

Entrepreneurial Education and SDGs in the Bingo Region — A Verification Using Text Data —

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Background and Objectives

Background

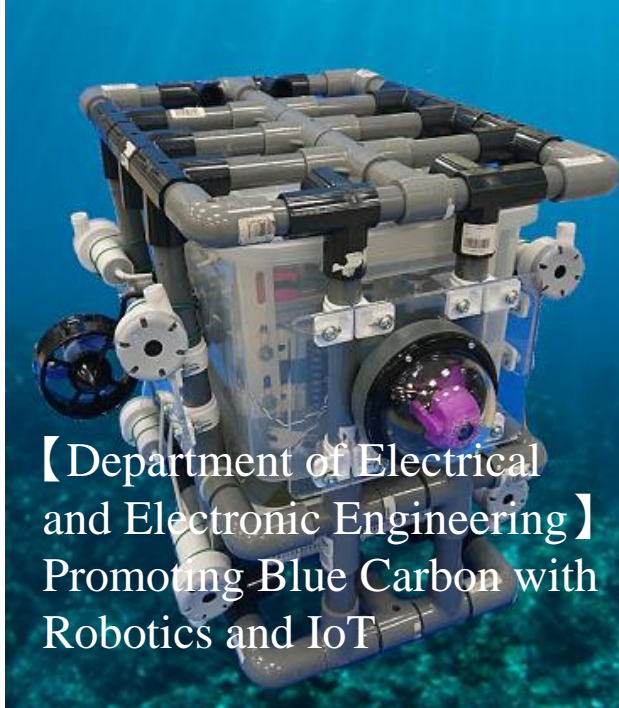
- The outflow of young people from rural areas is particularly noticeable at the time of job hunting. Therefore, initiatives are needed to help students gain a deeper understanding of the appeal of local companies and motivate them to seek employment in their hometowns.

Objective

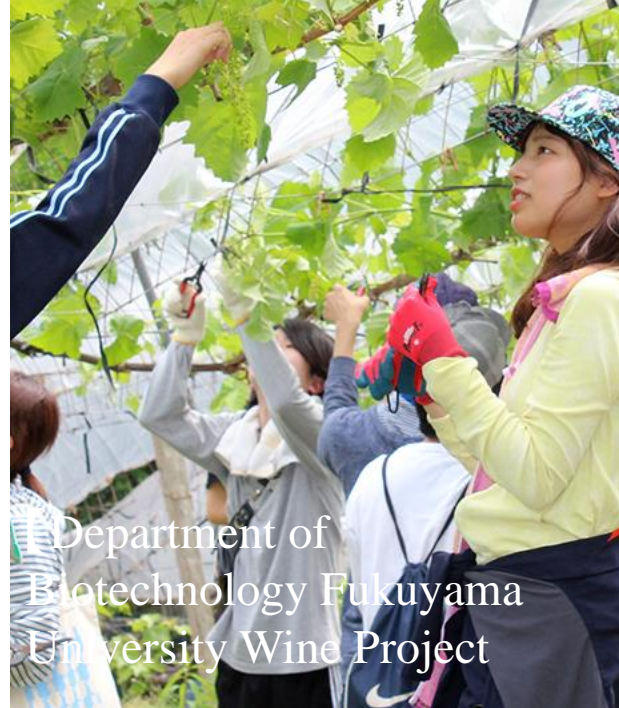
- Verify the implication derived from previous research that Bingo companies may have been operating with similar values even before the widespread adoption of the SDGs.



【Department of International Economics】Mangrove Reforestation Activities During the Indonesia Bali Study Program



【Department of Electrical and Electronic Engineering】Promoting Blue Carbon with Robotics and IoT



【Department of Biotechnology Fukuyama University Wine Project



【Faculty of Economics】Academic Symposium on SDGs and Carbon Neutrality



【Department of Marine Biology】Delicious to Eat! Learn and Become a Supporter of the Fisheries Industry!

Initiatives at Fukuyama University

Fukuyama University Green & Blue Declaration

~From Setouchi's Satoyama and Satoumi to Japan and the World~

Entrepreneurial Education

- In collaboration with local businesses, this initiative promotes industry-academia cooperation through practical problem-solving while also serving as part of entrepreneurial education to cultivate the managerial perspectives and strategic thinking necessary for entrepreneurs and the next generation of business leaders.



