

# Asher Yair Grinberger – CV

(October 2019)

## Personal Details

Birth date: 26.12.1982

Nationality: Israel

Marital status: Married+2

Military service: 2002-2005

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## Background

Currently, I am a lecturer at the Department of Geography, the Hebrew University of Jerusalem, Israel. My main research interests lie on the nexus of Geographical Information Science and Human Geography and include studying mobility behaviors using digital traces, modeling of urban dynamics modeling, analyzing volunteered geographical information, and investigating processes of geo-information production.

## Academic Education

2008-2011 Bachelor's Degree, *Magna Cum Laude*, Geography and complementary studies, with a programme in Geoinformatics. The Hebrew University of Jerusalem, Israel.

2011-2012 M.A. in Geography, Planning and Environment, with a specialization in Urban and Regional Planning, with direct transition to PhD track. The Hebrew University of Jerusalem, Israel.

2012-2017 PhD, Geography, Supervisor: Prof. Noam Shoval. The Hebrew University of Jerusalem, Israel.

## Academic Positions

2010-2016 Research assistant, Department of Geography, the Hebrew University of Jerusalem, projects SenTra (2010-2011), DeUrbs (2011-2014), The Development of an Integrated GIS Based System for Real Estate Market Analysis (2015-2016)

2016 Principal Investigator together with Prof. Noam Shoval, a joint Hebrew University-Ramat Hanadiv project, the Geography department, the Hebrew University of Jerusalem.

2016-2019 Co-Investigator, Increasing Urban Resilience to Large Scale Disasters: The Development of a Dynamic Integrated Model for Disaster Management and Socio-Economic Analysis (DIM2SEA), the Geography department, the

Hebrew University of Jerusalem. Funded by the Ministry of Science and Technology, Israel and the Japan Science and Technology Agency.

- 2017-2019 Principal Investigator, "The Role of Theory in the Age of Big Spatial Data", GIScience Research Group, Institute of Geography, Heidelberg University, Germany. Funded by the *Alexander von-Humboldt* Research Fellowship for Post-Doctoral Researchers.
- 2019 Tenure-track lecturer, Department of Geography, the Hebrew University of Jerusalem, Israel

### **Research Grants**

- 2018-2019 Survey of Israel, "An Algorithm for Identifying the Components of Demand in Local Housing Markets." (With Prof. Daniel Felsenstein), 200,000 NIS.

### **Teaching Positions**

- 2012-2015 Teaching Assistant. Course: Advanced Tracking Methods and Its Application to Geographical Research. Geography Department, The Hebrew University of Jerusalem, Israel.
- 2013-2016 Teaching Assistant. Course: Urban and Regional Analysis – GIS Applications. Geography Department, The Hebrew University of Jerusalem, Israel.
- 2015-2016 Teaching Assistant. Course: Research Methods for MA Students. Geography Department, The Hebrew University of Jerusalem, Israel.
- 2015-2016 Teaching Assistant. Course: GIS for planning applications. Geography Department, The Hebrew University of Jerusalem, Israel.
- 2016-2017 Teaching Assistant. Course: Urban Geography. Geography Department, The Hebrew University of Jerusalem, Israel.
- 2016-2017 Teacher. Course: Advanced Tracking Methods and Its Application to Geographical Research. Geography Department, The Hebrew University of Jerusalem, Israel.
- 2019 Teacher. Course: Critical Geographic Information Science – Theory and Practice. The Institute of Geography, Heidelberg University, Germany.

### **Awards and Nominations**

- 2010 Dean's List of BA students, Faculty of Social Sciences, the Hebrew University of Jerusalem, Israel.
- 2011-2013 Amiran Fellowship for Outstanding Research Students, MA award. Geography Department, The Hebrew University of Jerusalem, Israel.

