

CURRICULUM VITAE

Victor V. Pambuccian

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—EMPLOYMENT

— Professor of Mathematics, ASU West, Fall 2007 -
— Associate Professor of Mathematics, ASU West, Fall 1999 - Spring 2007
— Assistant Professor of Mathematics, ASU West, Spring 1994 - Spring 1999
— Teaching Assistant at the University of Michigan (9/89-5/93),
and Lecturer in Mathematics (9/93-12/93)
— French and Mathematics teacher at the “National Sports
Academy in Lake Placid”, Lake Placid, NY (9/88-6/89)

—EDUCATION

—University of Michigan (9/89 - 8/93)
Ph. D. in Mathematics (August 1993)
Major Area: Logic, Foundations of Geometry
Dissertation Title: The Axiomatics of Euclidean Geometry
Thesis Adviser: Prof. Andreas Blass
— University of Bucharest, Faculty of Mathematics (1978-1982)
Master of Sciences in Mathematics, June 1982
M.S. Thesis Title: The problem of the axiomatic
foundation of Euclidean geometry (120pp.)
Thesis Adviser: Prof. Kostake Teleman
— “Deutsches Lyzeum”, Bucharest, Rumania (1974-1978)
Baccalaureat (“Abitur”) diploma, September 1978

—ACADEMIC AWARDS and SCHOLARSHIPS

— 1st; 2nd prizes of the “Gazeta Matematica”
(Bucharest, 1975; 1976)
— 3rd; 1st; 2nd; 1st; 2nd prizes at the “Bundeswettbewerb
Mathematik” (West German Mathematical Competition)
(Bonn, 1976; 1977; 1977; 1978; 1978)
— Two prizes at the “Prindle, Weber & Schmidt Undergraduate
Math. Competition” II and III (Boston, MA, 1978; 1979)
— Alice Glover Webber Scholarship, U. of Michigan (1989-1991)

- Rackham Dissertation Grant, U. of Michigan (1/93 - 5/93)
- Fulbright Research Fellowship (University of Białystok, Poland, 9/03-1/04)
- Mercator Visiting Professorship, Dortmund University of Technology, Germany (4/08-8/08).
- Foreign member of the Armenian Academy of Sciences (2011–)

—PUBLICATIONS

— Refereed Journal articles:

- [2013a] V. Pambuccian, On the simplicity of ordered geometry. *Journal of Geometry* 104 (2013), 153–163.
- [2012b] V. Pambuccian, The non-planarity of K_5 and $K_{3,3}$ as axioms for plane ordered geometry. *Journal of Geometry* 103 (2012), 313–318.
- [2012a] Ioana Hociotă, Victor Pambuccian, Acute triangulation of a triangle in a general setting revisited, *Journal of Geometry* 102 (2012), 81–84.
