

Caterina Villani

Postdoctoral research in Cognitive Psychology
Dept. Modern Languages, Literatures, and Cultures.
University of Bologna, Italy.

caterina.villani6@unibo.it



Research Interests

Cognitive Science, Psychology, Linguistics, Semantics, Language Processing, Categorization, Social Interactions, Pragmatic, Conversations, Open Science.

Academic positions

- 2022-present **Postdoctoral Research**, Dept. of Modern Languages, Literatures, and Cultures, University of Bologna, Italy. ABSTRACTION project (ERC-2021-STG-101039777). Topics: Specificity and Concreteness in the human mind. PI: prof. Marianna Bolognesi
- 2022 **Fellowship** (5 months), Brain Language Laboratory, Freie Universität Berlin, Berlin, Germany. Project: The time course of speech act recognition of questions and statements in Italian by speech prosody: A gating study; Interaction of gestural and verbal-semantic information in understanding different speech acts. Supervisors: prof. Friedemann Pulvermüller and Rosario Tomasello.
- 2021 **PhD Visiting Researcher** (6 months), Brain Language Laboratory, Freie Universität Berlin, Berlin, Germany. Supervisor: prof. Friedemann Pulvermüller.
- 2020 **Fellowship**, Erasmus+ Programme of the European Union. University of Palermo, Krakow, Maastricht, Alicante, Ljubljana, and Bologna. Project: RECOGNIZE Legal Reasoning and Cognitive Science - Unit 4: The cognitive structure of legal concepts. Supervisor: prof. Corrado Roversi.
- 2019-2020 **Fellowship** (3 months), Interdepartmental Center of History of Law, Philosophy and Sociology of Law, and Legal Informatics (CIRSFID), University of Bologna, Italy. Project: ALMA IDEA Experimental Theory of Law: embodied cognition and perception of legal. Supervisors: prof. Corrado Roversi and Luisa Lugli.

Education

- 2018-2022 **PhD in Philosophy, Science, Cognition, and Semiotics**, University of Bologna, Italy.
Title: Variety, flexibility and use of abstract concepts: A multiple grounded perspective.
<http://amsdottorato.unibo.it/10310>. Supervisor: prof. Anna M. Borghi.
- 2014-2017 **M.A. in Philosophical Sciences** (110/110 cum laude), University of Bologna, Italy.
Title: Concepts, tools of language. An experimental study for a taxonomy of abstract concepts.
Supervisors: prof. Luisa Lugli, Francesco Bianchini, and Anna M. Borghi.
- 2010-2013 **B.A. in Humanities Sciences, Philosophy** (110/110 cum laude), University of Siena, Italy.
Title: Nature of consciousness: the debate between David Chalmers and Paul and Patricia Churchland. Supervisor: Prof. Sandro Nannini.

Institutional roles

- 2018-2022 **Ph.D. student representative**. PhD course in Philosophy, Science, Cognition, and Semiotics, Dept. of Philosophy and Communication, University of Bologna, Italy

Fundings

- 2022 Fellowship (5 months) – Freie Universität Berlin, Berlin, DE ~ 9.000 EUR
- 2021 Marco Polo Grant for international mobility – University of Bologna, Italy ~ 3.500 EUR
- 2021 Teaching assistant in Psycholinguistic Course (MA) – University of Bologna, Italy ~ €1.500
- 2019 AILMA IDEA fellowship (3 months), Interdepartmental Center of History of Law, Philosophy and Sociology of Law, and Legal Informatics (CIRSFID) – University of Bologna, Italy ~ 3.000 EUR
- 2018 Ph.D. fellowship – University of Bologna, Italy ~ 45.000 EUR

