Four Sources of Uncertainty in Communication Ontology

Ştefan Vlăduţescu

University of Craiova, 13 A. I. Cuza Street, Faculty of Letters, Department of Romanian Language, Romanian Literature, Education Sciences, Communication and Journalism, Craiova, Romania

Abstract. The study examines the uncertainties regarding the elements of Communication Ontology from the theoretical universe of communication discipline.

There are three primary analytical findings:

a) a coherent and rigorous ontology of human communication is missing;

b) communication as discipline has no thoroughly explicit ontology;

c) the current rudimentary ontology of communication is under the standards of a rigorous and robust ontology.

The main identified sources of uncertainty are the following:

a) the fact that the attitude and behavior of the communication discipline to take seriously as a discipline was established only in 1990's;

b) the fact that a discipline without a secular past, communication cultivates itself as always being at the beginning;

c) the fact that, being always met and treated with courtesy, communication discipline has built hardly "face" among other subjects, leaving a false impression of instability;

d) enjoying success without making waste of effort and acting as "being on her own", communication did not, like other disciplines, the effort to define clear, to establish and impose an ontology.

Keywords: Communication Ontology, uncertainty, instability, "face" of communication

1. Introduction

Among the components of a strong cogitative system, there is no imposed hierarchy. Nevertheless, in a natural way, ontology has set itself as the foremost formant. Taking into account this idea, it should be mentioned that the architectural primacy is contested by epistemology and ontology. The arguments of each one are

well-founded. The ontology emphasizes that the "human being", "existence" precedes "knowledge". Epistemology maintains that there is no existence without knowledge: once we learn about "something", that thing exists as "something" or as unknown. In his paper "Knowing and Being", J. R. Mensch shows that: the "paradigm (...) demands that we think the priority of being over knowing" (Mensch J. R., 2004, p. 8). This option is correct, but it is hardly approved of: "The difficulty of this thought, continues J. R. Mensch, is that we cannot see how we can speak about being before we know how far our statements actually describe it. Talk about being presupposes its knowability" (Mensch J. F., 2004, p. 8). At the beginning of the world, epistemology might be more important, but in an already established gnoseologically world, such as ours, the ontology represents the principled and principal component. On the other hand, both S. W. Littlejohn and K. A. Foss consider that we have perceived the hard axes as forming a tandem: "Epistemology and ontology go hand in hand because our ideas about knowledge depend in large part on our ideas about who is doing the knowledge. (...) In communication, ontology focus on the nature of human social interaction because the way a theorist conceptualizes interaction depends in large measure on how the communicator is viewed" (Littlejohn S. W., Foss K. A., 2008, p. 17).

2. Ontology as axis one of a discipline

The Ontology examines and inventories the existences, while the epistemology studies them. The categorization and the conceptualization represent fundamental ontological and epistemological processes. In fact, as Rafael Capurro emphasizes, "ontology has to do with Being itself" (Capurro R., 2006, p. 175). Thinking about terminology, Professor Dumitru Borțun highlights, at a given moment, "the unlimited optimism regarding the completion and the regulation of the language" (Borțun D., 2002, p. 81) (also Batâr, 2003; Bărbulescu, Țâțu & Țâțu, 2007; Abrudan, 2009; Horga, 2011; Maior & Nițu, 2013). Even though this observation is made in the context of the epistemological thinking of communication,

it enables to understand that the communicational ontology is built slowly and with difficulty.

The general ontology is a picture of existences. The ontology is defined as the study of the categories forming a field of existence likely to be conceptually structured as object of understanding and knowledge. The general ontology deals with the "existence of the object" or with the categories that form the object. In the theoretically modelled ontological practice, a few ontological theorems have been emphasised. The theorems are constructions-inferences fomade up of multi-axiomatic explanations. A theorem results from the targeted combination of several axioms: "Axioms can be combined to derive theorems" (Gudykunst W., 2005, p. 427). We can speak of 4 ontological communicational theorems:

a) the theorem on the distinction between independent entities and dependent entities;

b) the theorem on the ongoing distinction of the communicating agents or participants;

c) the theorem onthe distinction between continuants and occurents;

d) the theorem onthe distinction between universals (also called kinds, species, or types) and particulars (individuals, instances, or tokens)"

On the synchronous slope, the ontology means to put into incidence the diachronous vocabulary of the moment in relation to the object, the issue of the field. The object of study of the theory or science is split into categories. The perimeter to investigate is segmented into category plots (see also Bârgăoanu, Negrea & Dascălu, 2010a; Bârgăoanu, Negrea & Dascălu, 2010b; Drămnescu, 2012). Therefore, the ontology applied will proceed to either (1) a scanning of the problem of the targeted field by relating it to shared-validated concepts, or (2) the operationally clear and distinct definition of the concepts, with the goal to end in being shared-validated.

