

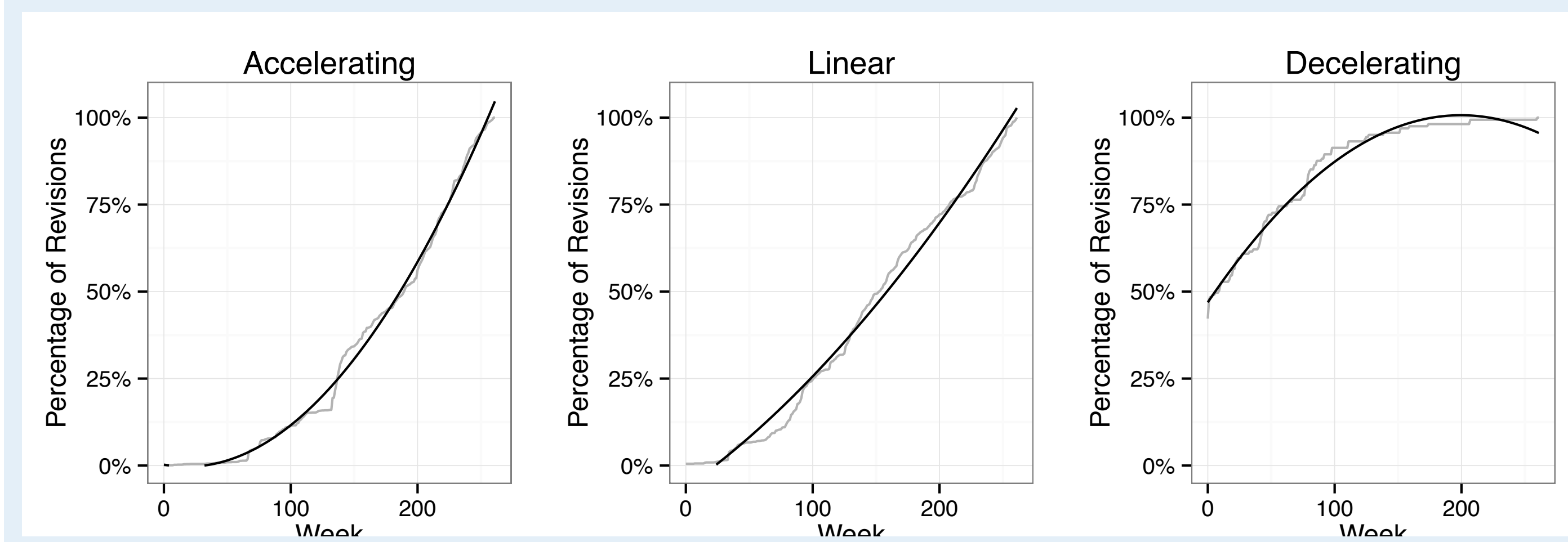
Critical Mass of What? Exploring Community Growth in WikiProjects

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Online communities need growth to develop critical mass. What kind of growth do they need? Do they need community membership growth, or do they need growth in content or participation frequency? We looked at how WikiProjects grow over the first five years of existence to see how what kind of growth is most important.

WikiProjects are subcommunities of Wikipedia organized around a specific topic or editing task. We collected the first five years for 1,069 WikiProjects.

Finding 1- WikiProjects growth changes over time, with some projects accelerating in growth and others decelerating.



Finding 2- WikiProjects tend to accelerate in growth of contributions, but decelerate in growth of membership.

		Editors		
		Decelerating	Linear	Accelerating
Revisions	Decelerating	197	8	0
	Linear	66	23	8
	Accelerating	400	144	223