Research Activities

- 2024 **Lab2Lab Abstraction group & RTG Computational Cognition**, prof. Dr. Nicole Gotzner, University of Osnabrueck, Germany, February 15.
- 2024 **Lab2Lab Abstraction group & Polifonia** (Horizon 2020), prof. Valentina Presutti, University of Bologna, Italy, January 19.
- 2023 **7th Corpus Linguistics Summer School**, University of Birmingham, UK, September 11-14.
- 2023 **Lab2Lab Abstraction group & Marco Marelli' research group**
University of Milan, Italy, June 16.
- 2023 **Lab2Lab Abstraction group & Experimental Philosophy**, prof. Valentina Cuccio, University of Messina, Italy, May 18.
- 2022 **Traincrease Workshop: Experimental designs for the study of abstract concepts in interaction** (Horizon 2020). Sapienza University of Rome, Italy, May 23-25.
- 2020-2021 **Annual Colloquium: Progress in Brain Language Research**, Brain Language Laboratory, Freie Universität-Berlin, Berlin, Germany.
- 2021 **Winter Seminar: Semantics – Embodiment – Extrospection**, organized by Prof. Martin Fischer, Michael Pauen, and Friedemann Pulvermüller. University of Potsdam, Freie Universität-Berlin, Humboldt Universität, Berlin, Berlin, Germany, March 15-19.
- 2020 **Summer school Introduction to analysis with R** (32hours), Sapienza University of Rome. Prof. Fabio Presaghi.

Teaching Activities

- 2024 **Guest Lecturer (3hours)** MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.
Title: Variety of abstract concepts and their use in communicative contexts.
- 2024 **Guest Lecturer (2hours)**, MA in Italian Culture and Language for Foreigners course, Idioms and Language course held by prof. Marianna Bolognesi, Dept. of Modern Language, Literatures, and Cultures, University of Bologna, Italy.
Title: Abstract concepts: A challenge for theories of cognition.
- 2023 **Guest Lecturer (2hours)**, MA in Italian Culture and Language for Foreigners course, Idioms and Language course held by prof. Marianna Bolognesi, Dept. of Modern Language, Literatures, and Cultures, University of Bologna, Italy.
Title: Abstract concepts: A challenge for theories of cognition.
- 2023 **Guest Lecturer (3hours)** MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.

- Title: Abstract Concepts: A challenge for theories of cognition.
- 2022 **Guest Lecturer (3hours)**, MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.
Title: Embodied Cognition and Abstract concepts: Variety, flexibility, and use.
- 2021-2022 **Teaching Assistant (150 hours) in Psycholinguistic (BSc. and MA)**, Dept. of Philosophy, University of Bologna, Italy.
- 2021 **Guest Lecturer (3hours)**, MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.
Title: Sub-kinds of abstract concepts; grounding of institutional concepts: the role of expertise
- 2020 **Guest Lecturer (3hours)**, MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.
Title: Concrete and abstract concepts: facilitation and interference evidence.
- 2020 **Guest Lecturer (2hours)**, MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.
Title: Abstract and concrete concepts in communicative contexts: Experimental debriefing.
- 2019 **Guest Lecturer (2hours)**, MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. of Philosophy, University of Bologna, Italy.
Title: Classical and embodied theories of concepts; concrete and abstract concepts representation.
- 2018 **Guest Lecturer (2hours)**, MA in Semiotics, Psycholinguistic course held by prof. Luisa Lugli, Dept. Philosophy, University of Bologna, Italy.
Title: Theories and Taxonomy of Abstract Concepts: Analysis and MA thesis results.

Supervision

- 2024 Supervisor 1 MA grad thesis in Linguistics, University of Bologna, Italy.
- 2022-2023 Supervisor 1 MA grad thesis in Linguistics, University of Bologna, Italy.

Organization of scientific events

- April 2025 Organizer and chair – *Conversational Dynamics: How Abstraction and Abstractness Ebb and Flow in Interaction*. Seminar with international invited speakers, University of Bologna, Italy.
- March 2018 Organizing committee – *Brain Awareness Week, “Words and Meaning: theoretical and clinical application perspective”*. Aphasia Centre CIRP, Torino, Italy.
- December 2017 Organizing committee – *14th Annual Conference of the Italian Association of Cognitive Science (AISC)*, University of Bologna, Italy.

Dissemination Activities

- 2024 *Festival della Scienza: Scale di Parole*. Workshops, Genova, Italy, October 30-31.
- 2023-2024 *Penne Amiche della Scienza*. Online outreach, middle school, November-May.
- 2023-2024 *Word Ladders: Scale di Parole*. Workshops, primary and middle School, Imola, Italy, November-May.