- 2012 Honorable Mention for Teaching Assistants, Geography Department, The Hebrew University of Jerusalem, Israel.
- 2012 Dean's List of MA students, Faculty of Social Sciences, the Hebrew University of Jerusalem, Israel.
- 2012 Rector's List for Excellence in Master's Studies, Faculty of Social Science, The Hebrew University of Jerusalem, Israel.
- 2013-2017 Hebrew University President 4 year Fellowship, the Hebrew University of Jerusalem, Israel.
- 2013-2017 Amiran Fellowship for Outstanding Research Students, PhD award, Geography Department, The Hebrew University of Jerusalem, Israel.
- 2014 Excellence in Teaching Award for Teaching Assistants, Geography Department, The Hebrew University of Jerusalem, Israel.
- 2016 Best PhD Paper Award, The Israeli Geographical Association
- 2017-18 *Fulbright* Post-doctoral Scholar Award, United States-Israel Educational Foundation. This award was not realized due to the choice of Heidelberg as the place for post-doctoral research.
- 2017-2019 *Alexander von-Humboldt* Research Fellowship for Postdoctoral Researchers, Alexander von-Humboldt Foundation.
- 2018 Member of the IRS Spring Academy 2018 “Investigating Space(s): Current Theoretical and Methodological Approaches: Part 2 – Virtuality and Socio-Materiality”.

### **Organization of Workshops and Academic Meetings**

1. *GIS as a tool for the ministry of economy*. Workshop instructed as part of training for employees of the ministry of economy, Jerusalem, Israel (December 2014).
2. *GIS workshop for research students*. Workshop instructed at the 56<sup>th</sup> annual conference of the Israeli Geographical Association, Jerusalem, Israel (December 2015).
3. *GIS workshop for school teachers*. Workshop instructed at the 56<sup>th</sup> annual conference of the Israeli Geographical Association, Jerusalem, Israel (December 2015).
4. *Critical GIScience Discussion Group*. GIScience research group, institute of geography, Heidelberg university (with Dr. Tessio Novack; February 2018 – present).
5. *State of the Map 2019*. Co-chair of the academic track program committee, Heidelberg, Germany (September 2019).
6. *GEOgraphical and CULTtural aspects of Geo-information: Issues and Solutions (GEOCULTGIS), AGILE2019 Workshop*. Co-organizer, Limassol, Cyprus.

## Professional affiliations

1. Israeli Regional Science Association Section
2. Israeli Geographical Association
3. Association of Geographic Information Laboratories in Europe (AGILE)

## Referee (# of papers)

1. Tourism Geographies (6).
2. International Journal of Geographic Information Science (5).
3. ISPRS International Journal of Geo-Information (4).
4. Journal of Location-Based Service (3).
5. International Journal of Disaster Risk Reduction (3).
6. Anthropocene (1).
7. Annals of Tourism Research (1).
8. International Journal of Hospitality Management (1).
9. Ocean and Coastal Management (1).
10. Tourism and Hospitality Research (1).

## Scientific Publications

**PhD dissertation: Grinberger, A.Y.** (2017). *An Integrative Model of Time-Space Behavior* (unpublished doctoral thesis). Supervisor: Prof. Noam Shoval. The Hebrew University of Jerusalem, Israel.

## Refereed papers

1. **Grinberger, A.Y.**, Shoval, N., & McKercher, B. (2014). Typologies of tourist time-space consumption: a new approach using GPS data and GIS tools. *Tourism Geographies*, 16(1), 105-123.
2. **Grinberger, A.Y.**, & Felsenstein, D. (2014). Bouncing back or bouncing forward? Simulating urban resilience. *Proceedings of the ICE: Urban Design and Planning*, 167(3), 115-124.
3. **Grinberger, A.Y.**, & Felsenstein, D. (2014). Back to routine or a new routine? Simulation of urban resilience. *Planning*, 11(2), 19-29 (in Hebrew).
4. **Grinberger, A.Y.**, & Shoval, N. (2015). A temporal-contextual analysis of urban dynamics using location-based data. *International Journal of Geographic Information Science*, 29(11), 1969-1987.
5. **Grinberger, A.Y.**, Lichter, M. & Felsenstein, D. (2015). Planning post-disaster urban recovery using synthetic big data. *Planning*, 12(2), 59-83 (in Hebrew).
6. Lichter, M., **Grinberger, A.Y.**, & Felsenstein, D. (2015). Simulating and communicating outcomes in disaster management situations. *ISPRS International Journal of Geo-Information*, 4(4), 1827-1847.

