

Monika Kaźmierczak  <https://orcid.org/0000-0003-4396-3627>

University of Lodz, the Faculty of Philology, the Department of Polish Dialectology and Logopaedics, Pomorska 171/173 St., 90-236 Lodz, e-mail: monika.kazmierczak@uni.lodz.pl

A proposal for a non-antagonistic approach to disorder and order in cluttering

Propozycja nieantagonistycznego ujęcia bezładu i porządku w gielkocie

Keywords: cosmos, chaos, chaosmos, non-antagonistic approach, cluttering

Słowa kluczowe: ład (kosmos), bezład (chaos), chaosmos, ujęcie nieantagonistyczne, gielkot/mowa bezładna

Abstract

The aim of this article is to present a different understanding of cluttering: not in the category of 'fluency disorders', but as a complex language and communication disorder. A complementary approach to the phenomena of order and disorder was proposed in relation to the non-antagonistic mythical and religious concept of the cosmos and chaos, linguistic adaptations of the theory of chaos, and considerations on the idea of chaosmos. Polish-language speech therapy literature shows the examples of perceiving chaos and order in cluttering as mutually conditioning, non-antagonistic forces. The article closes with postulates of opening to (neuro)diversity, bridging gaps between different language and communication orders as well as respecting by the recipients a sufficiently structured way of speaking, a way in which a clutterer communicates.

Streszczenie

Celem artykułu jest przedstawienie innego niż w kategorii „zaburzenia płynności” rozumienia gielkotu, tj. jako złożonego bezładu językowo-komunikacyjnego. Zaproponowano komplementarne ujęcie zjawisk ładu i bezładu, nawiązując do nieantagonistycznej mityczno-religijnej koncepcji kosmosu i chaosu, humanistycznych, w tym lingwistycznych adaptacji teorii chaosu oraz rozważań na temat idei chaosmosu. W polskojęzycznych publikacjach logopedycznych wskazano przykłady ujmowania chaosu i porządku w gielkocie jako sił wzajemnie się warunkujących, nieantagonistycznych. Artykuł wieńczy postulaty otwarcia



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na (neuro)różnorodność, budowania pomostów pomiędzy różnymi porządkami językowo-komunikacyjnymi oraz respektowania przez odbiorców wystarczająco uporządkowanego sposobu mówienia, sposobu porozumiewania się osoby z gielkotem.

Introduction

The way in which a linguistic and communicative phenomenon is perceived determines both its analysis and definition as well as the processes of diagnosis and treatment in speech therapy. In the case of phenomena not yet understood, including cluttering, integral treatment of scientific explanation and understanding opens up the opportunity to reach for new research strategies or tools and seek new cognitive paths, allowing researchers to approach the essence of things as closely as possible.

The aim of the article is to present an understanding of cluttering different from the ‘fluency disorder’ category. The complimentary presentation in cluttering of seemingly contradictory phenomena, i.e. order (harmony) and disorder (chaos), was inspired by a non-antagonistic mythical and religious concept of the cosmos (Gr. κόσμος) and chaos (Gr. χάος), humanistic, including linguistic, adaptations of the chaos theory and reflections on the idea of chaosmos. The relevance of these concepts to the proposed non-antagonistic perception of disorder and order, and the resultant depiction of the chaosmos of cluttering, are discussed in the subsequent sections of the article.

The ontology of chaos and the ontology of cosmos in humanistic research

In the antagonistic mythical and religious concept, the ontology of the cosmos and the ontology of chaos are at odds with each other [Ochman, 2017]. The human being embodies clashing and often contradictory components: cosmos and chaos, human nature and individual personality. If one assumes that nature and personality are distinct, hostility (understood as a mutual threat and incompatibility of two different forces and values) is induced by the conduct of “one individual in one key (of the cosmos) in juxtaposition with an action of another person acting on a different key (of another cosmos)”¹ [Ochman, 2017, p. 207]. Failure to accept a different order leads to inferring a threat and possible disruption of the accepted order and people outside the accepted order are sought to be reoriented or disoriented. In addition, a proponent and defender of one order is unable to imagine that his or her cosmos could be chaos for another person, therefore an individual conditioned by his or her own order can somehow be enslaved by the rules of others, particularly

1 Unless indicated otherwise, quotations in English were translated from Polish.

if they constitute the majority “in the same way as the ancient Greeks and Romans called peoples who did not have their culture barbarians and turned them into slaves” [Ochman, 2017, p. 207].

