# Framing the startup accelerator through assemblage theory: A case study of an intensive hub in Indonesia

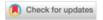
by Jandy Luik

Submission date: 22-Nov-2021 11:41AM (UTC+0700)

**Submission ID: 1709804376** 

File name: Framing\_the\_startup\_accelerator\_through\_assemblage\_theory.pdf (672.41K)

Word count: 9323 Character count: 52103



Research Article

# CONVERGENCE

Framing the startup accelerator

through assemblage theory: A case
study of an intensive hub in Indonesia

Journal of Research
New Media Techno
2021, Vol. 0(0) 1-1
© The Author(s) 2
Article reuse guide
sagepub.com/journal
DOI: 10.1177/1354

Convergence: The International Journal of Research into New Media Technologies 2021, Vol. 0(0) 1–17 © The Author(s) 2021 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/13548565211054905 journals.sagepub.com/home/con

\$SAGE

Jandy Luik®

Department of Communication Science, Petra Christian University, Surabaya, Indonesia

# Jonathan Hook and Jenna Ng

Department of Theatre, Film, Television and Interactive Media, University of York, York, UK

# **Abstract**

This article presents how assemblage theory, as taken from Deleuze and Guattari, can be used to understand the intensive approaches of startup accelerators in supporting startup companies. Through a study of a startup accelerator in Jakarta, Indonesia, we present three snapshots to exemplify manifestations of what we argue as the accelerator's "seed accelerator" form of content and "seed funding" form of expression as well as their reciprocal presupposition to demonstrate the multiplicity of assemblage as the organizational principles of the accelerator. Employing the tenets of formalization and territorialization from assemblage theory to analyze the results, this article shows that the "seed accelerator" form of content is manifested by way of how the accelerator's bodies of its human elements, activities, events, and infrastructure relate and interconnect throughout the accelerator's 12-week program towards its end point, that is, fulfilling the stakes for the Final Demo-Day, while, on the other hand, the "seed funding" form of expression is manifested by way of the usage of terms related to fund-raising, expressions of worry, and the expectations of the hub management and the VC in preparing the startups for the next level of funding. Moreover, we argue that the formalized function of the accelerator assemblage is to intensively seed scalable startups. This assemblage analysis thus offers an interrelational perspective regarding startup accelerators, and demonstrates the value of formalization and territorialization in assemblage theory to understand the programming arrangements in a startup accelerator.

# Keywords

assemblage, formalization and territorialization, intensive seeding, startup accelerators

# Corresponding author:

Jandy Luik, Department of Communication Science, Petra Christian University, Jl. Siwalankerto 121-131, Surabaya 60236, Indonesia.

Email: jandyluik@petra.ac.id

# Introduction

Previous studies on startup accelerators have focused on definitional issues, such as differentiating accelerators from incubators (e.g. Cohen and Hochberg, 2014; Isabelle, 2013), or proposing the accelerator as a new generation of an incubation model with "design elements" and "design themes" (Pauwels et al., 2016).

However, there is still a gap in understanding the organization of different elements in startup accelerators. On filling this gap, we share Croteau's (2006) concerns on the challenges of understanding the production of self-produced media content, such as who owns and controls the production, and in what forms of structure. Having said that, concern with the way media is being produced goes beyond capital or funding issues because factors such as discourses, knowledge, and daily practice play important parts in cultural production (Levine, 2001: 67). In their critique, Havens et al. (2009: 238) emphasize that they "cannot accommodate the conclusion that meaning, textual production, and identity practices are predictable or guaranteed to reflect only the interests of those who control the means of production". In other words, media scholarship to date has concentrated on the politics of participatory media and/or user-generated content, rather than establishing a more relational-oriented framework in understanding the components at play in producing media or, specifically in this case, software.

