



A Review of the Influence of the Linguistic Turn on Modern Educational Research and Practice

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Abstract. This paper reviews the history of the linguistic turn and explores the implications of this philosophical event for modern educational research and practice. Given the significance of signs and symbols in human communication, this paper first turns to Saussure to establish the background of semiotics, setting up a later understanding of the language. As leading figures of the linguistic turn, Gottlob Frege and Ludwig Wittgenstein are introduced to chart the broad lines of enquiry and the shift of the philosophical concern. The Ordinary Language Philosophy and J.L. Austin's Speech Act Theory are critical branches in the late stage of the linguistic turn, which can be combined with modern technologies and applied to new forms of educational research and practice, such as online classes and virtual embodied learning. In this trend, corpora are also emerging as a popular solution for related data-driven linguistic research.

Keywords: The linguistic turn, Philosophy, education

1 Introduction

After the Second World War, the 'semiotic challenge', first put forward by Spiegel in 1990, began to disrupt traditional ways of writing history. Moreover, Iggers (1997) compares historians to prisoners of a world of their thinking because their thoughts and perceptions are inevitably impacted by the languages they use [16]. Therefore, language is the reason for historical relativity stemming from 'the function of the language used to describe and thereby constitute past events as possible objects of explanation and understanding' (White, 1997, p. 392) [41].

From this perspective, all texts can be interpreted in innumerable ways, leading to the blurring of authors' intentions with multilayers and contradictions (Iggers, 1997) [16]. The emergence of this trend of thinking contributed to the methodological shift in historiography from essentialist and positivist traditionalism to linguistic approaches, seeking an adequate understanding of society (Yilmaz, 2007) [45]. Such a change in historiographical academia epitomises the 'linguistic turn' that covers the 'philosophical investigations of language, anthropological explorations of culture, psychoanalytic interrogations of subject formation, and radical questionings of the possibilities and limits of knowledge formation' (Surkis, 2012, p. 703) [35]. Furthermore, Standish (2021) states that the linguistic turn in philosophy demonstrates that human thoughts

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mostly come from the capacities of creating and using languages, which depend on the public circulation of signs [34]. This philosophic turn impacts many social fields, especially in education and politics.

2 Semiotics and De Saussure

According to Musson, Cohen and Tietze (2007), human beings communicate with each other through symbols, indicating that, to some extent, the use of language can reflect the symbolic organisational life [24]. As a linguistic theory focused on the study of symbols, semiotics was first defined by Ferdinand de Saussure, dividing the concept of 'sign' into two parts: the signifier and the signified. The signifier refers to the material aspect, such as sounds and images, while the signified refers to the mental aspect (Musson, Cohen & Tietze, 2007) [24]. In the case of 'tree', the signifier is the combination of four letters, 't-r-e-e', and the signified is the plants that grow on the ground. However, although the signifier and the signified always appear together and cannot be understood separately, their semantic correspondence is not fixed but influenced by the context. Therefore, it is evident that the bond between the signifier and the signified does not naturally exist but is determined by the cultural agreement with arbitrariness. For instance, when further explaining this view, Musson, Cohen and Tietze (2007) turn to Barley's (1983) semiotic analysis of funeral homes that concludes three key elements: the homes' interior décor, other related settings and the positioning of the corpses [24][3]. Such semiological analyses of different sign systems can illuminate the unique culture within a specific realm, which other analytic techniques generally cannot complete. These concepts are fundamental to the emergence of the linguistic turn (Musson, Cohen & Tietze, 2007).

Additionally, signs cannot be understood without context. As introduced earlier, the signifier and the signified are produced by collectives when they are accepted as legitimate. In that case, the signs cannot make sense merely through individualistic or idiosyncratic use. Therefore, particular signs can reflect, sustain and constitute social and cultural contexts, which means they cannot be appropriately understood or analysed when extracted or divorced from the social background in which they are embedded (Musson, Cohen & Tietze, 2007) [24]. With the introduction of semiotics, some rough preliminary knowledge preparation for understanding the language turn can be made.