Active Learning



Bingo Regional economics

Relevance to SDG Goals 4 & 17



- Enhancement of Practical Educational Content
- Development of Educational Materials Specializing in the Regional Economy
- Promotion of Students' Understanding of the Region and Encouragement of Local Employment



- Strengthening Industry-Academia Collaboration
- Dissemination and Implementation of SDGs-based management
- Facilitating partnerships within and beyond the region

Research Methodology

- Text mining analysis of five years' worth of lecture transcripts by executives from 66 Bingo-based companies before the adoption of the SDGs.
- Created a co-occurrence network visualizing relationships using key terms closely related to the SDGs.

Overview of the Data

Number of Companies	66Company
Target Period	2019-2014
Total Extracted Words (Used)	538,505 (190,735)
Number of Unique Words (Used)	16,835(15,221)
Sentence	23,046

Created by the Author

Co-Occurrence Network on the Environment

- Possibility of Considering Social Roles and Environmental Awareness in Corporate Management.
- Suggests a Positive Attitude Toward the Development of New Products and Services.

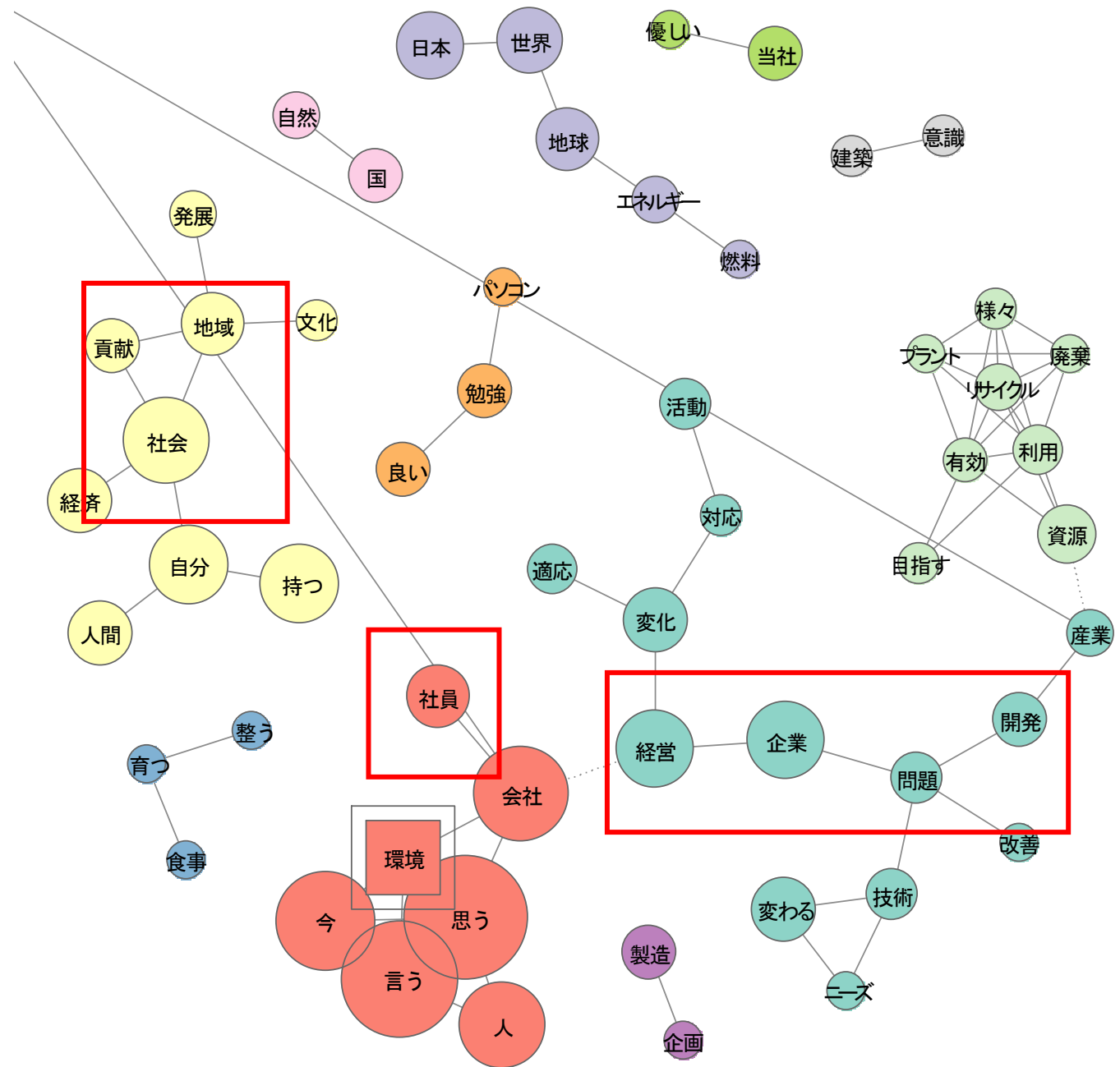


Figure 1: Co-Occurrence Network Based on Keyword Search for "Environment"