- [2011e] F. Kalhoff, V. Pambuccian, Positive existential definitions of parallelism in terms of betweenness in Archimedean ordered affine geometry, *Rocky Mountain Journal of Mathematics*, 41 (2011), 1501–1521.
- [2011d] V. Pambuccian, T. Zamfirescu, Paolo Pizzetti: the forgotten originator of triangle comparison geometry. *Historia Mathematica* 38 (2011), 415–422.
- [2011c] V. Pambuccian, Another splitting of the Pasch axiom. *Results in Mathematics* 59 (2011), 219–227.
- [2011b] V. Pambuccian, The simplest axiom system for plane hyperbolic geometry revisited. *Studia Logica* 97 (2011), 347–349.
- [2011a] V. Pambuccian, The axiomatics of ordered geometry I. Ordered incidence spaces *Expositiones Mathematicae* 29 (2011), 24–66.
- [2010d]. V. Pambuccian, Mappings preserving the area equality of hyperbolic triangles are motions, *Archiv der Mathematik* 95 (2010), 293–300
- [2010c]. V. Pambuccian, Acute triangulation of a triangle in a general setting *Canadian Mathematical Bulletin* 53 (2010), 534–541.
- [2010b]. V. Pambuccian, Forms of the Pasch axiom in ordered geometry, *Mathematical Logic Quarterly* 56 (2010), 29–34.
- [2010a]. V. Pambuccian, Weakly ordered plane geometry, *Annali dell'Universita di Ferrara Sez. VII Sci. Mat.* 56 (2010), 91?–96
- [2009d]. V. Pambuccian, On the equivalence of Lagrange's axiom to Bachmann's *Lotschnittaxiom*, *Journal of Geometry* 95 (2009), 165?–171.
- [2009c]. V. Pambuccian, Universal-existential axiom systems for geometries expressed with Pieri's isosceles triangle as single primitive notion, *Rendiconti del Seminario Matematico di Torino* 67 (2009), 327–339.
- [2009b]. V. Pambuccian, A reverse analysis of the Sylvester-Gallai theorem, *Notre Dame Journal of Formal Logic* 50 (2009), 245–260.
- [2009a] V. Pambuccian, R. Struve, On M. T. Calapso's characterization of the metric of an absolute plane, *Journal of Geometry* 92 (2009), 105?–116.
- [2008g] V. Pambuccian, On a paper of Dan Barbilian, *Note di Matematica* 29 (2008), 29–31.
- [2008f] V. Pambuccian, The sum of irreducible fractions with consecutive denominators is never an integer in PA^- , *Notre Dame Journal of Formal Logic* 49 (2008), 425–429.
- [2008e] V. Pambuccian, Elementary versions of the Sylvester-Gallai theorem, *Beiträge zur Algebra und Geometrie* 49 (2008), 335–339.
- [2008d] V. Pambuccian, Lambert or Saccheri quadrilaterals as single primitive notions for plane hyperbolic geometry, *Journal of*