3 The Linguistic Turn

Generally, there were two significant turns in Western philosophy. The first one is the epistemological turn that started in the 17th century. This philosophical turn takes Rene Descartes' philosophy as a turning point, shifting interest from an ontological inquiry into the origin of the world to an epistemological inquiry into 'how human beings get to know' (He & Dong, 2022, p.149) [13].

The second turn is the linguistic turn, first named by Rorty (1967) [29]. Such a turn shifted the focus of Western philosophy to language itself, which is a tool or vehicle to convey consciousness and concepts (He & Dong, 2022) [13]. After the linguistic turn,

Western philosophy went through a shift from ‘representing objects’ to ‘a concentration on language and communication as such’; this shift indicates a developing trend from a ‘subject-centred rationality (philosophy of consciousness)’ to a ‘communicative rationality (philosophy of communication)’ (Englund, 2011, p. 194) [11]. This turn involves various branches of social science and the humanities. Simultaneously, it is the development of these relevant disciplines that contributed to the linguistic turn.

When discussing the linguistic turn, two leading figures can never be overlooked. The first of these, Gottlob Frege, revolutionised the study of logic and ‘established a line of enquiry that was to be enormously influential for the philosophy of language’ (1980/1892, cited by Standish, 2021, p. 2) [34]. Frege is the grandfather of analytical philosophy and the distinction between analytical philosophy and other schools is the belief that ‘a philosophical account of thought can be attained through a philosophical account of language’ and ‘a comprehensive account can only be so attained’ (Dummett, 1993, p. 4) [10]. Additionally, this essay will turn to the statement of Vassallo (1997) that Frege is the first thinker who insisted on the distinction between the philosophical account of thought and that of thinking [39]. Such a shift in philosophic concerns, from the thought and its origin to the process of thinking shapes, is the most significant characteristic – and central theme - of the linguistic turn.

Later, Ludwig Wittgenstein made a visit to Frege in Jena in 1911 and later contacted Bertrand Russell under Frege’s suggestion, which can be seen as ‘moments of fundamental significance in the background to the story of philosophy’s linguistic turn’ (Standish, 2021) [34]. After these events, modern analytical philosophy was established and underwent a deviation from its central tenets under the influence of Wittgenstein’s later writings and Austin’s work. Thus, theories within the linguistic turn took communicative social action into account, exploring how power is manifested in social relations through hegemonic discourses (Foucault, 1978) [12].

In this case, language is not merely a tool to name things like an encyclopaedia but a medium that can influence others and society. The combination of theories and social practice is a late development of the linguistic turn, which is different from its early stage, which pays more attention to the nature of human thoughts and the world. This essay will focus on the late stage of the linguistic turn, where the ordinary language philosophy of the later Wittgenstein and Austin, as suggested by Ulin (2001), is the most influential branch [37].

4 Ordinary Language Philosophy and J. L. Austin’S Speech Act Theory

According to Winch (1958), the later Wittgenstein changed dramatically from his earlier work, arguing that language should be seen as actions that ‘we do’ rather than labels used to identify objects in the world [44]. Therefore, the meanings of words depend on the ‘language games’ where they are used; thus, ‘playing’ or ‘speaking’ is more important than understanding the formal rules of the game (Ulin, 2021) [38]. This statement corresponds to the situation of first language acquisition, in which, in the early

stage of life, ordinary infants or children spontaneously acquire language rather than learn the rules or grammar first (Mayberry, 1993) [23].

Therefore, Winch (1958) extends Wittgenstein's idea by analogy, arguing that the meanings of human actions are closely related to the language games, which are based on the language communities associated [44]. This idea establishes a connection between human actions and society, indicating that human actions are intrinsically communicative. Besides, Berger and Luckmann (1966) state that language is central to constructing society because it is productive, formative and creative [4], which means language 'makes things happen' (Musson, Cohen & Tietze, 2007, p. 46) [24].