Number of projects in each growth category

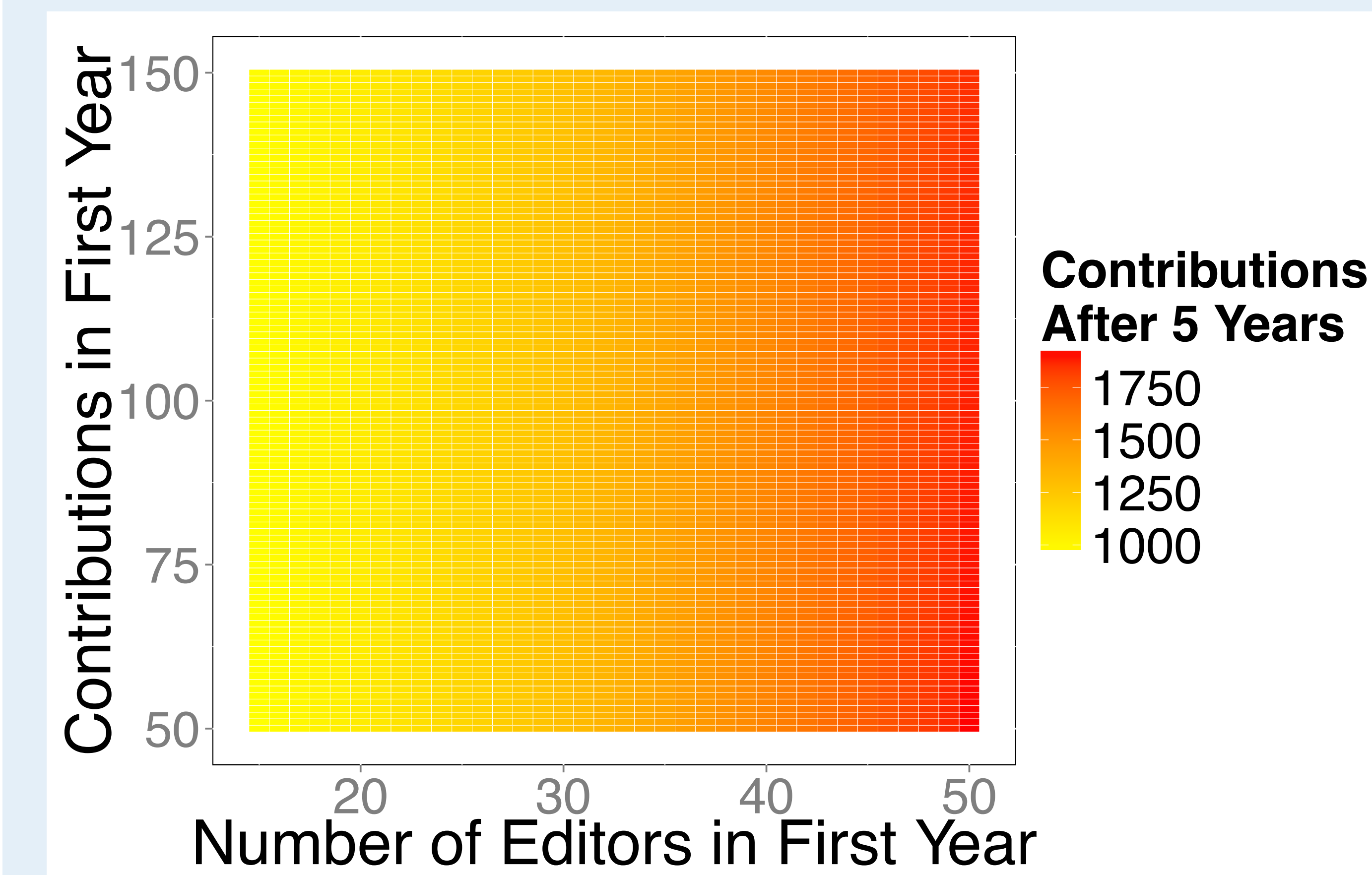
This mismatch in shapes suggests the editors change their participation over time, most likely by increasing contribution.

Summary

Online communities develop critical mass by growing their membership in their early stages more than by growing in content.

Communities will experience greater long-term growth by designing technologies, policies, and incentives to encourage new participants to even make small contributions rather than encouraging more contribution of content from existing

Finding 3- Growth of membership in a project's first year is more influential on 5 year growth than growth of contributions in first year.

