

Policy makers have a number of motives to foster participation of stakeholders in the policy process. They provide expert knowledge, information on encompassing interest but also legitimacy to the policy institution (see in particular Bouwen 2002; Kohler-Koch and Finke 2007; De Bruycker 2016). The latter is particularly important for supra-national institutions like the European Union, which can be considered to carry a democratic deficit (Follesdal and Hix 2006). As a matter of fact, according to (Coen and Richardson 2009), European institutions have been "active in the creation of a number of societal and environmental interest groups" (see also Kohler-Koch and Finke 2007; Klüver 2013). Yet, the relation between stakeholders and policy makers is not unidirectional. As emphasized by (Bouwen 2002), it should rather be seen as an exchange of access goods, such as information and legitimacy, against influence on the policy process.

The interactions between interest groups and policy makers thus gives rise to a **complex lobbying network (Coen and Richardson 2009)** in which influence can flow through different channels, e.g. in the case of European politics through national governments or directly at the European level (Pappi and Henning 1999), on different institutions, e.g. executive or legislative, and in different phases of the policy process: agenda-setting, policy formulation or implementation (see e.g. Dür and De Bièvre 2007). **In this complex framework, a perceived danger is that certain actors exert a disproportionate impact on the policy process. Measuring influence has thus been a key issue in the political science focusing on lobbying (see e.g. Mahoney 2007; Dür 2008).** However, progress in this field has long been plagued by lack of data and transparency of the lobbying processes. In the European context, the introduction of the transparency register (Greenwood and Dreger 2013) and the raising role of public consultations (Schmidt 2013) in which the opinion of interest groups is expressed publicly and archived electronically are potential game-changers. **A burgeoning literature (e.g. Klüver 2009; Klüver 2011; Klüver 2013; Klüver 2015; Beyers et al. 2014) has applied machine learning techniques to classify documents from public consultations according to the opinions expressed and measure their influence through their distance to the output of the policy process.** Two caveats that this literature must face is the difficulty to train classifiers given the relatively small size of the datasets (see e.g. Bunea and Ibenskas 2015) and the difficulty to express the opinion in a document through a uni-dimensional value. This paper approach these issues by proposing a complementary method to analyze open consultation data: the construction of multi-dimensional policy network maps through crowdsourcing.

## References

- Beyers, Jan et al. (2014). “Policy-centred sampling in interest group research: Lessons from the INTEREURO project”. In: *Interest Groups & Advocacy* 3.2, pp. 160–173.
- Bouwen, Pieter (2002). “Corporate lobbying in the European Union: the logic of access”. In: *Journal of European public policy* 9.3, pp. 365–390.
- Bunea, Adriana and Raimondas Ibenskas (2015). “Quantitative text analysis and the study of EU lobbying and interest groups”. In: *European Union Politics* 16.3, pp. 429–455.
- Coen, David and Jeremy Richardson (2009). *Lobbying the European Union: institutions, actors, and issues*. Oxford University Press.
- De Bruycker, Iskander (2016). “Pressure and expertise: explaining the information supply of interest groups in EU legislative lobbying”. In: *JCMS: Journal of Common Market Studies* 54.3, pp. 599–616.
- Dür, Andreas (2008). “Measuring interest group influence in the EU: A note on methodology”. In: *European Union Politics* 9.4, pp. 559–576.
- Dür, Andreas and Dirk De Bièvre (2007). “Inclusion without influence? NGOs in European trade policy”. In: *Journal of Public Policy* 27.1, pp. 79–101.
- Follesdal, Andreas and Simon Hix (2006). “Why there is a democratic deficit in the EU: A response to Majone and Moravcsik”. In: *JCMS: Journal of Common Market Studies* 44.3, pp. 533–562.
- Greenwood, Justin and Joanna Dreger (2013). “The Transparency Register: A European vanguard of strong lobby regulation?” In: *Interest Groups & Advocacy* 2.2, pp. 139–162.
- Klüver, Heike (2009). “Measuring interest group influence using quantitative text analysis”. In: *European Union Politics* 10.4, pp. 535–549.
- (2011). “The contextual nature of lobbying: Explaining lobbying success in the European Union”. In: *European Union Politics* 12.4, pp. 483–506.
- (2013). *Lobbying in the European Union: interest groups, lobbying coalitions, and policy change*. Oxford University Press.
- (2015). “The promises of quantitative text analysis in interest group research: A reply to Bunea and Ibenskas”. In: *European Union Politics* 16.3, pp. 456–466.
- Kohler-Koch, Beate and Barbara Finke (2007). “The institutional shaping of EU–society relations: a contribution to democracy via participation?” In: *Journal of Civil Society* 3.3, pp. 205–221.
- Mahoney, Christine (2007). “Lobbying success in the United States and the European Union”. In: *Journal of Public Policy* 27.1, pp. 35–56.

- Pappi, Franz U and Christian HCA Henning (1999). "The organization of influence on the EC's common agricultural policy: A network approach". In: *European Journal of Political Research* 36.2, pp. 257–281.
- Schmidt, Vivien A (2013). "Democracy and legitimacy in the European Union revisited: Input, output and throughput". In: *Political Studies* 61.1, pp. 2–22.