- Mathematical Analysis and Applications* **346**(2008) 531–532.
- [2008c] V. Pambuccian, The Erdős-Mordell inequality is equivalent to non-positive curvature, *Journal of Geometry*, **88** (2008), 134–139.
- [2008b]. V. Pambuccian, The elementary geometry of a triangular world with hexagonal circles, *Beiträge zur Algebra und Geometrie* **49**, 165–175 (2008).
- [2008a]. V. Pambuccian, Axiomatizing geometric constructions, *Journal of Applied Logic* **6** (2008), 24–46.
- [2007c]. V. Pambuccian, Alexandrov-Zeeman type theorems expressed in terms of definability, *Aequationes Mathematicae* **74** (2007), 249–261.
- [2007b]. V. Pambuccian, Orthogonality as single primitive notion for metric planes. *Beiträge zur Algebra und Geometrie* **48** (2007), 399–409.
- [2007a]. V. Pambuccian, Point-reflections in metric plane, *Beiträge zur Algebra und Geometrie* **48** (2007), 59–67, Zbl 1124.51009.
- [2006c]. V. Pambuccian, Positive definitions of segment congruence in terms of segment inequality, *Aequationes Mathematicae* **72** (2006), 243–253, MR 2007h:51011.
- [2006b]. V. Pambuccian, Logical asides on the maximality of a subgroup, *Note di Matematica* **26** (2006), no. 1, 105–108, MR 2007i:03038.
- [2006a]. V. Pambuccian, Remarks, du côté de chez Tarski, on symmetric ternary relations, *Journal of Geometry* **84** (2006), 94–99, Zbl 1089.51502, MR 2006k:51024.
- [2005f]. V. Pambuccian, K. Prazmowski, K. Sakowicz, Defining co-punctuality in terms of line-orthogonality in plane hyperbolic geometry, *Acta Mathematica Hungarica* **109** (2005), 289–293.
- [2005e]. V. Pambuccian, Groups and plane geometry, *Studia Logica* **81** (2005), 387–398, Zbl 1086.03007, MR 2006h:03054.
- [2005d]. V. Pambuccian, Three-dimensional hyperbolic geometry with planes and plane parallelism as only primitive notions, *Glasnik Matematicki* **40** (2005), 319–321, MR 2006i:51024, Zbl. 1088.51011.
- [2005c]. V. Pambuccian, Elementary axiomatizations of projective space and of its associated Grassmann space, *Note di Matematica* **24** (2004/2005), 129–141, MR 2006h:51002.
- [2005b]. V. Pambuccian, The complexity of plane hyperbolic incidence geometry is $\forall\exists\forall\exists$, *Mathematical Logic Quarterly* **51** (2005), 277–281, Zbl 1066.03027, MR 2005k:51025.
- [2005a]. V. Pambuccian, Euclidean geometry problems rephrased in terms of midpoints and point-reflections, *Elemente der Mathematik* **60** (2005), 19–24, Zbl. 1082.51011.
- [2004h]. V. Pambuccian, An axiom system for Lingenberg’s metric-Euclidean planes, *Journal of Geometry* **81** (2004), 139–143, MR 2005k:51023.
- [2004g]. V. Pambuccian, An axiomatics of hyperbolic projective-metric planes in terms of lines and orthogonality, *Bulletin of the Polish Academy: Mathematics* **52** (2004), 297–302, MR 2005j:51012.
- [2004f]. V. Pambuccian, Hyperbolic geometry in terms of point-reflections or of line-orthogonality, *Mathematica Pannonica* **15** (2004), 241–258, MR 2005f:51021, Zbl 1075.51005.
- [2004e]. V. Pambuccian, Axiomatization of Euclidean geometry in terms of points, equilateral triangles or squares, and incidence, *Indagationes Mathematicae*, 15 (2004), 413–418, MR 2005f:51020, Zbl 1064.51013.
- [2004d] V. Pambuccian, The simplest axiom system for plane hyperbolic geometry, *Studia Logica* **77** (2004), 385–411, MR 2005g:03010, Zbl 1069.03007.
- [2004c] V. Pambuccian, Fragmente der hyperbolischen Geometrie [Fragments of hyperbolic geometry], *Publicationes Mathematicae Debrecen* **65** (2004), 81–95. MR 2006b:51013.
- [2004b] V. Pambuccian, Early examples of resource-consciousness, *Studia Logica* **77** (2004), 81–86, MR 2005b:03143.
- [2004a] H. Havlicek, V. Pambuccian, On the axiomatics of projective and affine geometry in terms of line intersection, *Resultate der Mathematik* **45** (2004), 35–44,