The methodological criteria for the systematic examination of the "picture of existences" set up by T. R. Gruber (1993) and N. Guarino (1995) in the cited works are as follows: clarity, coherence, extensibility (monotony and anticipation), "minimal encoding bias" and "minimal ontological commitment". The five form the

"design criteria". The main ontological operation is the formal specification of the targeted field and ontological objects (of the existence categories, the canonical concepts). Whatever the domain of the discourse may be, it will always mobilize an implicit ontology. All discourses are impregnated by an implicit ontology which is diffused into the structuring and functioning of the discourse. It can be identified. The implicit ontology is a practice, an application of a type of discursivity; it is the achievement of a directly unveiled project. If the ontological project is presented directly, then we are dealing with an explicit ontology. If the appurtenance of the discourse to a universe of discourse is specified, if the concepts and reference categories are specified, if the theories, paradigms, models and principles used are made known, then we are dealing with an explicit ontology (Batâr, 2000a; Batâr, 2000b; Munteanu, 2013). Explicit ontology is a program of thinking within a ontology. Sometimes the explicit ontology and implicit ontology may not correspond.

There is an implicit ontology in any discourse. It is specific to the discourse appurtenance domain. In a philosophical study, we shall necessarily find a philosophical ontology.

When a text in the domain of the communication discipline is subject to the ontological assessment of a typical standard lecturer, the latter will have ontological assignment problems. There are two causes: a) as a discipline, communication does not have a properly set and easily identifiable ontology, and b) the communication culture is still insufficient in order to remedy the ontological ambiguity of communication through it.

The ontology, as perimeter of the lexicon, of the concepts, categories, taxonomies, paradigms, models and principles, dictates the specific nuances. The implicit ontology has the conceptual-category vocabulary and taxonomies, classifications as first criterion of determination. Essentially, it is a matter of two "lists". P. S. Gray et al. understand the taxonomy as a "list of categories" (Gray P. S. et al., 2007, p. 18) (also Afloroaei, 2008; Dumitru, 2011; Stavre, 2012; Vlăduțescu G., 2013).

3. Sources of uncertainty in Communication Ontology

For the first time, the urgent need for an ontology of communication was felt at the end of the 1980s. Then T. B. Frentz and T. S. Farrell noticed "the concept of communication itself demands a common ontology which is accessible to its participants through form" (Frentz & Farrell, 1989, p. 305).

The ontology is the royal way. It is axis 1 of any discipline. The ontology of the human communication is axis 1, A1, of the discipline of communication, a General Communication Science. The ontology is responsible for the universe of study. It establishes the extension and the elements of the object of any science, including those of the General Communication Science. All the other function within this boundary, and when they want to extend it, this could be accomplished only through the ontology. The sequencer axes thesis has two corollaries:

(1) ontology, epistemology, methodology and axiology, together with history, psychology, sociology, anthropology, hermeneutics, praxeology, ethics, logics, ecology, philosophy of communication, and communication law represent axes of the cogitation system called General Communication Science;

(2) the axes are internal articulations and, as a strong science (Balaban, 2013), i.e. rigorous and robust, General Communication Science describes the whole set of axes as components.

Concurrently, in the sequence of the systematic cogitation and computation, it is ontology, and not epistemology, that which represents the axis that opens the General Communication Science. Any ontology presupposes an epistemology, while it is achieved towards an epistemology and the other axes.

The fundamental stake of the communication ontology is to fix a standard lexicon of the theoretical-scientific communication universe. This taxonomic lexicon refers to: 1) paradigms, 2) models, 3) basic cogitations (laws, principles, axioms, postulates, theorems, paradoxes, etc.), 4) essential ontological components (processes, structures, elements like sender, receiver, actant, actor, agent, communicator, message, channel, context, etc.), 5) categories, concepts, and theories.