Alongside concepts that antagonistically view the world as order or disorder and man as cosmos or chaos, a being tending towards harmony or clutter, it is also possible to evoke a non-antagonistic concept which accounts for the dualism and twin opposition of order and disorder as two *de facto* simultaneously existing, mutually conditioning, interpenetrating and complementary forces (cf. the world concepts of Heraclitus, Zarathushtra and Manichaeism). The dynamic concept of man as a being who rather than ‘being’ is ‘becoming’, here involves a mutual respect for both the principle, i.e. the general order, and every singularity, which should lead to the optimisation of actions that constitute a harmonious combination of what is necessary to maintain the common order and not incompatible with the person’s sense of identity.

A chaological approach in the discussion on communication can be provided by the possibility of balancing on the edge of two orders with a sense of security for both sides, namely the community and the individual. For some 30 years now, the deterministic chaos theory, otherwise known as non-linear dynamics or complexity theory, has been setting new directions for research in many fields,² including mathematics, physics, economics, epidemiology, philosophy, education, literary studies and linguistics. Chaological references have been used, for instance, to show the relationship between communication science and the theory of chaos [Janiak, 2008], the dynamic description of speech production and biological determinants of these processes [Yang, 2003], first language acquisition and natural code transformation [Mitchener, Nowak, 2004], research on lexis [Pastuchowa, 2006; Rejter, 2006], etymology [Kleszczowa, 2012], analogy and anomaly [Dąbrowska, 2006] or the phenomenon of redundancy [Kleszczowa, 2006; Piela, 2006]. This approach emphasises that the dynamic and non-linear development of language elements in natural communication reflects the true reality surrounding the individual. The adaptation of the assumptions of chaology to the needs of linguistics is “a proposal for the analysis of the »true« reality, i.e. the one that surrounds a person, not an idealised, abstract, projected one” [Rejter, 2006, p. 19]. In chaological studies, linguists point out that a certain non-obvious order should be extracted with the help of an appropriate research apparatus through which it is possible to see the dynamism of nature’s systems and their determinism. The term ‘deterministic chaos’ “is [...] used to describe movements which, albeit determined, occur in capricious, unpredictable ways. This is due to their sensitivity to initial conditions” [Tempczyk, 1998, p. 319], including to the nonlinear work of the human brain [Başar, 1990] or the mental and emotional state of an individual [Abraham, Gilgen, 1995; Robertson, Combs, 1995; Abraham, 1996].

2 For an extensive list of literature on contemporary reflections on the cosmos and chaos, see Ochman, 2017, pp. 189–190.

Recognising the simultaneous occurrence of both mutually contingent phenomena of disorder and order permits this dynamic state to be referred to as “chaosmos”. This neologism from James Joyce’s novel [1999, p. 118] and the idea articulated by philosophers Gilles Deleuze and Felix Guattari [Guattari, 1995; Deleuze, Guattari, 2000] point to a state in which the human being constantly oscillates between absolute disorder and a multiplication of increasingly complex meanings, a space stretching between chaos and the search for order in which contradictions and opposites intermingle [Bartholomew, 2021]. Adopting the concept of chaosmos eliminates the existence of a single unwavering order, and instead it confirms the existence of disorder, a space with blurred boundaries.

