Preserving the Intent behind activities or projects, is at least as important as preserving the associated digital data. Project policies are the natural means to describe an intent in a sustainable implementation-independent way, after the project actors have reached an agreement. In addition, the consensus building process, through which actors have reached this agreement, is in itself a valuable resource to inform the intent. Hence we propose not only to preserve the final agreed policy values, but also to maintain records of the consensus process.

upon policies, but also to keep track of their evolutions or of any resources that may indirectly explain such evolutions. This will document the rationale behind the final consensus and enable the (long term) understanding of the captured intent.

This is all the more necessary as projects involve multiple domains of expertise, or multiple communities of actors with different backgrounds, different interests or different views. For instance, we may view SLA (Service Level Agreement) negotiations (e.g. between a content provider and a preservation service provider) as driven by the need to establish a compromise between two initial policies, the first one based on the content provider intent (domain policy, independent of implementation constraints), the second based on the service provider capacities (system policy, based on the system capacities, in terms of support, auditing, etc.). The final SLA is a resulting consensus (contract), after negotiations have stabilized the various refinements and constraint relaxations (technical, commercial, etc.) that enable a compromise between the two parties. Keeping track of the negotiation process, in terms of policy evolution, is a natural way to preserve the long term understanding of the motivation behind a specific contract.

Another scenario under development in Shaman, deals with mechatronic assembling, which involves collaboration between two disciplines (or subdomains): ECAD (electronic computer-aided design) and MCAD (mechanical computer-aided design). As in many other areas, a core business problem with ECAD/MCAD lies in the difficulty to shorten product development time by parallelizing project development across subprojects. In Shaman, we contemplate the possibility to derive collaboration policies from the tracking of collaboration sessions.

We are primarily interested in exploring further those ideas, especially by finding out how they resonate within different communities, from digital preservation proper to various domains of applications, say from algorithm design to manufacturing or healthcare.

This would include refining or even questioning the relation between intent, consensus and policies, especially when the intent is associated with interactions at the border of multiple...
domains, which may all have their established practices and standards, but not operating across domains, where the consensus is built.

Identifying and scrutinizing some scenarios for those application domains, at various degree of refinement or focus, would be extremely valuable to explore methodologies for the preservation of consensus building activities. This should happen at a sufficiently abstract level so that the captured traces of activities will durably provide the necessary background to preserve the rationale behind decisions made during the interactions across domains. Next, we could envision description languages for the corresponding policies and methods to infer policies from traces of consensus building activities.