A lexicon is a flexible standard, which assigns the boundaries and organization to a discipline.

Ordering the concepts and categories of communication and systematizing the communication domain are ontological, necessary undertakings that can only be achieved in the environment of a strong and convergent community of the communication specialists.

The Ontology of Human Communication is the picture of the existence of communication.

Ontology is the existence certificate of an universe. It aims at:

 (1) setting a language, certain definitions, concepts and existence categories;

(2 establishing certain protocols of cognitive-cogitative and diachronic organization of the universe;

(3) accrediting certain models and paradigms;

(4) distilling certain synthetic cogitations, such as principles, axioms, postulates, theorems, laws, paradoxes, etc.; and

(5) integrating the scientific community in a mutual thinking in relation to a cogitative object, to an object of study.

Communication has no thoroughly explicit ontology. A robust and rigorous ontology of human communication is missing. A strong discipline has a certain shape, a purpose and an ontological status. We see this in G. J. Shepherd's writings, too: "Disciplines forward unique ontological views; they tell us what matters about Being and they represent essentialist ideas. From modernity point of view, then, how can there be a discipline of communication? Nullius in Verba: words are nothing. How can one be a disciple of nothing? As a mere vehicle, communication has no existential status in modernity. In a sense, communication may carry Being, but in and of itself, communication is Being-less." (Shepherd G. J., 1993, p. 87).

All sciences have an ontology which is consolidated by the accumulations brought by converting the facts of observation in theories and concepts. For example, Linda Wetzel speaks of "mathematical ontology"; she shows that, over time, mathematics has enriched its ontology with increasingly new entities: "over the

centuries, mathematics has added more and more sorts of objects to its ontology" (Wetzel, 2009, p. 42). This is basically the way of developing the disciplines (Maturana, 1991; Crețu, 2009). This is also the case with communication. Specifically, the current issue of communication is that although it uses ontologies, it has not discursively consolidated an ontology. It has implicit and explicit ontologies for each of the three paradigms up to now, it has implicit and explicit ontologies for the schools representing the paradigms. However, communication does not have an interrogative and convergence "communication ontology". It has a few good dictionaries, but it does not have a discursively founded trans-historical interrogative ontology. It means it does not have an ontology to integrate all entities of the communication universe of study. Our project is the design of a ontology within an ontology engineering. At this moment, ontology is the universe of existences, of entities, of objects of speech.

The current ontology of communication is under the standards of a rigorous and robust ontology. A ontology of an universe is based particularly on the general culture of the science and on the communication within the field. In communication, there has been no ontologically directed communication. Communication also lacks a thoroughly structured vocabulary, as well as a culture of communication. We all discuss communication and cultivate the idea of communication. Everyone speaks of their own job, their own activity. Everyone speaks about the communication specific to their professional, family, etc. environment (Maior, 2009; Grosu, 2009; Siminică & Traistaru, 2013).

The rigorous and robust ontology of a settled discipline becomes noticeable by complying with 3 standards:

(1) the fact that science is taken seriously as an ontological discipline,

(2) the rare invocation of a self-ontological definition, and

(3) the fact that it is ontologically related to the other disciplines, as in partner-disciplines.

(1) A discipline without a secular past, communication cultivates itself as always being at the beginning. In 1991, C. R. Berger asked himself "Why are there

so few communication theories?" and noted "the relative lack of theory development by researchers" (Berger C. R., 1991, p. 102). Accordingly, in 1992, after approximately 45 years since the establishment of the discipline, Brant R. Burleson also noted there was "a lack of theories on the nature of human communication", and presumably demanded that "communication would be taken seriously" (Burleson B. R., 1992, p. 79). In 1993, Robert T. Craig noted there were "many communication theories" (Craig R. T., 1993, p. 26). Afterwards, Craig ascertained that communication, communication theory, "even now has not yet matured" (Craig, 2001; Craig, 2013). Communication must be taken seriously as existence in ontological terms.

(2) A mature discipline has a clear and distinct basic (ontological) vocabulary, suitable for operational research of relevance.