The willingness to identify the ever-shifting edge of disorder and order in chaosmos requires accepting that these seemingly extreme and mutually exclusive concepts condition and constantly complement each other. No clear line between chaos and order is seen here as “disorder is hidden in order, and disorder can give rise to order and harmony” [Tempczyk, 1995, p. 37]. In the analysis of the structure, chaosmos will contain layers of both elements overlapping each other in a spiral of change, with an intensity dependent on the individual communication situation. The current dominance of order in chaosmos will be a manifestation of the maintenance of optimal and widely accepted actions that do not cause embarrassment, uncertainty or misunderstanding in the audience. The predominance of chaos at a given time will give a sense of disorder, i.e. “disorder with a deeply hidden ordering structure” [Tempczyk, 1995, p. 147] and potential arrangement susceptible to change, and the initial conditions of linguistic interaction.

Chaosmos of cluttering

In Polish speech therapy literature, cluttering is sometimes described as speaking “without rhyme or reason” [Kaczmarek, 1981], i.e. in a chaotic manner characterised by lack of order and disregard for rules [*Wielki słownik języka polskiego PAN*, n.d.], which is caused by the chaos of thinking and the chaos of thought [Tarkowski, Góral-Półrola, Reichel, 2017]. Synonyms of the word “chaos” tend to be used to describe this phenomenon, which diagnoses disorder, mess, disarray or shapelessness in opposition to the desired order determined by the theory of speech acts, communication or linguistic interaction. The widespread conviction of the necessity of securing and unconditionally pursuing the principles of a socially accepted linguistic and communicative order contributes to the understanding of the therapy of cluttering as activities aimed at introducing objective order into an individual picture of speech. In order to establish a universally accepted order, it is necessary that the individual first learn, master and then internalise the established and universally accepted rules and principles that are supposed to eradicate the disorder of thought and speech.

Such an antagonistic view of the ontology of order and the ontology of chaos treats disorder either as a remnant of the original form of thinking and speaking before the final order was achieved, or as a transgression against the rules and principles of that order. Thus, it is the underlying reason for the inclusion of cluttering in the category of “speech fluency disorders” in international classifications (cf. ICD-10, 2008, code: F98.6; ICD-11, n.d., code: 6A01.1; ICF, 2001, code: b330). Under this concept, many clutterers perceive the unequivocally understood order of communication (the ontology of unity: strict compliance of the individual to certain general rules and principles, focus on the designated order, order as harmonised unity) and the overriding goal of therapy (removal of non-fluency symptoms) not only as an unattainable ideal, but also a form of pressure and bondage (disorder as any deviation from the designated norms and standards accepted by the majority), often harming the sense of the communicative identity of a clutterer, and therefore having consequences for the development and sense of identity, comfort of one’s life and ability to pursue linguistic social roles.

Using the proposed non-antagonistic view of the ontology of order and ontology of chaos in the discussion on cluttering opens a discussion on the development of a concept that recognises the order which sustains the harmony of the persistence and development of social communication and, at the same time, respects the subjective order and marks the edge of the chaos of cluttering for actions orderly enough, i.e. optimal in various types of communication events.

The ontology of multiplicity (acceptance of multiple orders, order as a hierarchical multiplicity) indicates that the organisation of the whole is composed of various unitary forms of order, each of which is an essential element for a diverse communicating community. The ontology of multiplicity makes it possible to see value in (neuro)diversity and respect every uniqueness and distinctiveness which does not threaten the communicative order of the whole and does not seek to self-exclude or isolate the individual. With regard to the non-antagonistic concept of order understood in this way, the overriding goal of cluttering therapy is to develop bridges which permit to understand the nature of individual and social principles of communication, monitoring and, consequently, modelling subjective chaos while preserving the sense of linguistic and communicative identity of a clutterer and respecting both individual communicative conditions and social principles of participation in linguistic interaction.