Co-Occurrence Network on Society

- There are situations where messages to students or thoughts about society as a whole are shared.
- There is a possibility that the emphasis on humanity in management, as well as growth and self-actualization through work, are being discussed.
- Examining How Small and Medium-Sized Enterprises (SMEs) Contribute to and Fulfill Their Responsibilities in the Community.

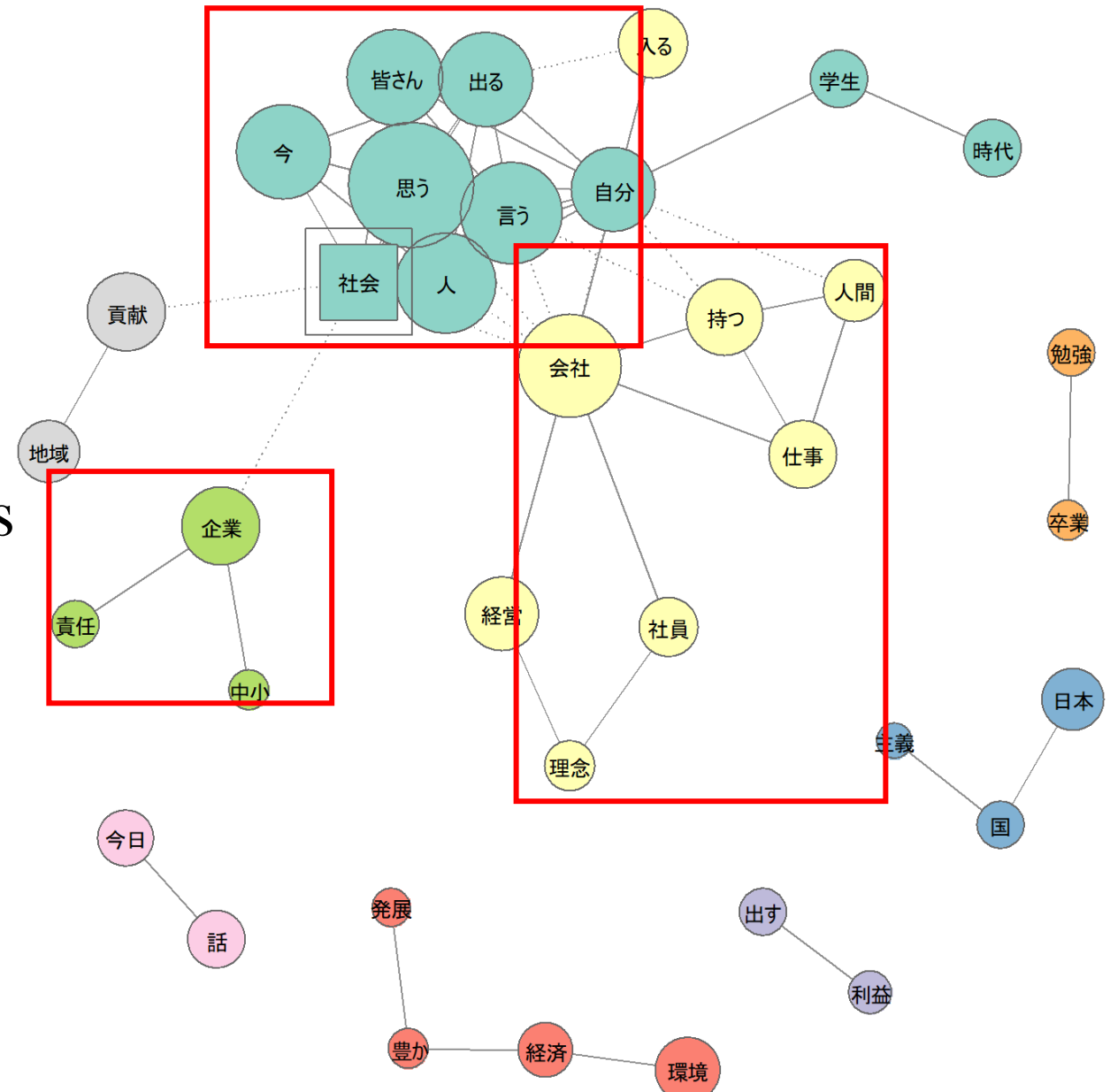
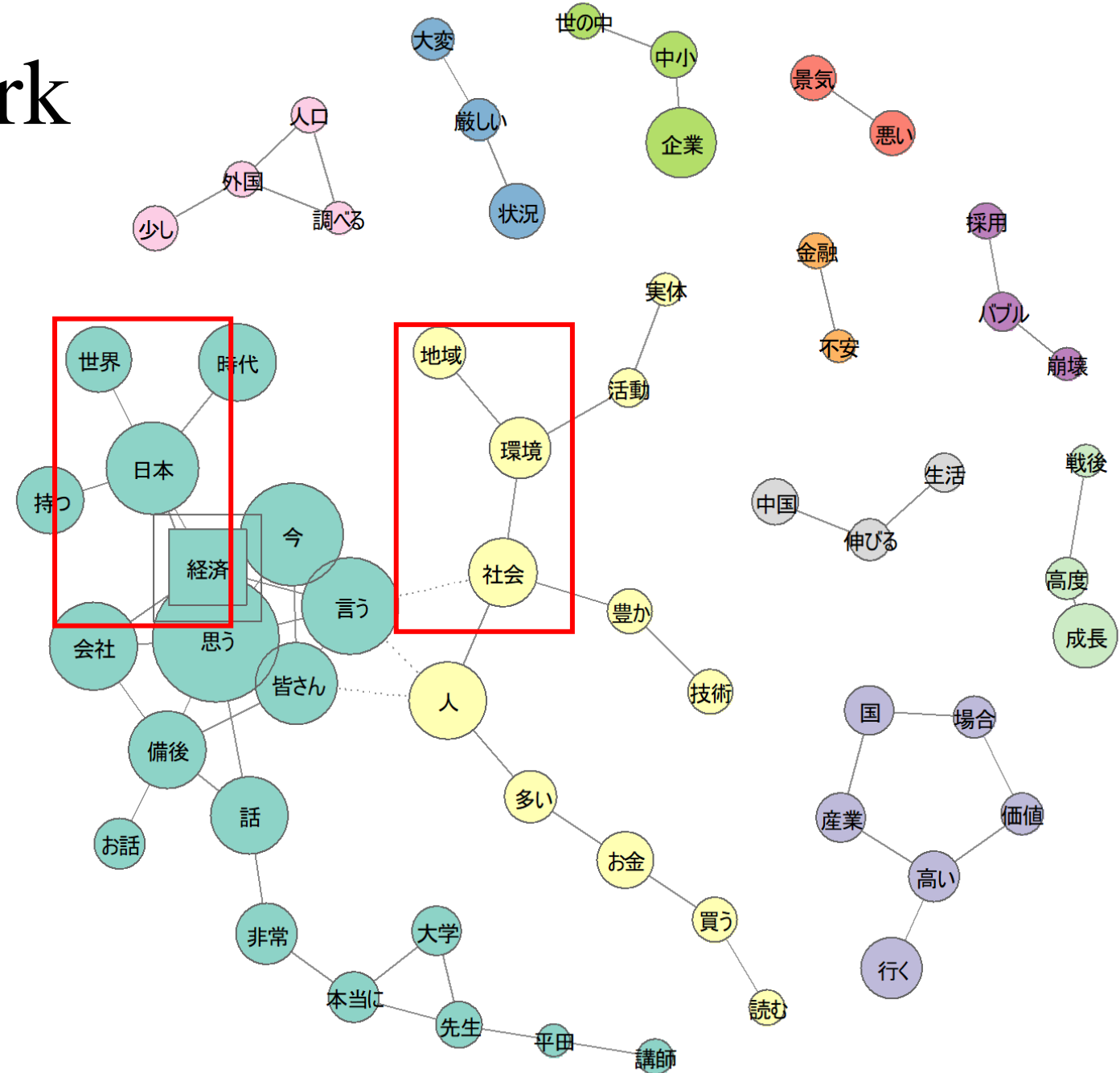


Figure 2: Co-occurrence Network Based on
Related Word Search for "Society"

Co-occurrence network of the economy.

- There is a possibility of addressing competition driven by globalization, as well as the strengths and challenges of the Japanese economy.
- Paying attention to activities in the local community and social issues.



Co-occurrence network of employees.

- It suggests that the management not only conveys their own ideas but also emphasizes two-way communication and organizational culture.
- It is likely that there are frequent references to individuals' roles within the organization, as well as employees' roles and mindsets adapting to changes in the times.