(3) Having problems with its own ontology, with its own universe, communication has a relatively unstable situation. When you do not know how far your theories spread, you are constantly in danger to enter someone else's territory and you are always likely to start a conflict. Communication, in its non-rigorous self-knowledge, is thereby a conflictual discipline. Once it has become rigorous, it will be able to come to agreements and make partners and friends. Meanwhile, not only is communication on a minefield, but the community it serves and lives in its temple is also on a minefield. We will only recall the fact that personalities of the discipline do not cite each other and that communication schools do not use the concepts and theories of other schools. We shall not exemplify them.

4. Conclusion: Towards a human communication ontology

An ontology of communication is necessary

(1) to organize the communication field in terms of category,

(2) to systematize the communication field, communicative entities (concepts, categories, paradigms, theories, models, systemic ontological elements, principles, axioms, theorems),

(3) to decide a mutual terminological index,

(4) to create the existence and convergence platform for the other axes of study, including itself. Of those axes, ontology is the only one that can speak ontologically, i.e. motivated, and existentially about itself.

Regarding the ontology, we can speak of general ontology and specific ontologies of speech, of implicit ontology and explicit ontology, of an external-realistic ontology and of an internal-subjective ontology.

References

[1] Abrudan, M. (2009). Quantitative and Qualitative Analysis of Romanian Newspapers Concerning the Topic of Global Economic Crisis. *Studii °i articole*, 67.

[2] Afloroaei, S. (2008). Distinct Ways of Thinking and Distinct Experiences of Truth. *Journal for Interdisciplinary Research on Religion and Science*, (2), 157-188.

[3] Balaban, Delia Cristina (2013). Development of Communication Science in Romania. Challenges and Perspecives. *Professional Communication and Translation Studies*, 6.

[4] Batâr, D. (2000). Definirea şi tipologia modelelor, necesitate în cunoaşterea ştiinţifică. *Buletinul Ştiinţific al Academiei Forţelor Terestre N. Bălcescu,* 4(20).

[5] Batâr, D. (2000). Spre o definire şi cunoaştere a paradigmei, concept fundamental al cunoaşterii ştiinţifice. *Buletinul Ştiinţific al Academiei Forţelor Terestre N. Bălcescu*, 2(10).

[6] Batâr, D. (2003). *Sociologie*. Sibiu: Editura Psihomedia.

[7] Bărbulescu, R., Ţâţu, D., & Ţâţu, L. (2007). *Investment in human capital. EU integration opportunities, Romania within EU: opportunities, requirements and perspectives* (pp. 430-435). V1. Sibiu: Editura Universităţii Lucian Blaga.

[8] Bârgăoanu, A., Negrea, E., & Dascălu, R. (2010a). The Emergence of a European Public Sphere. An analysis of Europe's News Website presseurop. eu. *Journal of   Media Research*, *3*(1).

[9] Bârgăoanu, A., Negrea, E., & Dascălu, R. (2010b). Communicating the European (Lack of) Union. An Analysis of Greece's Financial Crisis in Communication Terms. *Romanian Journal of Communication and Public Relations*, *12*(1), 18.

[10] Berger, C. R. (1991). Chautauqua: Why are there so few communication theories? Communication theories and other curios. *Communication Monographs*, 58, 101–113.

[11]Borţun, D. (2002). *Bazele epistemologice ale comunicării*. Bucureşti: Editura Ars Docendi.

[12]Bratosin, S. (2007). *La concertation dans le paradigm du mythe*. Berne: Peter Lang.

[13]Burleson, B. R (1992). Taking communication seriously. *Communication monographs,* 59(1), 79-86.

[14]Calota, G., & Ilie, G. (2013). "The Lost Generation". An Analysis on the Employability of Higher Education Graduates in Europe. Case Study: Romania. *Internal Auditing & Risk Management*, *8*(2).

[15]Capurro, R. (2006). Toward an ontological fondation of information ethics. *Ethics and Information   Technology*, 8, 175-186.

[16]Cerban, M. (2009). Types of Reference – Achieving Cohesion by Creating Links between Elements. *Translation Studies. Retrospective and Prospective Views*, 12.

[17]Colhon, M., & Tandareanu, N. (2010). The inference mechanism in conditional schemas. *Annals of the University of Craiova-Mathematics and Computer Science Series*, *37*(1), 55-70.

[18]Cotoară, D. (2003). Modele ale comunicării. *Studii de Biblioteconomie şi Ştiinţa Informării*, 7, 103.

[19]Craia, S. (2008). *Dicţionar de comunicare, mass-media şi ştiinţa informării*. Bucureşti: Editura Meronia.