This article thus seeks to address the above concerns by scrutinizing the interrelations of an accelerator's elements through assemblage theory by Gilles Deleuze and Félix Guattari, specifically via their focus on connections and relations between different things or bodies. As Deleuze states in an interview with Claire Parnet (later published in the book, *Dialogues* (1977, originally in French)): "[An assemblage] is a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them, across ages, sexes and reigns - different natures" (Deleuze and Parnet, 1987: 69 translated edition). The logics of connection in the theory of assemblage thus fit our tasks, which are to understand the interrelational structuring of the startup accelerator; how that structuring of its elements works in organizing a startup accelerator? and what possibilities such an assemblage may open up? Specifically, we seek to go beyond the face value of merely observing the interrelations of its elements, but to examine the underlying principles of organization that guide the way an accelerator operates. In this examination, we thus also present a novel interrelational perspective to "perceive" (Brown, 2020: 280) the creation and development of new media in a specific production context. In the process, we can understand what kinds of organizing principles hold together different bodies in the accelerator, and unravel what drives an accelerator's approach in developing its startup companies.

On that basis, this article investigates the following question: how may the assemblage of a startup accelerator explain the organization of the approach it takes in supporting startup companies? Out of findings from a three month study of a startup accelerator in Jakarta, Indonesia, we draw on assemblage theory by Gilles Deleuze and Félix Guattari (1987) to analyze our results. The article will proceed as follows: the section The Startup Accelerator: a brief introduction will provide, by way of background, a brief introduction to the definition and operation of a startup accelerator; the section Research methods will describe the methodology of research for this study, including an overview of assemblage theory as our analytical framework. In the section Accelerator assemblage: Intensive seeding, we present our analysis of the accelerator's principles of organization through assemblage theory. The section Conclusion concludes.

# The startup accelerator: A brief introduction

By definition, a startup accelerator is a fixed-term program (e.g. over a duration of three months) that provides a selected cohort of startup companies with a set of support mechanisms such as mentoring, direct funding, access to funding, and networking opportunities (Cohen and Hochberg, 2014; Miller and Bound, 2011; Pauwels et al., 2016). A startup accelerator is also a co-located hub where startup teams, hub management, mentors, and investors gather and interact to develop their companies and their product(s) (Luik et al., 2018). Startup accelerators have competitive acceptance rates, which may range from less than 1% (Cohen, 2013) to between 4% and 10% and up to 15% (Miller and Bound, 2011).

In accelerating the production and development of digital applications, a startup accelerator repetitively does three typical steps as a "cycle": (i) select the startup companies (in a cohort or batch) to be invested; (ii) organize activities to be followed in a specific time period (e.g. three months); and (iii) after pitching on the Final Demo-Day (defined as the end point of an acceleration program that takes place as a high-stakes presentation in front of an invitation-only audience such as other startups, investors, partners, and media), organize post-acceleration events with its alumni.

With respect to (i) (the selection step), Pauwels et al. (2016) comment that a startup accelerator usually utilizes a multi-staged selection process that may, for example, commence with an open call or with active scouting before the call, and then followed by a screening process conducted by a selection committee.

With respect to (ii) (activities), Miller and Bound (2011) indicate that the characteristics of an accelerator program's activities include time-limited support comprising of programmed events, intensive mentoring, and culminating in a Final Demo-Day. The approach is oriented around a cohort or batch in small teams rather than around individuals. In a similar vein, Cohen and Hochberg (2014: 4) summarize the accelerator program as "a fixed-term, cohort-based program, including mentorship and educational components, that culminates in a public pitch event or demo-day [similar to a Final Demo-Day]." These two references imply that the process of acceleration generally has a planned approach, often perceived as a "curriculum" that has a set of "goals" in store for the participants.

Finally, with respect to (iii) (post-acceleration), the accelerators emphasize keeping close relations with the startup companies that have graduated from them (Pauwels et al., 2016). For example, TechStars, a seed accelerator founded in 2006 in Colorado, United States, has since accepted over 1600 companies into its programs. They monitor these "alumni" through online surveys and intermittent phone contact, and encourage them to network by joining formal/informal meetings as well as their online platform (Cohen et al., 2019).

In following this "cycle," a startup accelerator presents itself as a temporary arrangement, akin to a program that pops up once or twice a year, held through in-person interactions or through an online platform (Luik et al., 2019), and aimed at delivering set impact on the chosen startup companies. A startup accelerator is thus different from an incubator that typically has an open-ended duration and ad-hoc admission, provides rented space, and is designed for nascent ventures with sectors that need longer time to market (Bone et al., 2017; Clarysse et al., 2015; Cohen and Hochberg, 2014; Isabelle, 2013). As a result of this acceleration process, Miller and Bound (2011) identify six benefits that startup founders can get out of accelerator programs: funding; business and product advice; connections to future investment; validation; a peer support group; and pressure and discipline.