7. **Grinberger, A.Y.**, & Felsenstein, D. (2016). Dynamic agent-based simulation of welfare effects of urban disaster. *Computers, Environment and Urban Systems*, 59, 129-141.
8. **Grinberger, A.Y.**, & Samuels, P. (2018). Modeling the labor market in the aftermath of a disaster: Two perspective. *International Journal of Disaster Risk Reduction*, 31, 419-434.
9. Mas, E., Felsenstein, D., Moya, L., **Grinberger, A.Y.**, Das, R., & Koshimura, S. (2018). Dynamic Integrated Model for Disaster Management and Socio-Economic Analysis (DIM2SEA). *Journal of Disaster Research*, 13(7), 1257-1271.
10. **Grinberger, A.Y.**, & Shoval, N. (2019). Spatio-temporal contingencies in tourists' intra-diurnal mobility patterns. *Journal of Travel Research*, 58(3), 512-530. doi:10.1177/0047287518757372.
11. **Grinberger A.Y.** (2019). Weighting the effects of spatial cognition and activity anchors on time-space activity. *The Professional Geographer*, 71(1), 52-64. doi:10.1080/00330124.2018.1455523.
12. Mocnik, F.-B., Ludwig, C., **Grinberger, A.Y.**, Jacobs, C., Klonner, C., & Reifer, M. (2019). Shared data sources in the geographical domain – a classification schema and visualization techniques. *ISPRS International Journal of Geo-Information*, 8(5), 242. doi:10.3390/ijgi8050242.

### Edited Books

1. Minghini, M., Grinberger, A. Y., Mooney, P., Juhász, L., & Yeboah, G. (eds.) *Proceedings of the Academic Track at State of the Map 2019*. Heidelberg.

### Peer Reviewed Conference Papers

1. **Grinberger, A.Y.** (2018). Identifying the effects of mobility domains on VGI: Towards an analytical approach. *VGI-ALIVE Workshop at AGILE 2018*, Lund, Sweden. <http://www.cs.nuim.ie/~pmooney/vgi-alive2018/papers/1.2.doc>
2. **Grinberger, A.Y.**, Schott, M., Raifer, M., Troilo, R., & Zipf, A. (2019). The institutional contexts of volunteered geographic information: A quantitative exploration of OpenStreetMap data. *GeoCultGIS Workshop at AGILE 2019*, Limassol, Cyprus.
3. **Grinberger, A.Y.**, Minghini, M., Mooney, P., Juhász, L., & Yeboah, G. (2019). Bridging the map? Exploring interactions between the academic and mapping communities in OpenStreetMap. In: Minghini, M., Grinberger, A. Y., Mooney, P., Juhász, L., & Yeboah, G. (eds.) *Proceedings of the Academic Track at State of the Map 2019* (pp. 1-2). Heidelberg.
4. **Grinberger, A.Y.**, Schott, M., Raifer, M., Troilo, R., & Zipf, A. (2019). Analyzing the spatio-temporal patterns and impacts of large-scale data production events in OpenStreetMap. In: Minghini, M., Grinberger, A. Y., Mooney, P., Juhász, L., & Yeboah, G. (eds.) *Proceedings of the Academic Track at State of the Map 2019* (pp. 9-10). Heidelberg.

### Peer-Reviewed Book chapters

1. Felsenstein, D., Ashbel, A., Lichter, M., & **Grinberger, Y.** (2013). Land use-land cover dynamics at the metropolitan fringe. In D. Malkinson, D. Czamanski