[20]Craig R. T. (2001). *Communication*. In R. T. Sloane (Ed.), *Encyclopedia of rhetoric*. Oxford: Oxford University Press.

[21]Craig, R. T. (1993). Why are so many communication theories? *Journal of Communication*, 43 (3), 26- 33.

[22]Craig, R. T. (2013). *Constructing theories in communication research*. In P. Cobley & P. J. Schulz (Eds.), *Theories and Models of Communication* (pp. 39-57). Walter de Gruyter.

[23]Creţu, Ioana-Narcisa (2009). *Introducere în ştiinţele comunicării. Note de curs*. Sibiu. Editura Universităţii Lucian Blaga.

[24]Dima, Ioan Constantin, & Vlăduţescu, Ştefan (2012). Risk Elements in Communicating the Managerial Decisions. *European Journal of Business and Social Sciences*, *6*(1), 27-33.

[25]Dinu, Dana (2008). *Lexicologia limbii latine*. Craiova: Editura Universitaria.

[26]Drămnescu, Marin (2013). *Postmodern Society and Individual Alienation*. Revista de PSIHOterapie Experienţială.

[27]Dumitru, M. (2011). Fictional objects and free descriptions. Revista Română de Filosofie Analitică, (1), 25-40.

[28]Dumitru, M., & Kroon, F. (2008). What to Say When There Is Nothing to Talk about (Qué decir cuando no hay nada de que hablar). *Crítica: Revista Hispanoamericana de Filosofía*, 97-109.

[29]Enăchescu, V.-A. (2011). Managing Decentralization of the Romanian Educational System. *Review of International Comparative Management*, 12(2), 293.

[30]Frentz, T. S. & Farrell, T. B. (1989). Language-action: a paradigm for communication. In B. L. Brock, R. L.Scott & J. W. Chesebro (Eds.), *Methods ofRethorical Criticism: A Twentieth Century Perspective* (pp. 303-320). (3rd ed.). Wayne State University Press.

[31]Gîfu, Daniela (2014). *Temeliile Turnului Babel. O perspectivă integratoare asupra discursului public*. Bucureşti: Editura Academiei Române.

[32]Gray, P. S. et al. (2007). *The Research Imagination. An Introduction to Qualitative and Quantitative Methods*. Cambridge University Press.

[33]Grosu, I. (2009). Serviciile de informaţii: reformă sau transformare. *Intelligence,* 6(16), 3-4.

[34]Gruber, T. R. (1993). *A Translation Approach to Portable Ontology Specification*. Knowledge Acquisition, 5, 199-210.

[35]Guarino, N. (1995). Formal ontology, conceptual analysis and knowledge representation. *International Journal of Human-Computer Studies*, *43*(5), 625-640.

[36]Gudykunst, W. B. (2005). *An Anxiety/Uncertainty Management (AUM) theory of strangers' intercultural adjustement*. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 419-458). Thousand Oaks, CA: Sage.

[37]Horga, I. (2011). Communication and information studies curricula–instrument for the internal and external cross-border communication of the EU. *Eurolimes*, (12), 21-32.

[38]Iancu, N. (2011). Un deceniu de la 9/11. *Revista Română de Studii de Intelligence*, (05), 124-136.

[39]Littlejohn, S. W., & Foss, K. A. (2008). *Theories of human communication*. (9th ed.). Belmont, CA, ThompsonWadsworth.

[40]Maior, George Cristian (2009). *Incertitudine. Gândire strategică şi relaţii internaţionale în secolul XXI*. Bucureşti: Editura Rao.

[41]Maior, George Cristian (2010). *Un război al minţii. Intelligence, servicii de informaţii şi cunoaştere strategică în secolul XXI*. Bucureşti: Editura Rao.

[42]Maior, George Cristian & Niţu, Ionel (2013). *Ars Analytica. Provocări şi tendinţe în analiza de intelligence*. Bucureşti: Editura Rao

[43]Maturana, H. (1991). *The Ontology of Scientific Explanation*. In F. Steier (Ed.), *Research on reflexivity*. Beverly Hills, CA: Sage.

[44]Mensch, J. R. (2004). *Knowing and Being*. Penn State Press.

[45]Mircea, I. A. (2013). Traditional and Modern Approaches in the Construction of Literary Histories Emerged after 1990.