All these principles broadly apply to the startup accelerator under study, which is based in Jakarta, Indonesia, and is the result of a joint program between an international Venture Capitalist ("the VC") and an Asia-based multinational corporation ("the Corporation"), providing mentorship,



funding, and networking access to its chosen startup companies. The VC team selected seven startups out of 186 applicants, representing a 3.76% acceptance rate, to constitute the cohort under study. This chosen cohort then participated in the accelerator's program starting in early 2017 which spanned 12 weeks, culminating with a Final Demo-Day pitch and presentation.

# Research methods

# Field work

We employed an ethnographic toolkit (LeCompte and Schensul, 2010) to study the operations of the accelerator so as to grasp its underlying principles of organization. Over a period of 3 months, the first author took a role as one of the accelerator's staff members and accessed the hub to work alongside its members, as well as observed all the accelerator's operations, activities and events both in and outside its working hours. Approximately 300 h of observation in all was conducted and a thick description of the observations was produced.

Interviews were also conducted with members of the accelerator, such as startup founders; hub management staff; VC investors; mentors; and startup alumni. In all, 20 participants were interviewed. Six of those 20 participants were interviewed more than once. The interviews consisted of both individual and group interviews in formal and informal settings. In formal settings, structured interviews took place in a room or space for that purpose. In informal settings, unstructured interviews took place as discussions at casual encounters such as networking events, and usually in co-working spaces or communal areas (e.g., the lobby of a building or in a car) where topics or questions were offered to the startup founders and co-founders to which they gave their thoughts and related their experiences. The observation notes of related activities, including expressions related to the topic of study, were also discussed with the participants to gain "validation" and to add participants' voices to the findings.

We also studied archival data of the accelerator, such as lists of applicants; startups' pitch decks; Final Demo-Day videos; and alumni contacts. The hub team also gave the first author access to their shared drive, shared calendar of events/meetings and mailing list of the batch under study, and introduced the first author to the partner VC team.

In our report, we will use the following participant codes to maintain anonymity: hub management (HM); startup (SU); startup founders and co-founders (SF); mentors (ME); venture capital team (VC); and startup alumni (SA). We will also assign numbers (e.g., 1, 2, etc.) to differentiate participants within the same code (e.g., SF1, SF2, etc.). All relevant ethics committee approval was obtained prior to conducting the research.

# Assemblage analysis

We then used the theory of assemblage by Deleuze and Guattari (1987) to analyze the findings from our study, framing the data via assemblage into a set of organizational principles to better understand the accelerator's structure, the interrelations between its different elements, and its developmental approach. Specifically, we applied the theory's concepts of *formalization* (in terms of *form of expression* and *form of content*); reciprocal presupposition; formalized function; territorialization (in terms of de-territorialization and re-territorialization); and the assemblage's nature of its space of the in-between. Given the complexity of the theory as well as multiple variations which have morphed in its discourse, we lay out below a brief clarification of the concepts used in our analysis.

An assemblage is first stated by Deleuze and Guattari to have "two sides: it is a collective assemblage of enunciation; it is a machinic assemblage of desire" (Deleuze and Guattari, 1986: 81 translated edition). Subsequently, Deleuze and Guattari re-affirm the formalization of assemblage as a constitution of form of content (via bodies) and form of expression or "enunciation" (via acts, statements or *enoncé*). They (1987: 88) write:

[A]n assemblage comprises two segments, one of content, the other of expression. On the one hand, it is a *machinic assemblage* of bodies, of actions and passions, an intermingling of bodies reacting to one another; on the other hand it is a *collective assemblage of enunciation*, of acts and statements, of incorporeal transformations attributed to bodies. [Emphasis in original]

Specifically, form of content (or the operation of "machinic assemblage of bodies") is reducible not to a thing, but to a complex state of things, bodies, and action. Form of expression (or "collective assemblage of enunciation") is likewise reducible not to words, but to a set of statements, discourses, and ideas arising in the social field (Deleuze and Guattari, 1986, 1987; Deleuze and Pamet, 1987).