Editorial roles - Occasional Reviewer

Since 2023	NeuroImage Behavioral Research Method Language and Cognition
Since 2022	Psychological Research
Since 2021	Review of Philosophy and Psychology
Since 2019	Cognitive Processing PeerJ

Participation in Research Groups

Since 2022	ABSTRACTION group (ERC), University of Bologna, Italy.
2022-2023	BALLAB – Body Action Language Lab, Sapienza University of Rome, Italy.
2022-2021	Brain Language Laboratory, Freie Universität Berlin, Berlin, Germany.
2018-2021	Legal Theory and Cognitive Science Laboratory, University of Bologna, Italy. Cognitive psychology LAB, University of Bologna, Italy.

Member of Scientific Societies

Since 2024	Cognitive Science Society (COGSCI)
Since 2023	Embodied and Situated Language Processing (ESLP)
Since 2017	Associazione Italiana di Psicologia – Sezione Sperimentale (AIP) Associazione Italiana di Scienze Cognitive (AISC)

Technical Skills

Experiment design	E-Prime; Gorilla; PsychoPy; Gorilla; Qualtrics survey
Statistical analyses	R; SPSS; Python (basic); Praat, Audacity, ELAN

Languages

Italian	native speaker
English	fluent
German	basic

Publications

Peer-reviewed international journal articles

1. **Villani, C.**, D’Ascenzo, S., Ubertone, M., Benassi, M.G., Borghi, A.M., Roversi, C., & Lugli, L. (2024). Abstract concepts and expertise: the case of institutional concepts. *Sci Rep* 14, 25874. <https://doi.org/10.1038/s41598-024-77308-7>
2. Mazzuca, C., **Villani, C.**, Lamarra, T., Bolognesi, M. M., & Borghi, A.M. (2024). Abstract Sentences elicit more Uncertainty and Curiosity than Concrete Sentences. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 46). <https://escholarship.org/uc/item/7cj2g289>