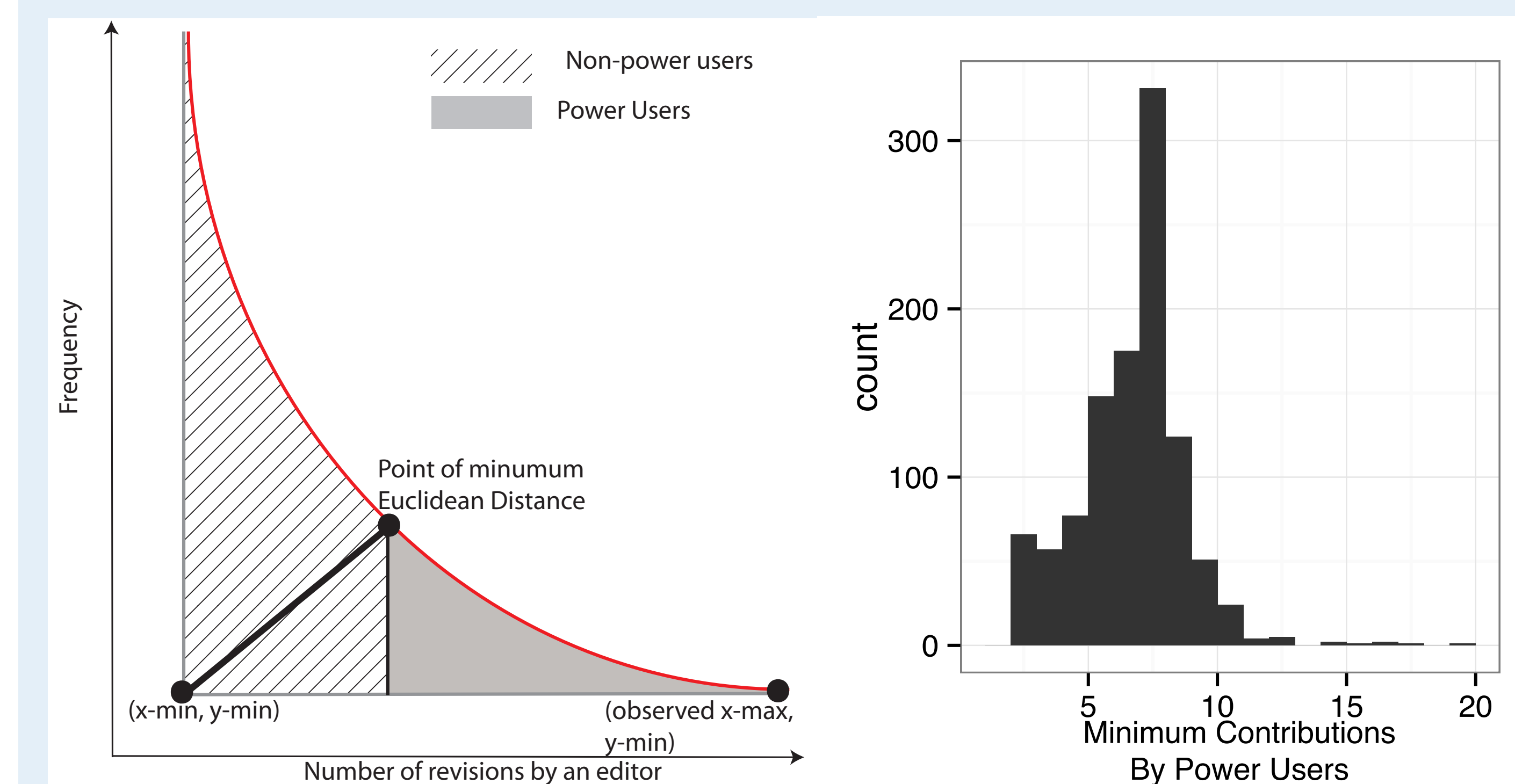


When we control for the number of editors who made the contributions, getting more contributions in the first year makes no difference on how large the project grows.

But, getting more editors leads to more growth even if the larger mass of editors does not make more contributions collectively.