Moreover, both forms are in paradox—while they are clatively independent (Deleuze and Guattari, 1986: 4), they may also re-unite. As they (1987) write:

The independence of the form of expression and the form of content is not the basis for a parallelism between them or a representation of one by the other, but on the contrary a parceling of the two, a manner in which expressions are inserted into contents, in which we ceaselessly jump from one register to another... In short, the functional independence of the two forms is only the form of their reciprocal presupposition, and of the continual passage from one to the other. (87)

Hence, forms of expression and content also exist in this state of "continual passage," or what Deleuze and Guattari (1987) call "reciprocal presupposition" (66, 87), namely, a state of bidirectionality or bidirectional relation (A presupposes B and B presupposes A).

Subsequently, Deleuze further clarifies that this mutual presupposition gives rise to a second meaning of form, so that form has two meanings. The first is as the organizational logic of matter (or formed matter). The other is to *distribute function* by abstracting function and matter to their particular virtual traits and connecting them together (or formalized function). Hence, form also gives direction or function for the organization of bodies or elements, and for the arrangement of the signs or utterances in or regarding a specific assemblage. Deleuze illustrates this clarification of form (in terms of *formed matter* and *formalized function*) in his explication of Foucault's reading of the prison:

Form here [of the prison] can have two meanings: it forms or organizes matter; or it forms or finalizes functions and gives them aims. Not only the prison but the hospital, the school, the barracks and the workshop are formed matter. Punishment is a formalized function, as is care, education, training, or enforced work. The fact is that there is a kind of correspondence between them, even though the two forms are irreducible...... (Deleuze, 1988: 33; emphasis added.)

In other words, the two forms of content and expression of the assemblage may come into contact with each other not only as formed matter, but also as formalized function in terms of the assemblage's aim and operational limits.

Yet, these two "segments" (content and expression) only comprise of an assemblage on a "first, horizontal" axis. As Deleuze and Guattari proceed to clarify, on a "vertical axis," "the assemblage has both *territorial* sides, or reterritorialized sides, which stabilize it [the assemblage], and *cutting edges of deterritorialization*, which carry it away" (Deleuze and Guattari, 1987: 88; emphasis in original). Or, per their declaration: "The assemblage is tetravalent: (1) content and expression; (2) territoriality and deterritorialization" (505). Referring specifically to de-territorialization, Massumi (2002) describes its context in the following way: "As aggregate formations, expression-content articulations have a tendency to drift over time. ... Content and expression [re-articulate] themselves, toward a new aggregate result" (xix). He draws on metaphors of gardening to describe this process of renewal:

...[E]stablished forms of content and expression must give of themselves. They shed functions, like so many seeds in search of new soil, or like branches for the grafting. It is of their cobbled-together nature to do so: to disseminate. And it is the inconstant nature of their sheddings to mutate as they disseminate. This mutational dissemination of transplantable functions is an instance of what Deleuze and Guattari call a 'deterritorialization'. (ibid)

Hence, it is clear that, as Deleuze and Guattari (1987) put it, while "every assemblage is basically territorial" (503), "its territoriality (content and expression included) is only a first aspect; the other aspect is constituted by *lines of deterritorialization* that cut across it and carry it away" (504; emphasis in original). Transformational movement via the territorial aspect of assemblage thus runs through its forms of content and expressions.