Such thinking is similar to Speech Act Theory (SAT) developed by Austin (1962) [1] and further by Searle (1979) [31]. From a traditional perspective, 'statements' were assumed to be only used to 'describe' some affairs or facts; there, they must be either 'true' or 'false' (Austin, 1962) [1]. However, not all 'sentences' (or 'utterances') are used for 'describing' or 'making statements'. Expressing questions, exclamations, commands, wishes or concessions involves other goals for uttering, lacking true values (Austin, 1962; Jones & Kimbrough, 2008) [1][17]. Austin (1962) prefers the word 'constative' to refer to the traditional 'statements' because not all true or false statements are descriptions, which could lead to the 'descriptive' fallacy [1].

Based on these ideas, Austin (1962, p. 3) states that 'many traditional philosophical perplexities have arisen through a mistake - the mistake of taking as straightforward statements of fact utterances which are either (in interesting non-grammatical ways) nonsensical or else intended as something quite different' [1]. This statement corresponds to the idea of the late Wittgenstein that most philosophical problems are questions of how language is used (Englund, 2011) [11]. These views represent an inquiry into the nature of the world and human thoughts, turning to language and language philosophical account as the main object of the study. Chapman (2023) holds that Austin was engaged in a kind of empirical study; however, she also mentions Austin's idea that 'information is not best or reliable if it was collected by mass observation or experiment' (2023, p.7) [7]. Besides, Austin's theory is criticised as "dubious" because of the introduction of unobservable entities (Black, 1969, p.410) [5]. Due to the space limitation, this study will not further analyse Austin's other research tendencies but will instead focus on his SAT, its influence afterwards and some relevant practices.

One central idea of Speech Act Theory is that language has a performative function, which means social actions can be performed when language is used. Some particular instances given include naming, giving and betting. To explain this idea, Austin (1962) introduces the notion of the illocutionary act that indicates the communicative purpose of an utterance [1]. Another notion associated with the illocutionary act is the locutionary act, which means what can be understood literally from the utterance. In other words, 'what is spoken about and what is said about it' (Hofman, Haerle & Maatz, 2023) [14]. Roughly speaking, the locutionary act is associated with constative utterances, while the illocutionary act plays a role in performative utterances.

According to Jones and Kimbrough (2008), performatives have four types: commanding, promising, requesting and declaring [17]. The mentioned speech acts share the same basic form of signalling conventions, which means they can be identified by conventional procedures. This idea corresponds to one of Austin's findings that the

context associated with the execution of illocutionary acts can be described by conventional procedures as well. Although there could be accidents, most utterances with illocutionary acts can be identified this way. As for the non-conventional accidents, Austin names them perlocutionary acts, which are the influences of the utterances left on the participants of communication.

On this basis, Searle (1969) develops the taxonomy of illocutionary acts, proposing the three most important criteria: the illocutionary point, the direction of fit and the psychological state expressed by the speech act [30]. Within this framework, Searle (1979) presents five types of illocutionary acts: assertives (e.g., statements, descriptions, swears), directives (e.g., orders, suggestions, insistences), commissives (e.g., promises, guarantees, agreements), expressives (e.g., apologies, congratulations, condolences) and declarations (e.g., appointments, promotions, nominations), which can reflect different communicative intentions and psychological states [31]. Therefore, words representing the facts, the natural world and the psychological state expressed by the utterance can be connected and analysed within the framework. SAT has been developed in diverse directions afterwards and can be applied in many fields of society, especially in education and politics (Hofman, Haerle & Maatz, 2023) [14].

5 The Practice and Influence of Speech Act Theory in Modern Society

The awareness of connecting multiple disciplinary areas to get comprehensive answers to particular questions and simplify the application of knowledge needed is attached to great importance (Petrova & Vasichkina, 2021) [26]. Currently, education and communication within globalisation and computerisation have been necessary for society's continued existence (Petrova & Vasichkina, 2021) [26]. The Internet has greatly increased the availability of accessible educational resources and expanded opportunities for learning both in and out of school (Lim, 2013) [19]. In that case, under the trend of interdisciplinary interaction, SAT can be understood and applied to new forms of practice and research in modern society.