- Zbl. 1064.51001, MR 2005e:51002.
- [2003g]. V. Pambuccian, Why are Surjective Lineations Between Archimedean Ordered Hyperbolic Spaces Motions?, *Acta Mathematica Hungarica* **100** (2003), 33–37, Zbl 1027.51021, MR 2004k:51018.
- [2003f]. V. Pambuccian, Aufbau der hyperbolischen Geometrie aus dem Geraden-orthogonalitätsbegriff, *Acta Mathematica Hungarica* **101** (2003), 51–61, MR 2004h:51024.
- [2003e]. V. Pambuccian, Constructive axiomatization of non-elliptic metric planes, *Bulletin of the Polish Academy: Mathematics* **51** (2003), 49–57, Zbl 1036.03051, MR 2004f:03105, Zbl. 1036.03051.
- [2003d]. V. Pambuccian, On the Planarity of the Equilateral, Isogonal Pentagon. *Mathematica Pannonica* **14** (2003), 101–112, MR 2004a:51006, Zbl 1017.03002.
- [2003c]. V. Pambuccian, Sphere tangency as single primitive notion for hyperbolic and Euclidean geometry, *Forum Mathematicum* **15** (2003), 943 – 947, MR 2004h:51023, Zbl. 1038.51014.
- [2003b]. V. Pambuccian, What is plane equiaffine geometry? *Aequationes Mathematicae* **66** (2003), 90–99.
- [2003a]. A. Blass, V. Pambuccian, Sperner spaces and first-order logic, *Mathematical Logic Quarterly* **49** (2003), 111–114, Zbl 1030.03011, MR 2004a:51001.
- [2002c]. V. Pambuccian, Axiomatizations of hyperbolic geometry: a comparison based on language and quantifier type complexity, *Synthese* **133** (2002), 331–341, correction *Synthese* **145** (2005), 497, Zbl. 1028.03014, MR 2003k:03014.
- [2002b]. V. Pambuccian, A universal axiom system for Salow’s generalized Halbdrehungsebenen, *Demonstratio Mathematica* **35** (2002), 839–841.
- [2002a]. V. Pambuccian, On definitions in an infinitary language, *Mathematical Logic Quarterly* **48** (2002), 522–524, MR 2003h:03052, Zbl 1021.03029.
- [2001g]. V. Pambuccian, On R. Baer’s generalized hyperbolic planes, *Publicationes Mathematicae Debrecen* **59** (2001), 103–109, MR 2002e:51011, Zbl. 1012.51009.
- [2001f]. V. Pambuccian, Mohr-Mascheroni as an axiomatizability statement, *Bulletin of the Polish Academy of Sciences: Mathematics* **49** (2001), 319 – 326, MR 2002g:51019, Zbl. 0993.51006.
- [2001e]. V. Pambuccian, A definitional view of Vogt’s variant of the Ulam-Mazur theorem, *Algebra, Geometry and Their Applications* **1** (2001), 5–10, MR 2002k:03060, Zbl. 0992.03045.
- [2001d]. V. Pambuccian, A methodologically pure proof of a convex geometry problem, *Beiträge zur Algebra und Geometrie* **42** (2001), 401–406, MR 2002g:52001, Zbl. 1008.52002.
- [2001c]. V. Pambuccian, Constructive axiomatization of plane hyperbolic geometry, *Mathematical Logic Quarterly* **47** (2001), 475–488, MR 2002k:03018, Zbl. 1003.03052.
- [2001b]. V. Pambuccian, Fragments of Euclidean and hyperbolic geometry, *Scientiae Mathematicae Japonicae* **53** (2001), 361–400, MR 2002f:51026, Zbl. 0995.51005.
- [2001a]. V. Pambuccian, Constructive axiom systems for plane absolute geometry, Euclidean and hyperbolic geometry, *Mathematical Logic Quarterly* **47** (2001), 127–134, MR 2002a:03123, Zbl. 0971.03063.
- [2000f]. V. Pambuccian, Two notes on the axiomatics of structures with parallelism *Note di Matematica* **20** (2000), 91–102, MR 2003c:51003.
- [2000e]. V. Pambuccian, Binary relations as single primitive notions for hyperbolic three-space and the inversive plane, *Indagationes Mathematicae* **11** (2000), 587 – 592, MR 2003c:51016, Zbl. 1044.51012.
- [2000d]. V. Pambuccian, A logical look at characterizations of mappings under mild hypotheses, *Indagationes Mathematicae* **11** (2000), 453–462, MR 2002f:51025, Zbl. 0987.51010.
- [2000c]. V. Pambuccian, A logical reading of the nonexistence of proper homomorphisms between affine spaces, *Geometriae Dedicata* **81** (2000), 215–218, MR 2001e:51001, Zbl. 966.51002.