Finally of note is, how these forms for an assemblage are not merely prescriptions for a mixture or amalgamation of heterogeneous elements. It is clear that an assemblage is not an organic unity. Rather an assemblage is a multiplicity that relies on its arrangement, layout, or construction, thus giving a sense of the processual rather than a static whole or situation. This sense of arrangement, too, is reflected in the gap in meaning between its original French word, "agencement", from which the current English word of usage, "assemblage", was translated. As Nail (2017, 22) explains, the former derives from the verb agencer, meaning "to arrange, to lay out, to piece together": "the noun agencement thus means 'a construction, an arrangement, or a layout." Conversely, the English word "assemblage," derived from the French word assemblage (a-sahn-blazh) rather than agencer, means "the joining or union of two things' or 'a bringing or coming together." There is thus a gap in meaning out of the translation: as he writes, "a layout or arrangement is not the same thing as a unity or a simple coming together." (Nail 2017, 22)

In other words, "assemblages are more like machines, defined solely by their external relations of composition, mixture, and aggregation." (Nail 2017, 23; emphasis added.) Or, as Buchanan (2015) puts it, "in practice, the assemblage is the productive intersection of a form of content (actions, bodies and things) and a form of expression (affects, words, ideas)" (390); elsewhere, he pushes an even more (self-admittedly) extreme conclusion: "I would even go so far as to say that the assemblage does not have any content, it is a purely formal arrangement or ordering that functions as a mechanism of inclusion and exclusion." (463) Or to return to the primary material, we also underscore Deleuze and Guattari's (1987: 23) note that "an assemblage establishes connections between certain multiplicities." Moreover, "in a multiplicity, what counts are not the terms or the elements, but what is 'between' them, the in-between, a set of relations that are inseparable from each other" (Deleuze and Parnet, 1987: viii; emphasis added). Accordingly, an assemblage exists in a dynamic space of the in-between, where "between things does not designate a localisable relation

going from one thing to the other and back again, but a perpendicular direction, a transversal movement" (Deleuze and Guattari, 1987: 25).

We thus use these key concepts of assemblage theory as our approach to understanding the interrelations of elements in the accelerator hub in a way that goes beyond merely reporting what are those relations. Our field work as conducted through ethnographic tools will yield data on which elements exist and how they operate in the startup accelerator. Our assemblage analysis will further explain what is "between" those elements in the accelerator and what are its organizing principles.

# Accelerator assemblage: Intensive seeding

In this section, we categorize our findings of interactions between the accelerator's heterogeneous elements on the terms of Deleuze and Guattari's assemblage theory, namely, formalization (form of content and form expression), formalized function, and territorialization. Specifically, we identify three organizational principles: (i) "seed accelerator" form of content and "seed funding" form of expression (as the accelerator's formalization); (ii) intensively seeding scalable startups (as the formalized function of the accelerator); and (iii) in medias res of the accelerator (as territorialization). The subsections below will examine each in turn.

Through this engagement, we use assemblage theory to dissect the accelerator's mode of organization, thus framing our understanding of the accelerator on previously unexplored terms, and particularly under new light of organizational principles which go beyond capital and operational issues. The benefit of this analytical approach is to discem how the relations between content and expression in the accelerator fit its purpose, such as understanding how the absence or the changing of one of the forms influences the accelerator's interrelational constellation of different elements. In turn, this analysis also advances understanding of the accelerator's operations—for instance, why it has a specific intensive timeline, why its interrelations of elements move towards a specific direction, and why a particular element has a particular role. Finally, this analysis, particularly through territorialization/de-territorialization (*In medias res of the accelerator*), also enables the mapping of events of disjuncture or discontinuities which signal the possibility of what a particular formalization may open up, thus seeing the discontinuities as creative encounters that may lead to different modes of organization.

# "Seed accelerator" form of content and "seed funding" form of expression

On the terms of Deleuze and Guattarian assemblage theory, we read the accelerator as an assemblage of heterogeneous elements (humans; activities; infrastructure; themes; terms; expectation) via (i) the operation of machinic assemblage of bodies that organizes the accelerator's bodies, infrastructure, and activities (such as the startup founders, mentors, investors, hub management, mentorship activities, and networking events); and (ii) the collective assemblage of enunciations that organizes its expressions (such as of funding and expectations of investment). We term the former the "seed accelerator" form of content; and the latter the "seed funding" form of expression.