- & I. Benenson (Eds.) *Modeling of land-use and ecological dynamics* (pp. 143-165). Springer: Berlin-Heidelberg.
2. **Grinberger, A.Y.**, Lichter, M., & Felsenstein, D. (2015). Simulating urban resilience: disasters, dynamics and (synthetic) data. In S. Geertman, J. Stillwell, J. Ferreira & R. Goodspeed (Eds.) *Planning support systems and smart cities* (pp. 99-119). Springer: Cham.
  3. **Grinberger, A.Y.**, & Felsenstein, D. (2017). A tale of two earthquakes: Dynamic agent-based simulation of urban resilience. In J. Lombard, E. Stern & G. Clarke (Eds.) *Applied spatial modeling and planning* (pp. 134-154). Routledge: Abingdon & New York.
  4. **Grinberger, A.Y.**, Lichter, M., & Felsenstein, D. (2017). Dynamic agent based simulation of an urban disaster using synthetic big data. In P. Thakuria, N. Tilahun & M. Zellner (Eds.) *Seeing cities through big data: Theory methods and applications in urban informatics* (pp. 349-382). Springer: Cham.
  5. **Grinberger, A.Y.**, & Felsenstein, D. (2017). Using big (synthetic) data to identify local housing market attributes. In L.A. Schintler & Z. Chen (Eds.) *Big data for urban & regional science* (pp. 109-120). Routledge: Abingdon & New York.
  6. Birenboim, A., **Grinberger, A.Y.**, Novelli, E.M., & Jonassaint, C.R. (2018). Daily monitoring of mobility as indicator of wellbeing among individuals with chronic disease. In M. Friman, D. Ettema & L. E. Olsson (Eds.) *Quality of life and daily travel (Best practices)* (pp. 219-234). Springer: Cham.
  7. **Grinberger, A.Y.**, Felsenstein, D., & Samuels, P. (2019). Emerging urban dynamics and labor market change: An agent-based simulation of recovery from a disaster. In K. Borsekova & P. Nijkamp (Eds.) *Resilience and Urban Disasters* (pp. 232-256). Edward Elgar: Cheltenham
  8. Noskov, A., **Grinberger, A.Y.**, Papapessio, N., Rousell, A., Troilo, R., & Zipf, A. (2019). Modelling and Assessing Spatial Big Data: Uses Cases of the OpenStreetMap Full-History Dump. In A. Voghera & L. La Riccia (Eds.) *Spatial Planning in the Big Data Revolution* (pp. 16-44). IGI Global.

#### **Papers under review**

1. **Grinberger, A.Y.** Cognitive space-time prisms: Integrating subjective dimensions into analytical time geography. Submitted to *the Annals of the American Association of Geographers*, current status: major revision.

#### **Work in progress:**

1. Grinberger, A.Y., Troilo, R., Loos, L, & Zipf, A. Extracting socio-spatial processes from large-scale OpenStreetMap contributions.
2. Grinberger, A.Y. Assessing the effects of critical GIScience on the field: An analysis of citations-networks.
3. Grinberger, A.Y., & Novack, T. Agent-based simulations of OpenStreetMapContributions.

#### **Presentations in conferences and professional meetings** (p=presenter)

1. **Grinberger, A.Y.** (p), & Felsenstein, D. (2012, February). *Vulnerable and resilient cities: Modeling the response to urban disasters*. Paper presented at the meeting of the Israeli Regional Science Association Section, Rehovot, Israel.

2. **Grinberger, A.Y.** (p), & Felsenstein, D. (2012, December). *Dynamic simulation of urban disasters*. Report presented at the DesUrbs project mid-term evaluation meeting, Brussels, Belgium.
3. Birenboim, A., Shoval, N., & **Grinberger, A.Y.** (p) (2012, December). *The Senso-Meter tool*. Paper presented at the DesUrbs project mid-term evaluation meeting, Brussels, Belgium.
4. **Grinberger, A.Y.** (p), & Felsenstein, D. (2012, December). *Urban recovery following unpredicted events: A dynamic simulation using an agent-based model*. Paper presented at the 53<sup>rd</sup> annual conference of the Israeli Geographical Association, Beer Sheva, Israel.
5. **Grinberger, A.Y.** (p), Shoval, N., & Fleischer, A. (2012, December). *Behavior in time and space of visitors to JNF's forest parks: The case of the Canada-Ayalon park*. Paper presented at the 53<sup>rd</sup> annual conference of the Israeli Geographical Association, Beer Sheva, Israel.
6. **Grinberger, A.Y.** (p), & Felsenstein, D. (2013, January). *Can a city recover from a natural disaster? A simulation-based analysis*. Paper presented at the meeting of the Israeli Regional Science Association Section, Beer Sheva, Israel.
7. **Grinberger, A.Y.** (p), Shoval, N., & McKercher, B. (2013, February). *Characterizing tourists' time-space consumption: Analysis of GPS data using GIS tools*. Paper presented at the meeting of the Forum of Israeli Tourism Researchers, Kinneret College on the Sea of Galilee, Israel.
8. **Grinberger, A.Y.** (p), & Felsenstein, D. (2013, June). *Can cities bounce back? Dynamic agent based simulation of urban resilience*. Paper presented at the IGU Conference 2013: Applied GIS and Spatial Modeling, Leeds, UK.
9. **Grinberger, A.Y.** (p), & Felsenstein, D. (2013, December). *Bouncing-back or bouncing-forward? A simulation of policy impacts on urban resilience after an earthquake*. Paper presented at the 54<sup>th</sup> annual conference of the Israeli Geographical Association, Bar Ilan University, Israel.
10. **Grinberger, A.Y.** (p), Shoval, N., & McKercher, B. (2013, December). *From prism to path: A new approach for time-space behavior analysis using GPS & GIS*. Paper presented at the 54<sup>th</sup> annual conference of the Israeli Geographical Association, Bar Ilan University, Israel.
11. **Grinberger, A.Y.** (p), & Felsenstein, D. (2014, January). *Incorporating dynamic pricing in agent based simulation: The case of an earthquake in Tel Aviv*. Paper presented at the meeting of the Israeli Regional Science Association Section, Carmiel, Israel.
12. **Grinberger, A.Y.** (p), & Felsenstein, D. (2014, February). *Planning interventions in the wake of an urban disaster – estimation by simulation*. Paper presented at the Israel Planners Association meeting, Jerusalem, Israel.
13. **Grinberger, A.Y.**, & Felsenstein, D. (p) (2014, May). *Incorporating dynamic pricing in agent based simulation: The case of an earthquake in Tel Aviv*. Paper presented at the Applied Geography Commission conference, Tel Aviv, Israel.
14. **Grinberger, A.Y.** (p), & Felsenstein, D. (2014, May). *A dynamic simulation tool for urban disasters*. Report presented at the DesUrbs dissemination event, Jerusalem, Israel.
15. **Grinberger, A.Y.** (p), & Shoval, N. (2014, July). *A temporal-contextual analysis of urban dynamics using location-based data*. Paper presented at Mobile Tartu 2014, Tartu, Estonia.