3. **Villani C.**, Loia A., & Bolognesi M. (2024). The semantic content of specific, generic, abstract, and concrete concepts. *Language and Cognition*, 1-28. <https://doi.org/10.1017/langcog.2023.64>
4. Ubertone, M., Borghi, A. M., **Villani, C.**, & Lugli, L. (2023). Embodied Cognition and Legal Concepts. In *Diritto e Questioni Pubbliche*, RECOGNISE, *Legal Reasoning and Cognitive Science: Topics and Perspectives*, (pp. 103-118).
5. Banks, B., Borghi, A.M., Fargier, R., Fini, C., Jonauskaitė, D., Mazzuca, C., Montalti, M., **Villani, C.**, & Woodin, G. (2023). Consensus Paper: Current Perspectives on Abstract Concepts and Future Research Directions. *Journal of Cognition*, 6(1), 62. <https://doi.org/10.5334/joc.238>
6. Roversi, C., Ubertone, M., **Villani, C.**, d'Ascenzo, S., & Lugli, L. (2022). Alice in wonderland: experimental jurisprudence on the internal point of view. *Jurisprudence*, 1-28. <https://doi.org/10.1080/20403313.2022.2109884>.
7. **Villani, C.**, Orsoni, M., Lugli, L. Benassi M., & Borghi A. (2022) Abstract and concrete concepts in conversation. *Sci Rep* 12, 17572. <https://doi.org/10.1038/s41598-022-20785-5>.
8. **Villani, C.**, D'Ascenzo, S., Scerrati, E., Ricciardelli, P., Nicoletti, R., & Lugli, L. (2022). Wearing the face mask affects our social attention over space, *Frontiers in Psychology: Research topic. Impact of Face Covering on Social Cognition and Interaction*, 4682. <https://doi.org/10.3389/fpsyg.2022.923558>
9. Scerrati, E., D'Ascenzo, S., Nicoletti, R., **Villani, C.**, & Lugli, L. (2022). Assessing interpersonal proximity evaluation in the COVID-19 era: Evidence from the affective priming task. *Frontiers in psychology*, 13, 901730. <https://doi.org/10.3389/fpsyg.2022.901730>
10. Scerrati, E., Marzola, G., **Villani, C.**, Lugli, L., & D'Ascenzo, S. (2022). Nuovi scenari per gli esperimenti in psicologia: la modalità online, *Giornale Italiano di Psicologia/ a. XLVIII*, n. 3, settembre. <https://dx.doi.org/10.1421/104144>
11. D'Ascenzo, S., Scerrati, E., **Villani, C.**, Galatolo, R., Lugli, L., & Nicoletti, R. (2022). Does social distancing affect the processing of brand logos? *Brain and Behavior*, e2501. <https://doi.org/10.1002/brb3.2501>
12. D'Ascenzo, S., Scerrati, E., **Villani, C.**, & Lugli, L. (2021). Processi cognitivi e pandemia: l'influenza del distanziamento sociale sull'elaborazione di loghi commerciali, *Giornale Italiano di Psicologia*, pp. 577-585. <https://dx.doi.org/10.1421/102710>
13. **Villani, C.**, D'Ascenzo, S., Borghi, A.M., Roversi, C., Benassi, M., & Lugli, L. (2021). Is justice grounded? How expertise shapes representation of institutional concepts. *Psychol. Res.* 1-17. <https://doi.org/10.1007/s00426-021-01492-8>
14. **Villani, C.**, Lugli, L., Liuzza, M.T., Nicoletti, R., & Borghi, A.M. (2021). Sensorimotor and interoceptive dimensions in concrete and abstract concepts. *J. Mem. Lang.*, 116, 104173. <https://doi.org/10.1016/j.jml.2020.104173>
15. **Villani, C.**, & Lugli, L. (2020). L'effetto Simon e il suo decorso temporale con stimoli linguistici non spaziali, *Giornale Italiano di Psicologia*, 1/ pp. 305-314. <https://doi: 10.1421/96612>
16. **Villani, C.**, Lugli, L., Liuzza, M.T., & Borghi, A.M. (2019). Varieties of abstract concepts and their multiple dimensions. *Language and Cognition*, 11(3), 403-430. <https://doi.org/10.1017/langcog.2019.23>
17. **Villani, C.**, Lugli, L., Liuzza, M.T., & Borghi, A.M. (2019). Le sottocategorie dei concetti astratti: uno studio empirico. *Sistemi intelligenti*, 31(2), 235-252.
18. **Villani, C.** (2018). L'Embodied Cognition e la sfida dei concetti astratti. Un approccio multidimensionale. *Rivista Italiana di Filosofia e Psicologia*, 9(3), 239-253.

Submitted articles, Preprints, Working papers

19. Bolognesi, M. M., Collacciani, C., Ferrari, A., Genovese, F., Lamarra, T., Loia, A., ... & **Villani, C.** (2024). Word Ladders: A mobile application for semantic data collection. Preprint: osf.io/preprints/psyarxiv/ryme7
20. **Villani C.**, Boux I.P., Pulvermüller F., & Tomasello R. (under review). The time course of speech act recognition conveyed by speech prosody: A gating study.
21. **Villani C.**, De Muynck G., Borghi A.M., Lugli L., & Winter B. (under review) Open hands, large numbers: Manual gestures influence random number generation. Pre-registration: <https://doi.org/10.17605/OSF.IO/J7EU5>
22. Lamarra T., **Villani C.**, & Bolognesi M. (under review). Specificity effect in abstract/concrete categorization task.
23. Mazzuca, C., **Villani, C.**, Lamarra, T., Bolognesi, M. M., & Borghi, A. M. (under review). Abstractness impacts conversational dynamics and interactive alignment. Preprint: <http://dx.doi.org/10.2139/ssrn.4959796>
24. Lamarra, T., **Villani, C.**, Mazzuca C., Borghi, A.M., & Bolognesi M. (in preparation). How does sentence specificity shape uncertainty and curiosity in conversational dynamics? OSF project: https://osf.io/3m45k/?view_only=1e9360eafa2b4a5ebb7aad7ff146e797
25. **Villani, C.**, Loia A., & Bolognesi M. (in preparation). Development of Abstraction in Children: Insights from a Words Ladders Task.

