introduction, committee-based algorithms are simply unacceptable in a distributed setting, due to their inherent unfairness, and to their vulnerability to malicious attacks.

6. Conclusion and Open Problems

In this paper we showed that in a highly simplified model, there exist very simple solutions to the important problem of low-cost preference reconstruction. Our results allow us to hope that the considerable gaps between the abstract model and real life can be bridged by algorithmic solutions. In particular, we believe that the following problems are important to solve.

- The algorithms in this paper are synchronous, i.e., players are assumed to proceed in lockstep fashion. Finding an asynchronous algorithm would be a significant progress in making the algorithm practical.
- Another important aspect is that the algorithms in this paper assume that all players of the same type have identical preference vector. It would be extremely useful to extend the algorithms to the case where types are not sharply defined, i.e., to allow some tolerance for deviation.
- The algorithms use random player and product identities. It seems interesting to try to develop an algorithm that lifts this assumption.
- The algorithms rely on knowing a lower bound on α, the popularity of the type. We would like to find an algorithm that adapts to any α.

Taste and honesty. One (post modern) interpretation for taste is *honesty*. In this model, each object has a single value ("truth"), independent of the player who probes it. This model is applicable if the grades of objects reflect some objectively defined predicate. In this case a player who announces a value which is not the true value of the object is simply lying. With this interpretation, our algorithms can be used to ensure that, with high probability, *each and every lie will eventually be uncovered*. This certainty may lead to the following intriguing consequence (assuming that the penalty for getting caught lying is larger than the gain): no rational player will ever lie, and the overhead of enforcing honesty will be minimized, since the algorithm will be invoked only in the rare cases of irrationality. Analyzing this scenario is beyond the scope of the current paper.

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