In turn, we argue that the "seed accelerator" form of content is manifested by way of how the accelerator's bodies of its human elements, activities, events, and infrastructure relate and interconnect throughout the accelerator's 12-week program toward its end point, that is, fulfilling the stakes for the Final Demo-Day, which are the continuity of the accelerator's different elements (namely, that the participant teams to continue achieving investment funding and developing their product and companies; the investors to continue productively and profitably with their investment; and the hub management to continue the operation of the hub). Inherent in this end point is also the

immense pressure faced by all the stakeholders in the participants' preparation of their product pitch for the Final Demo-Day, which requires concise content on the product, its future prospects, the ability of the team to handle all the pressures, and the investment needed to expand the company. From archival data on the previous cohort (namely, media articles; the startups' pitch decks; and their Final Demo-Day videos) and the content of the mentorship classes held throughout the accelerator's program, it is clear that pitching well at the Final Demo-Day was critical for the continuity of the arrangement of all the stakeholders.

The "seed funding" form of expression, then, is manifested by way of the usage of terms related to fund-raising, expressions of worry and the expectations of the hub management, and the VC in preparing the startups for the next level of funding. Following the last point, the "seed funding" form of expression in relation to expectations thus also undergoes variables (or what Deleuze and Guattari term "variables of expression, immanent acts, or incorporeal transformation" (Deleuze and Guattari, 1987: 85), whereby the physical body remains the same but its expression or function changes). In this case, the expressions of securing more funding conveys more than the meaning of its amount and its intrinsic value; it also conveys the prestige and affirmed expectations which change the social status of the startup.

We thus present three snapshots from our field study to illustrate diverse manifestations of the "seed accelerator" form of content and "seed funding" form of expression in the accelerator as described above. Taking Deleuze and Guattari's phrasing, we will also present the "reciprocal presupposition" between form of content and expression to demonstrate the multiplicity of assemblage as the organizational principles of the accelerator.

The *first* snapshot is an observation made during the 8th week of the accelerator's program about a team meeting that took place in the VC's office which discussed how the program and participants have performed so far. Specifically, it shows how the Final Demo-Day pitch is a source of tremendous pressure:

After lunch, one of the accelerator's teams [HM2] went to the VC's office and met with three members of the VC team. They first talked about the accomplishment of yesterday's event (press conference) and the beneficial coverage from the media. The conversation's topic then moved internally to the current content and feedback of the acceleration program and to the progress of each startup.

Above all, what worried them most was the preparedness of the startups because the final demo-day was getting closer; it was less than three weeks away. The discussion ended with follow-up actions of increasing monitoring activities and of maximizing the mini demo-day (the next week—week 9). (Snapshot 1: Observation)

A brief context for this snapshot: This pressure for the Final Demo-Day did not occur only at that specific week; both organizers and participants had recognized the pressure for the Final Demo-Day since the beginning of the program. Rather, Snapshot 1 was more of a reminder of the pressure which constantly appeared throughout the program.

Snapshot 1 thus presents the "seed accelerator" form of content by how the different bodies of the accelerator—that is, the accelerator and VC teams; the VC's office that is separated from the coworking area; and this meeting as recorded in the snapshot—were related and connected by the pressure they were all under due to the criticality of the Final Demo-Day pitch. Of particular note to underscore that connection is how the discussion of the program's participants' performance so far varied from the focus of previous team meetings which had been daily discussions of day-to-day technical operations and future events. Instead of the repetitive interactions of these bodies as in

regular team meetings, the accelerator's bodies in Snapshot 1 interacted under the immense "pressure" for the Final Demo-Day, by which they then broke away from the routine. The teams came to the VC's office with the awareness that they were less than three weeks away from the Final Demo-Day and what emerged from the meeting was a consensus for them to all move forward with action plans, such as to increase monitoring activities and bring in other mentors/investors to give input at the Mini Demo-Day.

Snapshot 1 also indicates the accelerator's "seed funding" form of expression by way of expressed concern about the proximity of the Final Demo-Day's date and the startup participants' preparedness for the event. While no direct statements of funding and investment were given, we argue that these expressions of worry are nevertheless similar manifestations, as the stakes of a successful pitch at the Final Demo-Day ultimately increases the possibilities of the startups' further development and subsequent securing of more funding. Moreover, these expressions of worry also reveal the same expressions of expectation for the accelerator management and VC teams to deliver the startup participants to be ready for next stage of funding.