16. **Grinberger, A.Y.** (p), Lichter, M., & Felsenstein, D. (2014, August). *Dynamic agent-based simulation of an urban disaster using synthetic big data*. Paper presented at the NSF Big Data and Urban Informatics workshop, Chicago, IL.
17. **Grinberger, A.Y.** (p), & Felsenstein, D. (2014, December). *Incorporating dynamic pricing in agent based simulation: The case of an earthquake in Jerusalem's center*. Paper presented at the 55<sup>th</sup> annual conference of the Israeli Geographical Association, Haifa, Israel.
18. **Grinberger, A.Y.** (p), Lichter, M., & Felsenstein, D. (2015, January). *Simulating an urban disaster using synthetic big data*. Seminar presented at the Geography Department Seminar, Jerusalem, Israel.
19. **Grinberger, A.Y.** (p), & Felsenstein, D. (2015, February). *Estimating high-resolution urban dynamics by the integration of big spatial data and micro-simulation*. Paper presented at the meeting of the Israeli Regional Science Association Section, Haifa, Israel.
20. Lichter, M., **Grinberger, A.Y.** (p), & Felsenstein, D. (2015, February). *Using web-based planning aids for urban resilience – the case of an earthquake in Jerusalem*. Paper presented at the Israel Planners Association meeting, Beer Sheva, Israel.
21. **Grinberger, A.Y.** (p), Lichter, M., & Felsenstein, D. (2015, July). *Simulating urban resilience: Disasters, dynamics and (synthetic) data*. Paper presented at CUPUM 2015, Boston, MA.
22. **Grinberger, A.Y.** (p), & Felsenstein, D. (2015, December). *Incorporating market based mechanisms into an agent-based simulation: The case of an earthquake in Tel Aviv*. Paper presented at the 56<sup>th</sup> annual conference of the Israeli Geographical Association, Jerusalem, Israel.
23. **Grinberger, A.Y.** (p), Lichter, M., & Felsenstein, D. (2016, February). *Automatically identifying Local Housing Markets*. Paper presented at the meeting of the Israeli Regional Science Association Section, Tel Aviv, Israel.
24. **Grinberger, A.Y.** (p), Lichter, M., & Felsenstein, D. (2016, February). *Dynamic agent-based simulation of welfare effects of urban disasters*. Paper presented at the meeting of the Israeli Regional Science Association Section, Tel Aviv, Israel.
25. Lichter, M. (p), **Grinberger, A.Y.**, & Felsenstein, D. (2016, February). *Incorporating the influence of the visual landscape into hedonic estimation of housing prices*. Paper presented at the meeting of the Israeli Regional Science Association Section, Tel Aviv, Israel.
26. **Grinberger, A.Y.** (p), & Felsenstein, D. (2016, July). *An agent-based dynamic simulation tool of long-term urban resilience*. Report presented at the DIM2SEA project meeting, Sendai, Japan.
27. **Grinberger, A.Y.** (p), Lichter, M., & Felsenstein, D. (2016, December). *Long term dynamics of urban resilience: The case of labor markets following a disaster*. Paper presented at the 57<sup>th</sup> annual conference of the Israeli Geographical Association, Tel Aviv, Israel.
28. **Grinberger, A.Y.**, Felsenstein, D. (p), & Samuels, P. (2017, February). *Long term dynamics of urban resilience: The case of the labor market after an earthquake*. Paper presented at the meeting of the Israeli Regional Science Association Section, Acre, Israel.
29. **Grinberger, A.Y.** (p), Felsenstein, D., & Samuels, P. (2017, February). *Medium term dynamics of urban resilience: The case of the labor market after an*