On the combination of SAT and modern informational technologies, Loke and Golding (2016) explore how people learn in virtual worlds. According to their definition, virtual worlds are 'computer-based, multi-user virtual environments that simulate life in the physical world and that users interact with by manipulating a digital character or avatar using keyboards and mice' (Loke & Golding, 2016, p. 1168) [21]. As the most commonly used and most extensively researched virtual world (Wang & Burton, 2013), Second Life is the focus of Loke and Golding's study, as it can be used to understand the universal functions of similar products [40]. Desktop virtual worlds can be applied in educational fields for many different purposes, such as building social networks and training in specific professions (De Freitas, 2008) [9].

Loke and Golding (2016) focused on professional education, such as medical education, teacher education and social work, and turned to the example of the Otago Virtual Hospital (Blyth & Loke, 2014) [21][6]. In this virtual world, medical students can

role-play as doctors through digital avatars to provide medical services for virtual patients, allowing them to practice their knowledge and skills in safety with no risks of injuring patients (Dalgarno & Lee, 2010) [8]. Based on these advantages of realistic simulation and repeatability, virtual worlds in educational fields have received great attention from academia for over a decade, especially in clinical decision-making, ethical reasoning and home visiting in social work (Wang & Burton, 2013; Loke et al., 2012; Houser et al., 2011; Wilson, Brown, Wood & Farkas, 2013) [40][22][15][43].

However, theories of learning in virtual worlds still face shortcomings. According to Dalgarno and Lee (2010), learning and curriculum design associated with virtual worlds is mainly driven by intuition rather than research-based theories or models [8]. Hence, Loke and Golding (2016) introduce SAT to supplement the experiential learning theory; this theory can be applied to examine students' verbal interactions and thinking processes in role-playing within virtual worlds [21].

In the information age, communicative methods have undergone a thorough transformation from offline to online. Thus, one challenge is 'the lack of correspondence between the virtual-world learning performance and the target performance in the physical world' (Loke & Golding, 2016, p. 1170) [21]. Loke and Golding (2016) turn to Thorndike and Woodworth's (1901, p. 558) view that the transfer from the virtual learning context to the target physical world context depends on 'identical elements.' [21][36] However, this view is extreme and unable to make complete correspondence between the virtual and physical worlds because controlling an avatar for learning with a keyboard and a mouse is evidently different from the learning behaviours of humans in the physical world.

Due to the limitations and criticisms of Thorndike and Woodworth's idea of transfer (Lave, 1988; Lobato, 2006) [18][20], Loke and Golding (2016) apply near transfer to explain role-play learning in the virtual world rather than far transfer, which can avoid some controversies (Perkins & Salomon, 1992) [21][27]. The near transfer occurs between very similar contexts; for example, one soccer striker learns dribbling skills from a midfielder. By comparison, the far transfer takes place between very different contexts, such as learning soccer tactics and strategies by playing chess.

The concept of near transfer can be connected with the idea of SAT that the same speech act can be performed by different means. For example, the speech act of promising can be done by saying a performative utterance, such as 'I promise you that...' or by entwining a little finger to another person's little finger to make a pinky promise (Loke & Golding, 2016) [21]. Although these two actions are entirely dissimilar in the physical world, they both belong to the commissive illocutionary act of promising. These instances indicate that, at present, people face diverse communicative scenarios, which bring them different options for using performative utterances.

Moreover, when facing these alternatives, online informational performatives might be preferable over others due to the situational constraints associated with new technologies. Web conferencing applications, such as Adobe Connect and Zoom, have become frequently used tools for attending or organising meetings online. They can provide participants of the meeting with new ways of uttering performatives through different buttons, such as 'hand-up', 'thumbs-up', 'clapping', and 'smiling'. Participants can activate these buttons during the meeting to perform their illocutionary acts. For instance,

the 'hand-up' button is used to reproduce the physical behaviour of raising a hand in the virtual world, conventionally signalling to others that 'I have something to say'. This connection is established on an 'accepted conventional procedure' from history (Austin, 1962, p. 12) [1].