Invited lectures

- 2024 **Traincrease H2020 Closing Conference**. Kazimierz Dolny, Poland, May 24-27.
Title: Abstractness and Specificity in Social Interaction.
- 2024 **Psycholinguistic Coffee Seminar**, University of Edinburgh, UK, March 27.
Title: Varieties of abstract concepts and their use in conversation.
- 2023 **PECoG meeting** organized by prof. Martin Fisher. University of Potsdam, Germany, June 02.
Title: Numbers and Gestures: Exploring the Random Number Generation Task
- 2022 **Intensive Study Program Recognise Seminar: Legal reasoning and cognitive science**, online, January 31-February 4.
Title: Embodied cognition and legal concepts.
- 2021 **Recognise Seminar**, online, March 30.
Title: Is Justice Grounded? Legal Theory Meets Embodied Cognition.
- 2021 **Colloquium: Progress in Brain Language Research** organized by Brain Language Laboratory, Freie Universität Berlin, Berlin, Germany, February 3.
Title: Varieties of abstract concepts. A multiple grounded perspective.
- 2019 **Workshop Abstract Concepts differ: Number, Emotion and Dangerous things**, organized by prof. Martin Fisher and Anna M. Borghi, Sapienza University of Rome, Rome, Italy, March 29.
Title: Italian norms for different kinds of abstract concepts on many dimensions.
- 2018 **Brain Awareness Week Event: Words and Meaning: theoretical and clinical application perspective**, Aphasia Centre CIRP, Turin, Italy, March 15.
Title: Pensare a “tazza” e “libertà”: diversi tipi di concetti?
- 2017 **Neural Mechanisms Workshop**, University of Turin, Turin, Italy, October 12-13.
Title: L’Embodied Cognition e la sfida dei concetti astratti.

Conferences Presentations

- 2024 AISC, Associazione Italiana di Scienze Cognitive. Rome, Italy, September 18-20.
Talk: Lamarra T., **Villani C.**, Mazzuca C., Borghi A.M, Bolognesi M. *How does sentence specificity shape uncertainty and curiosity in conversational dynamics?*
- 2024 XPRAG.it, 5th Experimental Pragmatics in Italy Conference. Venice, Italy, September 26-27.
Talk: **Villani C.**, Mazzuca C., Lamarra T., Bolognesi M., Borghi A.M. *Abstractness and Social Interaction: insights from sentences processing.*
- 2024 XPRAG.it, 5th Experimental Pragmatics in Italy Conference. Venice, Italy, September 26-27.
Poster: Lamarra T., **Villani C.**, Mazzuca C., Borghi A.M, Bolognesi M. *How does sentence specificity shape uncertainty and curiosity in conversational dynamics?*
- 2024 AIP, Associazione Italiana di Psicologia Sperimentale. Noto, Italy, September, 23-25.
Poster: De Muynck G., Borghi A., **Villani C.**, Lugli L., Winter B. *Do Hand Gestures interact with Random Number Generation?*
- 2024 COGSCI, Cognitive Science Society. Rotterdam, Netherlands, July 24-27.
Talk: Mazzuca M., **Villani C.**, Lamarra T., Bolognesi M., Borghi A.M. *Abstract Sentences elicit more Uncertainty and Curiosity than Concrete Sentences.*
- 2023 AISC, Associazione Italiana di Scienze Cognitive. Genova, Italy, December, 14-17.
Talk: **Villani C.**, Rambelli G., Bolognesi M. *Exploring subordinate categories organization in Human and Artificial cognition.*
- 2023 ESLP, Embodied and Situated Language Processing Conference. Messina, Italy, September 29-30.
Talk: **Villani C.**, Loia A., Bolognesi M. *The semantic content of concrete, abstract, specific and generic concepts.*
- 2023 ESLP, Embodied and Situated Language Processing Conference. Messina, Italy, September 29-30.
Poster: Lamarra T., **Villani C.**, Bolognesi M. *Lexical decision and semantic processing latencies for words that vary in concreteness and specificity*
- 2023 XPRAG, Experimental Pragmatics. Paris, September., 20-22.
Talk: Tomasello R., **Villani C.**, Boux I, Pulvermüller F. *The time course of speech act recognition conveyed by prosody: A gating study.*
- 2023 AIP, Associazione Italiana di Psicologia Sperimentale. Lucca, Italy, September, 18-20.
Talk: **Villani C.**, Loia A., Bolognesi M. *Il contenuto semantico di concetti specifici, generici, astratti e concreti.*
- 2023 AIP, Associazione Italiana di Psicologia Sperimentale. Lucca, Italy, September, 18-20.
Poster: Lamarra T., **Villani C.**, Bolognesi M. *Lexical Decision e semantic processing per parole che variano in concretezza e in specificità.*
- 2021 ESPL, Embodied and Situated Language Processing Conference. Online, September 20.
Talk: **Villani, C.**, Orsoni, M., Lugli, L., Benassi, M., Borghi, A.M. *How do people talk about abstract and concrete concepts? A conversational paradigm.*
- 2021 CILC5, Conference on Interactive, Language & Cognition. Online, September, 15-19.
Talk: **Villani, C.**, Orsoni, M., Lugli, L., Benassi, M., Borghi, A.M. *“Using abstract and concrete concepts in interactive contexts: A conversational study.*
- 2021 AIP, Associazione Italiana di Psicologia Sperimentale. Online, September, 9.
Talk: **Villani, C.**, Orsoni, M., Lugli, L., Benassi, M., Borghi, A.M. *Conversazioni astratte e concrete: quali differenze.*
- 2021 AIP, Associazione Italiana di Psicologia Sperimentale. Online, September, 8.
Talk: D'Ascenzo, S., **Villani, C.**, Scerrati., E., Lugli, L., Ricciardelli, P., Nicoletti, R. *Se indossi la mascherina seguirò il tuo sguardo! Come il COVID-19 ha influenzato la nostra attenzione sociale.*
- 2021 AIP, Associazione Italiana di Psicologia Sperimentale. Online, September, 10.
Talk: Scerrati, E., D'Ascenzo, S., **Villani, C.**, Nicoletti, R., Lugli, L. *Effetti di priming affettivo*