In cluttering, which is characterised by high dynamics of changes in the speech image and dependence on the consituation and current psychophysical condition of the sender, it is extremely difficult to draw a clear line between disorder and order. The category of the edge of chaosmos of cluttering dynamically shifting under the initial conditions of the speech act, provides a better understanding of the barriers and communication challenges, the unpredictability of the consequences of linguistic actions during different types of events, making it possible, at the same time,

to bear in mind the existence of a hidden subjective order in the utterances of a clutterer, an order which may not be easy to read in the close perspective of a face-to-face conversation. In order for the client³ to be able to act on at least the edge of this dis-order,⁴ i.e. effectively balance between one's own chaos and abilities of other participants in communication, the dynamic concept of cluttering therapy emphasises the process of developing and selecting optimal, sufficiently well-structured language and communication activities together with the therapist. The language of description of a clutterer will be here a tool for characterising the individual's speech image and indicating the gap between the optimal communicative order (therapy goals) and the current image of the subjective order (resources, current way of communicating), with reference to the client's phenotype, previous linguistic and communicative strategies and a therapeutic biography if a clutterer has previously benefited from some form of professional support.

Chaosmos of cluttering in speech therapy literature

Analysis of speech therapy literature has so far not brought to the fore the proposal to treat disorder and hidden order in cluttering as twin and comprehensively acting forces, mutually contingent though seemingly exclusive and radically different. However, publications by specialists describing cluttering as a speech fluency disorder contain numerous exemplifications of four statements which are essential to the concept of a non-antagonistic account of order and chaos [after: Tempczyk, 1995, pp. 36–37]. In order to illustrate this presence, each statement will be supported here by ten examples of conclusions by specialists from Polish-language works (by both Polish authors and from translated texts) on cluttering:

Disorder is hidden in order

1. “[...] It is not possible to count the episodes of cluttering [...]; cluttering concerns the entire speech act” [Myers, 2018, p. 49];
2. “What happens at a certain level of the system is likely to affect other levels [...]. Excessive speed affects the entire communication system” [Myers, 2018, p. 49];

3 In the article, a speech therapy client is understood as “a person who uses speech therapy services, with whom the therapist builds an asymmetrical dialogical relationship based on uniqueness and mutual respect of subjectivity (therapeutic alliance/working alliance)” [after: Kaźmierczak, 2022, p. 121].

4 The proposed transcript with an en dash was used to show the relationship between disorder and order (cf. transcript with an en dash of verbal expressions which convey the relationship ‘between one side and the other’: <https://sjp.pwn.pl/poradnia/haslo/Myslник-pauza-minus;16280.html>).

3. “[...] In the process of communication, the linguistic, articulatory and supra-segmental layers (including the rate and fluency of speech) interact and influence each other in various ways” [Spruit, 2016, p. 34];
4. “[...] Clutterers do not think faster than they speak, but they tend to bypass the necessary links in the thought process, which ultimately produces the same result” [Tarkowski, Smul, 1988, p. 13];
5. “[...] A symptom of thinking that is slower than speaking is the occurrence of a large number of pauses between phrases uttered rather quickly” [Tarkowski, Smul, 1988, p. 13];
6. “Individuals suffering from cluttering use pauses very rarely and/or in inappropriate places, and sometimes these pauses are very short” [Spruit, 2016, p. 52];
7. “[...] Clutterers are caught up in a thicket of thoughts not always formulated in a complete way, and yet they continue to speak” [Myers, 2018, p. 50];
8. “Clutterers may [...] be unaware of their way of communicating and its impact on the recipient” [Myers, 2018, p. 47];
9. “A person struggling with this type of difficulty [motor/phonological cluttering – M.K.] fails to notice that he or she makes mistakes at the phonological coding stage, which contributes to incorrect structure of words” [Spruit, 2016, p. 62].
10. “[...] Most clutterers are able to speak intelligibly if they have a short and carefully considered utterance with a clear structure to follow. The intelligibility of their speech decreases when they have less control over either informal or more spontaneous and extensive speech” [Myers, 2018, p. 52].

The subjective order of a person with the experience of cluttering requires self-analysis and joint meta-analysis of utterances with the therapist in order to raise the level of consciousness of the language user. In clutterers, speech is developed, the intention of the utterance and the concept are present (the message is constructed and generated), and the analysis of the different subsystems of language in the utterances is possible. Accurate identification of the levels and structures needed to be monitored and remodelled forms the basis for determining the therapeutic strategy in cluttering. Indeed, the mode of communication displayed by a person with cluttering is not always optimal, adequate to show the intentions of the sender and conditioning the effectiveness of the message in linguistic interaction. Understanding by the recipient of the overall intention of the message does not at the same time imply full decoding at the local level, i.e. of each individual message.