- earthquake*. Paper presented at the Modeling Urban Resilience in the Aftermath of the Haifa Fire workshop, Jerusalem, Israel.
30. **Grinberger, A.Y.** (p) (2017, April). *The identification of geographic activity contexts: Considering behavioral effects*. Seminar presented at the GIS Colloquium, Institute of Geography, Heidelberg University, Heidelberg, Germany.
  31. **Grinberger, A.Y.** (p), & Shoval, N. (2017, April). *Considering spatial cognition in the identification of geographic activity contexts*. Paper presented at the annual meeting of the Association of American Geographers, Boston, MA.
  32. Felsenstein, D. (p), **Grinberger, A.Y.**, & Samuels, P. (2017, August). *Restoring urban equilibrium in the aftermath of a disaster; Some policy simulation results*. Paper presented at the 57<sup>th</sup> congress of the European Regional Science Association, Groningen, The Netherlands.
  33. **Grinberger, A.Y.** (p) (2018, May). *Integrating geographical concepts into the study of digital spatial data*. Paper presented at the IRS Spring Academy 2018: Virtuality and Socio-Materiality, Erkner, Germany.
  34. **Grinberger, A.Y.** (p) (2018, June). *Identifying the Effects of Mobility Domains on VGI: Towards an Analytical Approach*. Paper presented at the AGILE'18 VGI-ALIVE pre-conference workshop, Lund, Sweden.
  35. Samuels, P. (p), & **Grinberger, A.Y.** (2018, October). *Labor Mobility, Trade and Urban Resilience to Natural Disasters*. Paper presented at the 2018 Barcelona Workshop on Regional and Urban Economics. Territorial Resilience: Mitigation and Adaptation, Barcelona, Spain.
  36. **Grinberger, A.Y.** (p) (2018, October). *Extracting Knowledge on Urban Dynamics from Geo-Spatial Data: Approaching the 'Why; Question'*. Warwick Institute for the Science of Cities Seminar Series, Coventry, UK.
  37. Felsenstein, D.(p), **Grinberger, A.Y.**, & Samuels, P. (Novemembr, 2018). *Cascading Disasters and Labor Market Outcomes*. Cascading Disasters: Theory, Methods and Empirics International Workshop, Haifa, Israel.
  38. **Grinberger, A.Y.** (p) (2018, November). *Geographical Knowledge Extraction from Spatial Data: Broadening the Epistemological Base*. UCSB Geography Colloquium, Santa Barbara, USA.
  39. **Grinberger, A.Y.** (p), Schott, M., Raifer, M., Troilo, R., & Zipf, A. (June, 2019). *The Institutional contexts of volunteered geographical information: A quantitative exploration of OpenStreetMap data*. Paper presented at the AGILE'19 GeoCultGIS pre-conference workshop, Limassol, Cyprus.
  40. **Grinberger, A.Y.** (p), Schott, M., Raifer, M., Troilo, R., & Zipf, A. (September, 2019). *Analyzing the spatio-temporal patterns and impacts of large-scale data production events in OpenStreetMap*. Paper presented at the Academic Track, State of the Map 2019, Heidelberg, Germany.