durante la pandemia: differenze individuali.

- 2020 AIP, Associazione Italiana di Psicologia Sperimentale, Online, September 2-4.
Talk: **Villani, C.**, D'Ascenzo, S., Borghi, A.M., Roversi, C., Benassi, M., Lugli, L. *Un'indagine sui concetti istituzionali. Il ruolo delle esperienze individuali nella rappresentazione concettuale.*
- 2019 AISC, Italian Association for Cognitive Sciences. Rome, Italy, December 11-13.
Talk: **Villani, C.**, Lugli, L., Liuzza, MT., Nicoletti, R., Borghi, A.M. *Exploring the differences between kinds of abstract concepts: evidence with and interference paradigm.*
- 2019 AIP, Associazione Italiana di Psicologia Sperimentale. Milan, Italy, September 18-20.
Talk: **Villani, C.**, Lugli, L., Liuzza, MT., Nicoletti, R., Borghi, A.M. *Esperienze sensorimotorie, linguistiche, e interocettive durante l'elaborazione di concetti concreti e astratti.*
- 2018 AISC, Italian Association for Cognitive Sciences. IUSS Pavia, Italy, December 17-19.
Talk: **Villani, C.**, Lugli, L., Liuzza, MT., Borghi, A.M. *Linguistic, social and interoceptive experiences during the processing of abstract concepts.*
- 2017 AISC, Italian Association of Cognitive Science. Bologna, Italy, December 14-16.
Talk: **Villani, C.**, Lugli, L., Liuzza, MT., Borghi, A.M. *Different Kinds of Abstract Concepts.*
- 2017 AIP, Associazione Italiana di Psicologia Sperimentale. Bari, Italy, September. 20-22.
Talk: **Villani, C.**, Lugli, L., Borghi, A.M. *Concetti astratti: un dominio omogeneo o eterogeneo? Uno studio sulle differenze fine-grained delle sotto-categorie dei concetti astratti.*
- 2017 ESCoP, European Society for Cognitive Psychology. Potsdam, Germany, September, 3-6.
Poster: **Villani, C.**, Lugli, L., Borghi, A.M. *A taxonomy of Italian Abstract concepts.*