Disorder can give rise to order and harmony

1. “[...] Attempts to draw attention to his or her [the clutter’s – M.K.] speech or behaviour bring only temporary improvement” [Tarkowski, Smul, 1988, p. 16];

2. “[...] Monitoring their own speech, [some people who clutter – M.K.] may have no difficulty in reducing their pace for a short period of time, especially in highly structured communication situations, but they return to their typical way of speaking once this short period of alertness has passed” [Myers, 2018, p. 47];
3. “It is important to work with the client during the interview and documentation process to benefit from their insights into their own communication effectiveness” [Myers, 2018, p. 50];
4. “[...] Therapists and researchers need to »go to the source« describing the nature of cluttering on the basis of client introspection” [Myers, 2018, p. 52];
5. “The therapy structure is based on improving the client’s general knowledge on cluttering and their application of this knowledge to develop a meta-awareness of the profile of their disorder” [Myers, 2018, p. 53];
6. “[...] One way to motivate the client to undertake therapy is to show them that achieving more effective speech is possible” [Myers, 2018, p. 53];
7. “[...] The VOT (voice onset time) value in clutterers is reduced, which is one of the reasons why phonetic defects occur. As one starts to speak more slowly, the voice onset time becomes longer” [Spruit, 2016, p. 53];
8. “Higher self-awareness and meta-awareness of the client’s own disorder profile is a *sine qua non* for monitoring and then modelling the cluttering disorder” [Kaźmierczak, 2022, p. 125];
9. “Taking into account the perspective of the clutterer makes it possible to adopt the right treatment strategy, with the client’s preferred goals, adequately selected therapy methods or techniques according to his or her needs and abilities” [Kaźmierczak, 2022, p. 131];
10. “Chaos of thoughts does not entail their absence” [Tarkowski, Góral-Półrola, Reichel, 2017, p. 169].

The strategy for handling cluttering is the result of joint identification by both the client and the speech therapist of the resources and areas required for therapy. The fullest possible picture of the communicative and, if any, therapeutic biography conditions the specialist to propose the most beneficial and, at the same time, the most comfortable actions for a given person. Subsequent successes in language interaction will answer the question of whether, in the course of therapy, a clutterer acquires the ability to at least balance on the edge of communicative effectiveness, whether his or her level of communicative proficiency and self- and meta-awareness allow for flexible adaptation to the requirements of the communicative situation and its other participants as well as the application of optimal linguistic actions in direct face-to-face communication.

There is no strict boundary between order and chaos

1. “[...] Cluttering is a disorder bordering on the norm and pathology” [Tarkowski, Góral-Póřrola, Reichel, 2017, p. 192];
2. “[...] Clutterers speak too fast for their abilities, although not necessarily faster than people who do not struggle with this disorder” [Myers, 2018, p. 46];
3. “Clutterers vary considerably in the degree of awareness of their disorder” [Myers, 2018, p. 47];
4. “Because the typical characteristics of cluttering can appear in any aspect of communication, clients vary in their disorder profile” [Myers, 2018, p. 49];
5. “The same client may have different degrees of fluency depending on the length of utterances, their complexity and the pragmatic load of the communicative situation” [Myers, 2018, pp. 49–50];
6. “[...] A certain percentage of clutterers may be aware of the problem, but treat a potential reduction in speech rate as incongruous with their character” [Myers, 2018, p. 47];
7. “However, a great amount of work is still needed to integrate what people faced with this disorder say, namely their own perception of symptoms, with what their interviewees observe in terms of behaviour and neuroimaging-based measurement data on the neurodynamics of people suffering from cluttering” [Myers, 2018, p. 48];
8. “[...] Cluttering is nothing more than «a way of speaking», which cannot be described quantitatively as strictly as stuttering” [Myers, 2018, p. 51];
9. “[...] Its [of cluttering] intensity varies depending on the context of the utterance and the degree of self-awareness and self-control” [Myers, 2018, p. 52];
10. “Nobody expresses themselves with complete fluency” [Spruit, 2016, p. 16].