However, the emergence of new technologies requires the upgradation of conventions. During online meetings, 'hand-up' buttons can be used to express a performative act of 'requesting a microphone' because online meetings are normally controlled by a host who can authorise the participants to speak with a microphone (Loke & Golding, 2016) [21].

Furthermore, according to Loke and Golding (2016), in a virtual world, students can learn through non-verbal performative actions [21]. When performative actions in the virtual world have the same intentions as performative actions in the physical world, they can produce similar effects, although they have different forms of implementation. With this in mind, performative actions in the virtual world can exert a real impact on the co-participants in the virtual world, which is usually a learning effect.

Due to the correspondence in terms of the intentions and effects, Loke and Golding (2016, pp. 1177-1178) argue that the processes of experiential learning in the virtual world are: '(1) performing actions that enact their intentions; (2) undergoing the non-physical effects/consequences of their actions; (3) establishing a link between the action and effects/consequences through reflection' [21]. This statement indicates a supplement to experiential learning theory from the perspective of Austin's Speech Act Theory, which can be an extension to the 'boundaries of traditional theories' (Powers, 2003, p. 191) [28].

The study by Loke and Golding (2016) reflects the shift of research focus from the learning consequences to the learning processes, which corresponds to the central idea of the linguistic turn [21]. Non-verbal performative actions in such a case can be seen as a 'language' in a broad sense or a special kind of utterance in Speech Act Theory, which can represent a conventional connection between a 'signifier' and a 'signified' in social practice. The learning processes in the virtual world demonstrate that the generation of meaning is not limited to one dimension but can occur simultaneously in the physical and virtual worlds. The corresponding signifier and signified can come from different forms of context, such as clicking the 'hand-up' button and asking for the authority to use a microphone.

Speech Act Theory first presented the concept of performative action, which can derive new forms in the Internet age. From a perspective of externalism, the Internet provides people with a new environment or an external entity to extend their awareness of using and interpreting language (Wikforss, 2008) [42]. According to Simon (1971), the development of information-processing technologies has transformed the meaning of the verb "know" from "storing information in the memory" to "accessing, identifying, extracting, and using information" [32]. In that case, under the trend of interdisciplinary interaction and information technology development, Speech Act Theory can be understood from new perspectives and applied to new forms of practice and research in modern society.

6 Speech Act Theory and Corpus Linguistics

With the development of computational technologies, some regrets of Austin can be remedied. One of these solutions is the application of corpora. As mentioned earlier, Austin was interested in empirical studies but faced some practical problems, such as collecting and analysing authentic data on actual language use (Austin, 1966; Chapman, 2023) [2][7]. However, corpus linguists' creativity will not be limited by data and technology because 'the wealth of data and the ease of access will however encourage the compilation of statements which are firmly compatible with the data', and computers will 'encourage hunch-playing and speculation at the creative stage' (Sinclair, 2004, pp. 16-17) [33]. Recently, due to the involvement of big data analysis, corpus linguistics has broadened its study range and transformed its concern from language to social and ideological issues (O'Keefe & McCarthy, 2022) [25].

Overall, it can be concluded that modern corpus linguistics returns to human beings themselves by collecting and analysing naturally occurring discourses, reflecting how people think, talk and interact in particular contexts. This attitude towards language and relevant research approaches can be regarded as a legacy of the linguistic turn.

7 Conclusion

The linguistic turn left a profound impact on modern studies of philosophy and linguistics, transforming the concerns from the nature of the world to language itself and even human beings themselves. In modern society, corpus linguistics inherits the importance of data and establishes a data-driven approach to language investigation, distinguishing it from traditional 'armchair research'. However, according to Chapman (2023), both theories and experimental data are continuously shaping the ways we understand and explain human language, influencing research and practice within these areas [7].

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