter, L. , Read, J. , Pyle, M. , Law, H. , Emsley, R. and Morrison, A. (2018), Causal beliefs in people experiencing psychosis: The relationship to treatment accessed and the perceived helpfulness of treatment. *Psycholology and Psychotherapy: Theory, Research and Practice*, 91: 332-344. doi:[10.1111/papt.12163](https://doi.org/10.1111/papt.12163)

Chadwick, P., & Birchwood, M. (1994). The omnipotence of voices. A cognitive approach to auditory hallucinations. *The British Journal of Psychiatry*, *164*(2), 190–201.

Corstens, D., Longden, E., & May, R. (2012). Talking with voices: Exploring what is expressed by the voices people hear. *Psychosis, 4*(2), 95-104. doi: 10.1080/17522439.2011.571705

Gibbs, Raymond W., & Cameron, Lynne. (2008) The social-cognitive dynamics of metaphor performance. Cognitive Systems Research, 9(1-2), 64-75. doi: 10.1016/j.cogsys.2007.06.008

Gibbs, R. W. Jr., Leggit, J. S. and Tuner, E. A. (2002), ‘What’s Special about Figurative

Language in Emotional Communication?’, in S. Fussell (ed.), *The Verbal*

*Communication of Emotions*. Mahwah: Lawrence Erlbaum.

Haddock, G., McCarron, J., Tarrier, N., & Faragher, E. B. (1999). Scales to measure dimensions of hallucinations and delusions: The Psychotic Symptom Rating Scales (PSYRATS). *Psychological Medicine*, *29*(4), 879–89.

Hayward, M., Bogen-Johnston, L., & Deamer, F. (2018). Relating Therapy for distressing voices: Who, or what, is changing? *Psychosis, 10*(2), 132-141. doi: 10.1080/17522439.2018.1469037

Hendricks, R.K., Demjén, Z., Semino, E., and Boroditsky. L. (2018) Emotional implications of metaphor: Consequences of metaphor framing for mindset about cancer. *Metaphor & Symbol,* 33(4)

Jenner, J. A., Rutten, S., Beuckens, J., Boonstra, N., & Sytema, S. (2008). Positive and useful auditory vocal hallucinations: Prevalence, characteristics, attributions, and implications for treatment. *Acta Psychiatrica Scandinavica*, *118*(3), 238–45.

Kövecses, Z. (2000). *Metaphor and emotion*. Cambridge: Cambridge University Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: University of Chicago Press.

Leff, J., Williams, G., Huckvale, M., Arbuthnot, M., & Leff, A. P. (2014). Avatar therapy for persecutory auditory hallucinations: What is it and how does it work? *Psychosis*, 6(2), 166-176.

Leudar, I., & Thomas, P. (2000). *Voices of reason, voices of insanity*. London: Routledge.

Leudar, I., Thomas, P., McNally, D., & Glinski, A. (1997). What voices can do with words: The pragmatic of verbal hallucinations. *Psychological Medicine*, 27, 885-898.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, *33*, 335–343. doi: 10.1016/0005-7967(94)00075-U

Mawson, A., Cohen, K., & Berry, K. (2010). Reviewing evidence for the cognitive model of auditory hallucinations: The relationship between cognitive voice appraisals and distress during psychosis. Clinical Psychology Review, 30(2), 248-258. doi: <http://dx.doi.org/10.1016/j.cpr.2009.11.006>

McCarthy-Jones, S. (2012). *Hearing voices: The histories, causes, and meanings of auditory verbal hallucinations*. Cambridge: Cambridge University Press.

Miller, R. S. (2010). Speak up: 8 words and phrases to ban in oncology! *Oncology Times*, *32*(12), 20.

Ortony, A. and Fainsilber, L. (1987), ‘The Role of Metaphors in Descriptions of Emotions’, in *Proceedings of the 1987 workshop on Theoretical issues in natural language processing* Association for Computational Linguistics, Las Cruces, New Mexico.

Parnas, J., Moller, P., Kircher, T., Thalbitzer, J., Jansson, L., Handest, P., & Zahavi, D. (2005). EASE: Examination of anomalous self-experience. *Psychopathology*, *38*, 236–258.

Pragglejaz Group (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and Symbol*, *22*(1), 1–39.

Reeves, A., Bowl, R., Wheeler, S., & Guthrie, E. (2004). The hardest words: Exploring the dialogue of suicide in the counselling process – A discourse analysis. *Counselling and Psychotherapy Research*, *4*(1), 62–71.

Reisfield, G. M., & Wilson, G. R. (2004). Use of metaphor in the discourse on cancer. *Journal of Clinical Oncolog*y, *22*(19), 4024–4027.

Rhodes, J.E., & Jakes, S. (2004). The contribution of metaphor and metonymy to delusions. *Psychology and Psychotherapy: Theory, Research and Practice*, *77*, 1–17.

Semino, E. (2008). *Metaphor in discourse*. Cambridge: Cambridge University Press.

Semino, E., Demjén, Z., & Demmen, J. (2018a). An integrated approach to metaphor and framing in cognition, discourse, and practice, with an application to metaphors for cancer. *Applied Linguistics*, 39(5), 625–645.

Semino, E.,‎ Demjén, Z.,‎ Hardie, A.,‎ Payne, S.,‎ & Rayson, P. (2018b). *Metaphor, cancer and the end of life: A Corpus-based study*. London & New York, NY: Routledge.

Stott, R., Mansell, W., Salkovskis, P., Lavender, A., & Cartwright-Hatton, S. (2010). *Oxford guide to metaphors in CBT: Building cognitive bridges*. Oxford: Oxford University Press

Tay, D. (2017). Using metaphor in healthcare: Mental health interventions. In E. Semino & Z. Demjén (Eds.) *Routledge handbook of metaphor and language* (pp. 371–384). London & New York, NY: Routledge.

Thibodeau, P. H., & Boroditsky, L. (2011). Metaphors we think with: The role of metaphor in reasoning. PLoS ONE, 6(2), e16782.

Thibodeau, P. H., and Boroditsky, L. (2013). Natural language metaphors covertly influence reasoning. *PLoS ONE* 8:e52961

Thibodeau, P., Hendricks, R.K., & Boroditsky, L. (2017). How linguistic metaphor scaffolds reasoning. *Trends in Cognitive Science*, 21(11), 852-863

Thibodeau, P. H., & Flusberg, S. J. (2017). Metaphorical accounting: How framing the federal budget like a household's affects voting intentions. *Cognitive Science*, *41*(S5), 1168–1182.

Thomas, N., Hayward, M., Peters, E., van der Gaag, M., Bentall, R.P., Jenner, J., … McCarthy-Jones, S. (2014). Psychological Therapies for Auditory Hallucinations (Voices): Current Status and Key Directions for Future Research. *Schizophrenia Bulletin*, *40*(Suppl\_4), S202–S212.

Varese, F., Mansell, W., & Tai, S. J. (2017). What is distressing about auditory verbal hallucinations? The contribution of goal interference and goal facilitation. *Psychology and Psychotherapy: Theory, Research and Practice*, *90*(4), 720–734. doi: 10.1111/papt.12135

Varese, F., Tai, S. J., Pearson, L., & Mansell, W. (2016). Thematic associations between personal goals and clinical and non-clinical voices (auditory verbal hallucinations). *Psychosis*, *8*(1), 12–22.

Table 1