- [2000b]. V. Pambuccian: Affine Super-Pythagorean Geometry, *Beiträge zur Algebra und Geometrie* **41** (2000) 199–202, MR 2001d:51002, Zbl. 952.01005.
- [2000a]. V. Pambuccian, Another constructive axiomatization of Euclidean planes, *Mathematical Logic Quarterly* **46** (2000), 45–48, MR 2000k:03145, Zbl. 943.03052.
- [1999]. V. Pambuccian, On the Euclidean geometry of the double-edged ruler *Note di Matematica* **19** (1999), 65–70.
- [1998c]. V. Pambuccian, Zur Existenz gleichseitiger Dreiecke in H -Ebenen, [On the existence of equilateral triangles in H -planes] *Journal of Geometry* **63** (1998), 147–153, MR 99j:51011, Zbl. 931.51006.
- [1998b]. V. Pambuccian, Euclidean superpythagorean geometry, *Beiträge zur Algebra und Geometrie* **39** (1998), No. 2, 255–258, Zbl. 915.51012.
- [1998a]. V. Pambuccian, Zur konstruktiven Geometrie euklidischer Ebenen, [On the constructive geometry of Euclidean planes] *Abhandlungen aus dem mathematischen Seminar der Universität Hamburg* **68** (1998), 7–16, MR 2000a:03023, Zbl. 959.03052.
- [1997]. V. Pambuccian, On the simplicity of axiom systems for Euclidean geometry, *Demonstratio Mathematica* **30** (1997), 509–512, MR 99g:03011, Zbl. 884.03004.
- [1996c]. V. Pambuccian, Splitting the Pasch axiom, *Journal of Geometry* **56** (1996), 126–130, MR 97e:51015, Zbl. 854.51010.
- [1996b]. A. Blass, V. Pambuccian, On a problem of H. N. Gupta., *Geometriae Dedicata* **61** (1996), 329–331, MR 97f:51032, Zbl. 873.51014.
- [1996a]. V. Pambuccian, Über das Reichhaltigkeitsaxiom für partielle affine Räume, *Journal of Geometry* **55** (1996), 139–140, MR 97e:51002, Zbl. 853.51002.
- [1995b]. V. Pambuccian, Simple axiom systems for affine geometry, *Zeszyty Naukowe Geometria* **21** (1995), 59–74, MR 97f:51003, Zbl. 848.03003.
- [1995a]. V. Pambuccian, Ternary operations as primitive notions for constructive plane geometry VI, *Mathematical Logic Quarterly* **41** (1995), 384–394, MR 96m:03039, Zbl. 828.03032.
- [1994d]. V. Pambuccian, Zum Stufenaufbau des Parallelenaxioms, *Journal of Geometry* **51** (1994), 79–88, MR 95g:51016, Zbl. 815.51012.
- [1994c]. V. Pambuccian, Le plus simple système d'axiomes pour la géométrie élémentaire *Bulletin of the Polish Academy: Mathematics* **42** (1994), 77–84, Zbl. 821.51015.
- [1994b]. V. Pambuccian, Ternary operations as primitive notions for constructive plane geometry V, *Mathematical Logic Quarterly* **40** (1994), 455–477, MR 96a:03071, Zbl. 808.03045.
- [1994a]. V. Pambuccian, Ternary operations as primitive notions for constructive plane geometry IV, *Mathematical Logic Quarterly* **40** (1994), 76–86, MR 96a:03070, Zbl. 799.03072.
- [1993]. V. Pambuccian, Ternary operations as primitive notions for constructive plane geometry III, *Mathematical Logic Quarterly* **39** (1993), 393–402, MR 96a:03069, Zbl. 799.03071.
- [1992b]. V. Pambuccian, Ternary operations as primitive notions for constructive plane geometry II, *Zeitschrift für mathematische Logik und Grundlagen der Mathematik* **38** (1992), 345–348, MR 95c:03030, Zbl. 739.03033.
- [1992a]. V. Pambuccian, Intuition, Mathematik und die Existenzweise des Seins, *Science of Man/ Wissenschaft vom Menschen* **3** (1992), 87–119, MR 93f:00005, Zbl. 763.00003.
- [1990b]. V. Pambuccian, Unit distance as single binary predicate for plane Euclidean geometry, *Zeszyty Naukowe Geometria* **18** (1990), 5–8, MR 91j:51025, Zbl. 722.51014.
- [1990a]. V. Pambuccian, On the Pythagorean hull of \mathbb{Q} ,