[46]Munteanu, N. (2013). The Influence of Media Communication on the Military Organizations. *Buletin Stiintific*, *18*(2).

[47]Neacşu, A. (2006). *Arheologia şi evoluţia conceptelor filosofice*. Editura Universitaria.

[48]Niţă, C. & Ciupercă, C. (2011a). *Adaptarea instituţională a serviciilor de informaţii la evoluţia reţelelor de socializare*. În *Adaptarea a serviciilor de informaţii la schimbările mediului strategic*, Bucureşti: Editura DGIA.

[49]Niţă, C. & Ciupercă, C. (2011b). *Social networking şi acţiune socială*. În *Putere şi cunoaştere: intelligence în era informaţională*. Bucureşti: Editura ANIMV.

[50]Otovescu, A. (2008). *Românii din Italia*. Ed. Didactică şi Pedagogică.

[51]Otovescu, D. (2010). *Tratat de sociologie generală. (Discourse of general sociology)*. Beladi publishing house, Craiova.

[52]Radu, C. (2005). *Comunicare verbală şi nonverbală*. In F. C. Rus et al. (Eds.), *Ştiinţe ale comunicării.   Note de curs*. Cluj-Napoca : Editura Accent.

[53]Shepherd, G. J. (1993). *Building a discipline of communication*. Journal of communication, 43, 83-91.

[54]Siminică, Marian, & Traistaru, Aurelia (2013). Self-Directed Learning in Economic Education. *International Journal of Education and Research*, 1(12).

[55]Stavre, I. (2012). *Internet and digital technology – influences on audiovisual   communication and on teaching at master's degree level*, Valencia, 2012, Published by International Association of Technology, Education and Development - ISBN: 978-84-615-5563-5

[56]Tenescu, A. (2011). Spatial And Corporal Language and Representation in Postmodern Romanian Poetry. *Annales Universitatis Apulensis. Series Philologica*, (12/2), 235-250.

[57]Ţenescu, Alina. *Supermodern spaces in mediatic literature*.

[58]Tonoiu, V. (1995). *Omul dialogal: un concept răspîntie*. Editura Fundaţiei Culturale Române.

[59]Vlăduţescu, G. (2013). Ontology and Metaphysics: Whether They Are One. *Balkan Journal of Philosophy*, (1), 73-74.

[60]Vlăduţescu, G. (2007). *Istoria filosofiei ca hermeneutică*. Bucureşti: Editura Academiei.

[61]Vlăduţescu, Ştefan (2013). Message as Fundamental Discursive Commitment of Communication. *Journal of Studies in Social Sciences*, 5(2), 276-287.

[62]Vlăduţescu, Ştefan (2014). Eight Computational-Communicative Operations of Building Information. *Mitteilungen Klosterneuburg*, 64(1).

[63]Vlăduţescu, Ştefan (2014). Drainage of Some Areas of Uncertainty in the Field of Communicative Instance Concept. *International Journal of Education and Research*,

2(1) .

[64]Vlăduțescu, Ștefan (2014). Uncertainty Communication Status: Theory or Science. *International Letters of Social and Humanistic Sciences*, 10(2), 100-106.

[65]Vlăduțescu, Ștefan (2013a). *De ce s-ar numi ce facem noi aici Istoria presei românești /Istoria jurnalismului din România/ și pentru ce?* În R. Bîlbîie, F. Șperlea; M. Teodor (Coord), *Jurnalismul, o preocupare a elitei. Studii și cercetări de istorie a presei* (pp. 19-25). București: Editura Tritonic.

[66] Vlăduțescu, Ștefan (2013b*). Câștig și pierdere de informație în analiza de intelligence. Fuziune, fisiune, comunicare.* În G. C. Maior & I. Nițu (Coord), *Ars Analytica. Provocări și tendințe în analiza de intelligence* (pp. 309-327). București: Editura Rao.

[67]Vlăduțescu, Ștefan (2013). *Communicative Message as Nuclear Thinking of an Aspirational Desire.* In I. Boldea (Coord.), *Studies on Literature, Discourse and Multicultural Dialogue* (pp. 212-217). Târgu Mureș: Editura Arhipelag XXI.

[68]Wetzel, L. (2009). *Types and tokens: on abstract objects*. MIT Press.