Mapped to the terms of the accelerator as assemblage, Snapshot 1 serves as a "mark" of the intersection of the forms of content and expression, or the relation of reciprocal presupposition between them, where in this instance the reciprocity of the bodies under immense "pressure" and the "expressions of worry" provides a new model of team meeting in the accelerator. Independently, the situation where the teams interacted in the VC's office would serve as an intermingling of bodies in the "seed accelerator" form of content. Moreover, the sense of urgency due to the expectations of delivering for the Final Demo-Day (as the work of 'seed funding' form of expression) contributed to the expressions expressed in the meeting. However, Snapshot 1 presents the moment where the mutual relation between both formalizations happened. The bodies of the accelerator (the hub management, VC teams etc.) met in the office as related by the pressured situation of the imminent Final Demo-Day, but were framed by their "expression of worry" for opening up a new way toward reaching the accelerator's end point. In other words, we could see that the relations between these two forms (of content and expression) brought about different kinds of interaction in the accelerator.

The *second* snapshot records the dialog and interactions between the founders of a startup team (SF4) and their mentor (ME5) in a one-on-one mentorship session held during week 6. Of note is how the meeting started out as a mentoring session with associated discussions of knowledge and experience transfer, and advice on product usage, fees, and distributions, among other issues. Yet, mid-way through, the meeting *changed course* to become a specific discussion on investment and direct funding, as can be seen in the reproduced excerpt below, with the bolded words indicating funding-related expressions:

- SF4: We are focusing our product on the business associations, so they will ask their members to use our product.
- ME5: That's amazing, they will use it for free or they would have to pay?
- SF4: They will pay subscription fee.

(Some follow-up conversations followed, then SF4 consulted their distribution channel)

- **SF4:** Is it right that we make our distribution channel through the government and associations?
- ME5: Why would you not want that?.....

After SF4 had presented on their startup, the unserved market, the strong connection they had with their network and the planning for the next year, ME5 asked:

ME5: And you raised already? Or you still raising [funds]?

SF4: We already closed the last round.

ME5: How much did you raise?

SF4: 150.

ME5: Thousand dollars?

SF4: Yes, and the next phase is we are trying to get \$500,000.....

ME5: I am excited! If I would have known about your \$150,000, I am not only going to invest by myself, I will invite others too. (Snapshot 2: Observation)

In Snapshot 2, the accelerator's bodies (i.e., the startup founders; the mentors; the co-working and meeting room; the one-on-one mentorship/consultation session and the casual conversation) manifest differently from Snapshot 1, in that they operated through a *change of meeting course* from what was originally a session of mentorship guidance to one of investment assessment. In turn, this shift of bodies from following the relational lines of mentorship to those of investment presents the multiplicity of the "seed accelerator" form in how the accelerator's bodies converge and connect toward the stakes for the Final Demo-Day, namely, the stakes around continuity, product development, continued operations and investment, all of which become manifest through this "turn" to investment.

Like its form of content, Snapshot 2 also demonstrates the accelerator's "seed funding" form of expression as change of expression usage from expressions related to mentoring about business models and distribution channels (in terms of the meeting's questions, expectations and topic) to those related to funding and investment. This change involved utterances, terms, and themes, as well as ME5's statement of invitation at the end of the meeting. Although their statement was not a direct investment offer, it was taken by SF4 as recognition of their progress so far in the acceleration program, thus fulfilling the expectations of the accelerator's management and investors in evidencing their competitiveness for the market and readiness for the next level of funding.

Hence, Snapshot 2 serves as the second demonstration of the accelerator's organizational form of assemblage. Shows the relation of reciprocal presupposition between the accelerator's "seed accelerator" form of content and "seed funding" form of expression by how the change of meeting course is legitimated by the change of expression usage. The inclusion of funding content into a mentorship session in the accelerator is thus an "event" that shows a rupture from the lines of confluence running across a mentorship session. Rather than following the plan of bodies coming together to unite under the "pedagogy" of advice giving, Snapshot 2 demonstrates the breaking from this plan as something that was "anticipated."