In cluttering, as in the speech of non-clutterers, it is very difficult to draw a clear line between fluency and non-fluency: one can consider a spectrum of non-fluency and fluency, with dynamically shifting edges of chaosmos. Used during the collaboration between the speech therapist and the clutterer, measurements or quantitative descriptions can help to raise the level of self-awareness in the search for an individual image of speech sufficiently structured for the successful achievement of communicative goals in linguistic interaction.

Sensitivity [of actions, movements] to initial conditions

1. “[...] Cluttering speech originates in inner speech and manifests itself in external speech. In other words, the speech disorder in question involves the deep structure of speech and not, as previously thought, its surface structure” [Tarkowski, Góral-Póřrola, Reichel, 2017, p. 168];

2. “External symptoms will depend on which parts of the system in a given person are particularly sensitive to the consequences of excessive pace” [Myers, 2018, p. 49];
3. “[...] Everyone has certain limitations regarding their ability to choose the pace at which the processes of encoding thoughts through language and speech are performed. Once these capacities are exceeded, disintegration occurs limiting the intelligibility of the message [...]” [Myers, 2018, p. 46];
4. “[...] Certain mental processes are different in clutterers, making it more difficult for them to maintain a slower rate of speech on a consistent basis” [Spruit, 2016, p. 91];
5. “It is likely that, to some extent, cluttering is genetically determined [...], and may have a neurological basis” [Spruit, 2016, pp. 25, 27];
6. “[...] Cluttering can be primarily found in conversation. But that does not mean that the disorder cannot occur when reading, telling a memorised story, and during other speech tasks” [Spruit, 2016, p. 23];
7. “When talking to a clutterer, one gets the impression that they assume that their audience has the necessary knowledge. However, this is not the case” [Spruit, 2016, pp. 57–58];
8. “It is not easy to make a recording which would faithfully reflect the way of communicating in everyday situations since a clutterer can usually speak relatively fluently and clearly if they are focused on the speech” [Spruit, 2016, p. 73];
9. “It is primarily emotions that are the catalyst of cluttering speech” [Kaźmierczak, 2022, p. 124];
10. “The customer’s motivation to change the way they communicate is highly dependent on their level of psychological well-being” [Kaźmierczak, 2022, p. 125].

The picture of the linguistic behavior of clutterers, or even one clutterer in several communication events, can be very different due to a number of variables (e.g. neurodiversity, different temperaments and personalities of clutterers and their psychological well-being, the degree of awareness of one’s own way of speaking and sensitivity to the audience’s reactions, the level of monitoring of one’s own speech, the time allotted for dialogue or monologue, the distinctiveness of each communication event and the participants, the variety of topics and accompanying emotions, the heterogeneity of communication goals). The awareness of sensitivity to initial conditions leads to understanding of bifurcations in the statements of clutterers; it also allows to identify conditions conducive to good communication during therapy.

Conclusion

The non-antagonistic understanding of the ontology of order and the ontology of chaos proposed in this article reveals the chaosmos of cluttering as part of a complex linguistic and communicative disorder. It seems to be an achievable challenge to seek an optimal way of communicating of clutterers that does not place the individual way of speaking (subjective order) and the social order in opposition to each other. However, effort is required from both sides in order to achieve communication that is sufficiently structured from the point of view of the sender with cluttering and the receiver of his or her speech. “The phenomenon of cluttering still needs «disenchanting» on a number of planes. The society should become accustomed to the existence of this speech disorder, understand it better and respond to it better” [Węsierska et al., 2015, p. 261]. One important step here is to build bridges between different language and communication orders, which requires an openness to (neuro)diversity and a critical reflection on formulations such as “without rhyme or reason” or “fluency disorder.”

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