## Thesis

#### [Thesis] My thesis is that when making global decisions, *all means all*. By expanding opportunities for low-income states, negating promotes equality and justice.

## C1: Who Appropriates

#### [C1] My first contention is that by giving low-income states a chance to appropriate space, negating justly equalizes the playing field.

#### [Meyer 1] Private appropriation ensures that poor states don’t have to ask rich ones permission to access outer space.

Attorney Zachary Meyer 1 notes: Meyer, Zachary J. [Partner, Varnum Attorneys at Law; member of the Business and Corporate Services Practice Team] “Private Commercialization of Space in an International Regime: A Proposal for a Space District.” *Northwestern Journal of International Law & Business*, Vol. 30, Issue 1, Winter 2010. https://tinyurl.com/3yhyd26d CH

NASA has recognized the success of these commercial private space endeavors and joined the party, introducing its Centennial Challenges.43 However, the challenges sponsored by NASA are relatively modest, generally featuring prizes under one million dollars." The major limitation on the size of the prizes is government funding.4 5 Private commercial space enterprise is a more egalitarian model than national space agencies for exploring and developing space too. Private commerce has enabled undeveloped countries to compete with the major space-faring nations rather than depend on them. Also, while national space agencies serve the interests of their own citizenry, private commercial space enterprise can serve their shareholders, regardless of citizenry. Thus, an undeveloped nation may employ an international space enterprise whose shareholders are in part or in whole drawn from the citizenry of the nation. For example, consider Chile, which established the Chilean Space Agency ("CSA") in 2001. As recently as 2007, the CSA began entertaining bids from international space companies regarding an Earth observation satellite project. 46 Normally, the CSA would have to politely request and dutifully pay a space-faring State like the United States or Russia to develop and launch a satellite into orbit. In addition to offending state independence and sovereignty, those payments go into the pockets of the taxpayers of the space-faring State. However, the CSA's use of an international space company to implement its own space activities highlights how a robust commercial regime could bolster participation in space independent of the most developed space-faring States. Chile need not request a space-faring State to implement their own space activities if it can turn to a space company, and the payments to the space company could ostensibly be enjoyed by Chilean citizens that are shareholders in the international space company. Despite the lucrative and beneficial reasons for further developing outer space, and the demonstrated ability of the private sector to do so, several hurdles face private commercial space enterprise-none insurmountable. One potentially high hurdle is the legal structure governing outer space.

He adds: Meyer, Zachary J. [Partner, Varnum Attorneys at Law; member of the Business and Corporate Services Practice Team] “Private Commercialization of Space in an International Regime: A Proposal for a Space District.” *Northwestern Journal of International Law & Business*, Vol. 30, Issue 1, Winter 2010. https://tinyurl.com/3yhyd26d CH

Collectively, the Outer Space Treaty and Moon Treaty promote a legal regime seemingly inhospitable to the commercialization of outer space. However, the two treaties do not prohibit the commercialization of outer space outright. Rather, the two treaties resist private ownership and appropriation, and even that resistance is not absolute. Ultimately, as will soon become apparent, the two treaties do permit the private ownership and appropriation necessary to commercialize space so long as international interests are given their due consideration. As a general observation, the Outer Space Treaty is steeped in the rhetoric of a "common interest of all mankind," especially expressing the concern that one part of "all mankind"-the less-developed States – will be left out of the exploration and use of outer space while the other part of "all mankind" the developed States – will reap all the rewards of exploiting outer space.55 Specifically, it declares that the exploration and use of outer space is to be conducted "for the benefit and in the interests of all countries ... and shall be the province of all mankind." 56 To that end, outer space is to "be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies."s? Given the notion of "free access," it is little surprise that neither outer space nor celestial bodies are "subject to national appropriation."58 However, this does not directly address non-national appropriations, i.e., supra-national activities by the international community or sub-national activities by individuals. As to sub-national activities, the signatory States are required to "bear international responsibility for national activities in outer space" and on celestial bodies, which includes activities conducted by governmental entities, non-governmental entities, or both.59 If the activities are conducted by non-governmental entities, then the appropriate State must authorize and continuously supervise such activities. However, beyond authorization and supervision, there is no indication as to what this "responsibility" means for the extent of permitted sub-national appropriation.

By expanding economic opportunities to more than just a few states, negating promotes equality and justice.

## C2: What Gets Appropriated

#### [C2] My second contention is that by making essential goods and services cheaper, negating promotes equality and justice.

#### [Meyer 2] Private space appropriation is key to the innovation and efficiency that can create advancements in medicines and housing that low-income citizens need.

Zachary Meyer 2 writes: Meyer, Zachary J. [Partner, Varnum Attorneys at Law; member of the Business and Corporate Services Practice Team] “Private Commercialization of Space in an International Regime: A Proposal for a Space District.” *Northwestern Journal of International Law & Business*, Vol. 30, Issue 1, Winter 2010. https://tinyurl.com/3yhyd26d CH

A. Why Explore and Develop: Advancement, Profit, and Benefit There are many reasons to explore and develop space, including that to do so is a challenge sure to bring out both creativity and dedication in its pioneers. Beyond adventure and futurism, other concrete and more immediate reasons exist: scientific and industrial advancement, commercial profit, and social benefit. The vacuum of space, the absence or reduction of gravity, and the extremes in temperature provide an ideal environment for the material processing necessary in many manufacturing industries, including metallurgy, pharmaceuticals, semiconductors, genetic engineering, and molecular electronics.13 The vacuum that exists in space permits enhanced or perfect crystallization of certain substances.14 Therefore, in space, the production of these substances can be accomplished much more efficiently than on Earth – seven hundred times more efficiently and four times more purely." These conditions make possible substantial scientific advances in the areas of medicine 6 and pharmacology, 7 and industrial advances in electronics," glass,' 9 and metallurgy.2 Commercial profit is sure to attach to the above scientific and industrial advances as well. Cheaper drugs, electronic components, and building materials mean higher profits for those companies willing to invest in space. Furthermore, the construction of a space infrastructure would stimulate all levels of the economy. 2' In fact, space exploration and development has already birthed a multi-billion dollar industry.2 2 Last decade's telecommunications boom spurred the initial development of a commercial space infrastructure: the building, launching, and maintaining of communications satellites.23 And now the infrastructure is rapidly evolving to accommodate the newest visitors to space: tourists. 2 4 "More space activity" translates into "more necessary infrastructure" and "more economic stimulus." The potential for future commercial profit from developing space infrastructure will also depend on another imminent space activity-space mining. The minable resources located on the Moon and in near-Earth asteroids are both immense and valuable.25 These extra-terrestrial resources are probably necessary to build a comprehensive space infrastructure: it simply costs too much to blast industrial materials in mass out of Earth's 26 gravity.

By expanding access to basic needs, negating helps the least well-off, promoting equality and justice. Thus, I negate, and now move on to my opponent’s case.