Extracta Mathematica 5 (1990), 29-31.

[1989c]. V. Pambuccian, Ternary operations as primitive notions for constructive plane geometry, *Zeitschrift für mathematische Logik und Grundlagen der Mathematik* 35 (1989), 531-535, MR 90m:03014, Zbl. 695.03025.

[1989b]. V. Pambuccian, Another example of an exotic function, *The American Mathematical Monthly* 96 (1989), 913-914, MR 90m:26013.

[1989a]. V. Pambuccian, Simple axiom systems for Euclidean geometry, *Mathematical Chronicle* 18 (1989), 63-74, MR 91j: 51004, Zbl. 699.51006.,

[1988]. V. Pambuccian, Simplicity, *Notre Dame Journal of Formal Logic* 29 (1988), 396-411, MR 89f:03007, Zbl. 669.03005

[1987b]. V. Pambuccian, Elias Canettis “Blendung”. Darstellung eines nekrophilen Gelehrten, *Psyche (Stuttgart)* 41 (1987), 915-928.

[1987a]. V. Pambuccian, An axiom system for plane Euclidean geometry, *Bulletin of the Polish Academy of Sciences: Mathematics* 35 (1987), 333-335, MR 89h:51024, Zbl. 633.51011.

[1985b]. R. Schnabel, V. Pambuccian, Die metrisch-euklidische Geometrie als Ausgangspunkt fuer die geordnet-euklidische Geometrie, *Expositiones Mathematicae* 3 (1985), 285-288, MR 88a:51022, Zbl. 566.51018.

[1985a]. V. Pambuccian, Congruence axioms for absolute geometry, *Mathematical Chronicle* 14 (1985), 47-48, MR 87f:51019, Zbl. 591.51024.

[1984b]. V. Pambuccian, Elementary Euclidean geometry and algebra. A dualist point of view, *Nepali Mathematical Sciences Report* 9 (1984), 45-62, MR 87h:01054, Zbl.586.51018.

[1984a]. V. Pambuccian, A simple proof of a metrization theorem, *Mathematical Chronicle* 13 (1984), 71-72, Zbl. 556.54019.

— **Non-refereed Journal articles:**

- V. Pambuccian, Translations from Rumanian into English of the poems:
 - Max Blecher, *Pastoral* in *Words Without Borders*, April 2008
 - Tristan Tzara, *Friend Midear, Voice, Old Song, Come with Me to the Countryside, Inscription on a Tomb* in *Words Without Borders*, September 2005—December 2007
 - Paul Celan, *Poem for Marianne’s shadow and Last Night* in *Words Without Borders*, March and October 2005,
 - Eugène Ionesco, *I* in *Words Without Borders*, March 2006,
 - Barbu Fundoianu, *Hertza*, in *International Poetry Review* **36** (2010), no. 1, 30–35.
 - Translations of Gellu Naum, Nichita Stănescu, Ion Caraion, Nora Iuga, George Almosnino, Cezar Ivănescu, Mariana Marin in *International Poetry Review* **37** (2011), Fall.
 - Tristan Tzara, *Sunday*, *International Poetry Review* **38** (2012), Fall.
 - Constantin Abăluță, *On rain’s street*, *Two Lines* 19 (2012) “Passageways”, 36–39.
 - Constantin Abăluță, *The small rain*, *Two Lines Online* 19 (2012) “Passageways”.
- V. Pambuccian, Translation from German into English of the poems:
 - Richard Wagner, *Lockjaw* in *Words Without Borders*, March 2010.
 - Oskar Pastior, *always* in *International Poetry Review* **36** (2010), no. 1, 60–61.
 - Elisabeth Axmann, *prague, 1968* in *International Poetry Review* **36** (2010), no. 1, 54–59.
 - Translations of Elisabeth Axmann, Anemone Latzina, Rolf Bossert, Richard Wagner in *International Poetry Review* **37** (2011), Fall.
- V. Pambuccian and Raffi Kantian, Translation of the poem *Balance sheet* by Wahan Tekejan from Armenian to German, *ADK Armenisch-Deutsche Korrespondenz* 114 (2001), Nr. 4. p. 48.
- V. Pambuccian and Hermine Navasardjan,

- Translations of the poems *Milchstrasse* and *Geheimnis* from Armenian to German, Oda. Ort der Augen 3 (2010), 52–53.
- Translation from Armenian to German of Hermine Navasardyan's *Schwarm*, "Sie sehen und sehen doch nicht, hören und hören doch nicht, Zeitgenössische armenische Lyrik, Apollon, Yerevan, 2012.
 - V. Pambuccian, Translation from French into English of the poems:
 - Vahé Godel, *Indentity Check*, in *Two Lines* 18 (2011), 170–175
 - Vahé Godel, *Keep the Void Open*, in *Two Lines Online* 18 (2011).
 - Vahé Godel, *Dear friend this morning*, in *International Poetry Review* 38 (2012), 32–33
 - V. Pambuccian, Berge Turabian, a contemporary troubadour, *The Armenian Reporter International*, May 6 (2000), p. 8.