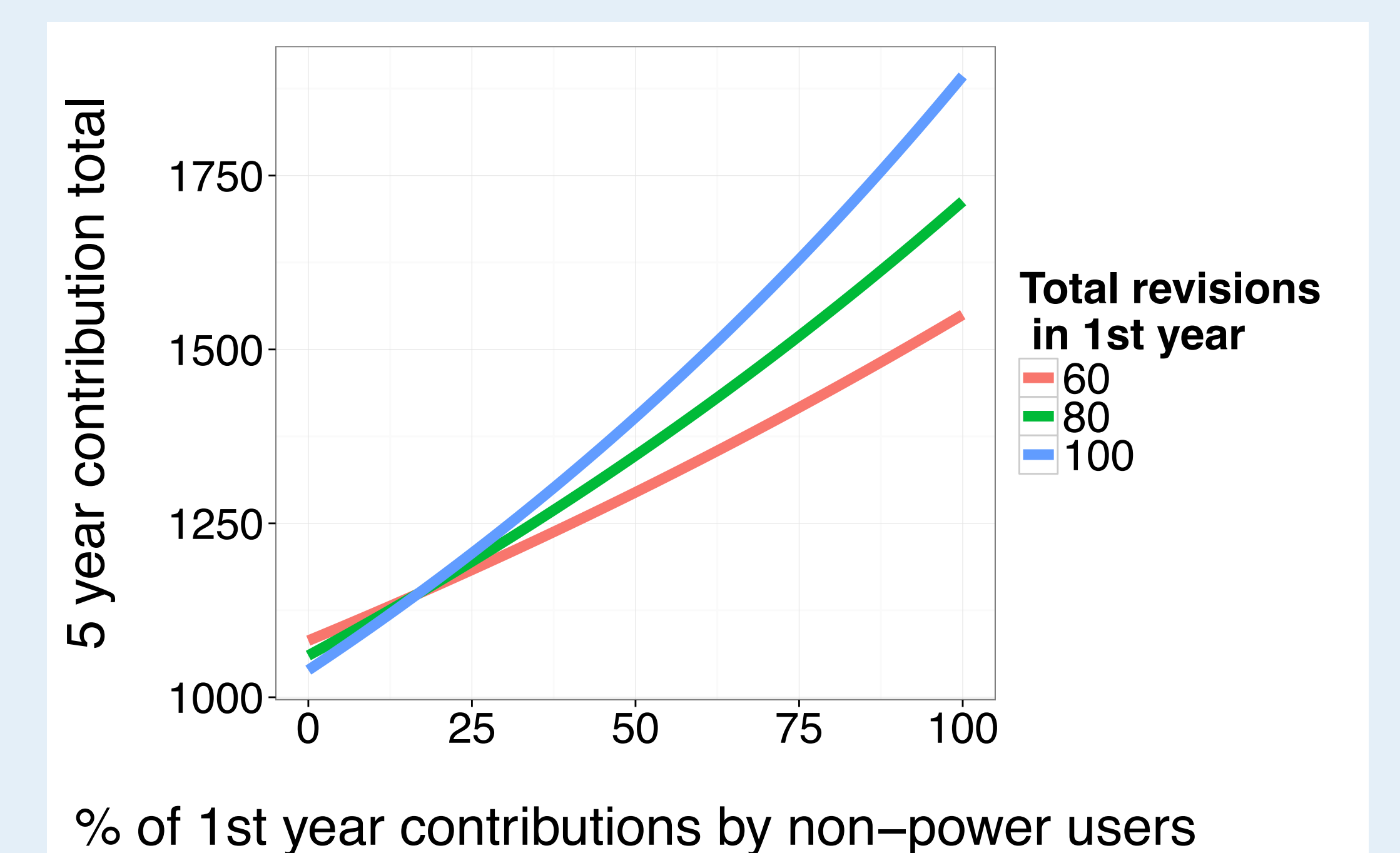
This suggests that the people in a community comprise its critical mass, more so than the content that has been contributed.

Finding 4- Most WikiProjects have fewer than 10 Power users.



Each wing of the distribution of contribution represents a different type of user: Power users who make many contributions and non-power users who make very few contributions.

Finding 5- The more work done by non-power users in the early stages, the larger a project will grow after 5 years.



Communities do not need power users as much as they need a large group of people who are willing to make at least some small contribution. In fact, our model suggests that when power users do too much they have a negative impact on long-term growth.