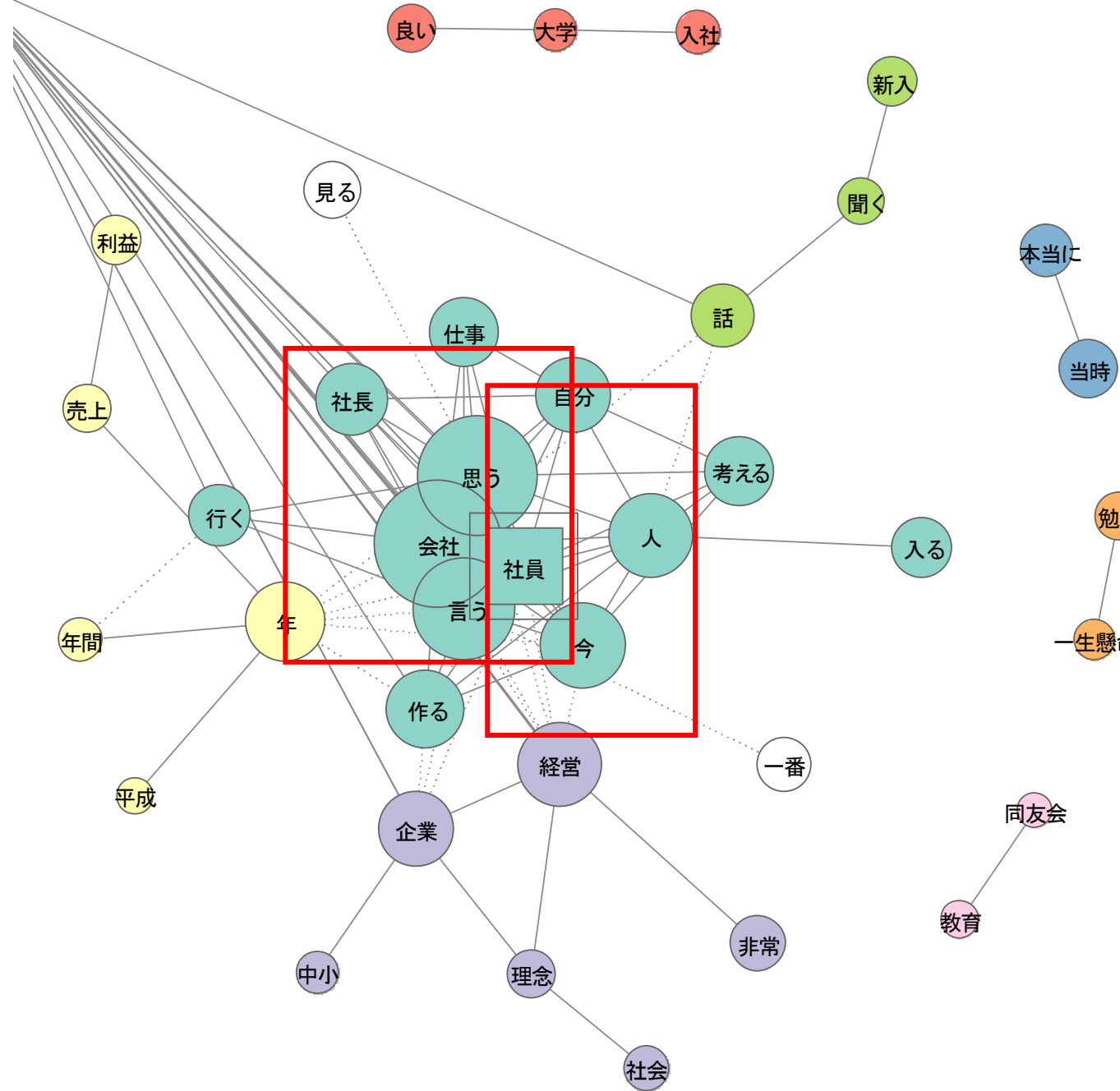


図4 「社員」の関連語検索による共起ネットワーク

Discussion and Conclusion

- At that time, direct terms such as "SDGs" or "sustainability" had not yet become widespread. However, there was already an interest in coexistence with the local community, environmental conservation, human resource development, and technological advancement, reflecting the values and themes that form the foundation of what we now call the SDGs.

Future Prospects

- By comparing data from after the adoption of the SDGs in 2015, it becomes possible to examine how the keywords and key themes emphasized by companies have changed, as well as how existing initiatives have been redefined and developed within the context of the SDGs.

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Japanese



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