The *third* snapshot features a similar manifestation of *change of meeting course* and *change of expression usage* which took place during a conversation in a different one-to-one mentorship session between a startup founder [SF2] and a mentor [ME3], who was also an angel investor. This particular mentorship session was also attended by HM1, HM2, and SF7. The first half hour of the meeting covered presentations and discussions about the startup's business model, current users, revenue, and potential market. Of note, however, is that this mentorship session was more like a point in a series of different interactions between SF2 and ME3, such as informal chats during

networking events and interactions during the class mentorship. Hence, having known the startup beforehand and convinced by their performance in their session, ME3 concluded the mentorship session with an actual funding offer:

ME3: So, when do you start the fundraise?

SF2: Right now.

ME3: So, which kind of people or company would you like to invest?

SF2: I think for me... angel is good...

**ME3:** Do you have angel investor right now?

SF2: No.

**ME3:** So, how much [is] the valuation of the fundraising?

SF2: 20%.

ME3: So, my investment amount is very small. Only 10.000 USD. How about this, do you accept 10K investor?

(Snapshot 3: Observation)

As with Snapshot 2, Snapshot 3 provides a parallel illustration of the relation of reciprocal presupposition between the accelerator's "seed accelerator" form of content and "seed funding" form of expression. Here, the change of meeting course is similarly legitimated by the change of expression usage, transforming from a mentorship session into an investment offer.

Of significance regarding the array of bodies in the series of different interactions between SF2 and ME3 is that the manifestation of *changing course of meeting* would not be abstract enough to explain how the bodies were connected across their different interactions. Rather, we perceive the changing course of meeting as another intermingling of bodies that demonstrates the multiplicity of "seed accelerator" form. In this instance, while the bodies were indeed interacting for a mentorship session (for the Final Demo-Day), the series of interactions beforehand indicated the startup's awareness of the possibility of ensuring their continuity of achieving investment funding and developing their product and companies. For example, in a class mentorship session a day before Snapshot 3 was captured, ME3 said to the participants: "I am interested to know your company at tomorrow's one on one session; if I am interested to invest and you are also interested in me, then we can talk about investment."

In terms of the form of expression, ME3's statement—"do you accept 10K investor?"—was, compared to the expressions in Snapshot 2, not only an actual investment offer expression but also served as an acknowledgement for the potential of SF2 and their team. This statement thus worked as a performative aspect of the "seed funding" form of expression, in which it functioned as, to take Deleuze and Guattari's vocabulary, the continual passage from expression to the intermingling of bodies: the statement was not only about an expression of offer but also about the bodies of status, recognition, and being acknowledged to be viable players by a group of international mentors and investors. Together with "expression of worry" (Snapshot 1) and ME5's "quasi-offer" (Snapshot 2), these expressions thus constitute "multi-faceted" actual examples of "seed funding" as form of expression.

These three snapshots thus demonstrate the interrelational connections of assemblage in the startup accelerator per their respective "seed funding" and "seed accelerator" form of content and expression as their contingent organizing principle that establishes liaisons and relations between its different elements. In turn, the different elements of the accelerator were related externally through the "seed accelerator" form of content and "seed funding" form of expression as a multiplicity. Per our analysis, the reciprocal presupposition relation of both forms could then be seen to reflect new models of interactions.

# Intensively seeding scalable startups

Besides formalization in the context of "seed accelerator"-"seed funding," there is another dimension of formalization (see 3.2) that is related to the distribution of function which points us to the abstraction of the accelerator's function. By abstraction, we refer to the multiplicity of relations between unformalized function and formalized function. We argue that, through the provisions of mentorship, working space, networks, and funding, a startup accelerator is a manifestation of a provision mechanism that we term "provision-ing." By this term, we refer to the provision of beneficial support for the likes of startup companies who are still in their early stages of development but have the potential to become an established company. Thus, we argue that the startup accelerator is one manifestation of provision-ing (as unformalized function), alongside other provision mechanisms such as virtual co-working or collaborative spaces, or the startup incubator (which, as explained earlier, differs from the accelerator in nature and, indeed, provision). In this section, we will analyze the formalization of the accelerator's provision-ing mechanisms to explain its direction or function as its form of assemblage.

This tenet of formalization of the assemblage brings our analysis to the issue of defining the participants of the accelerator. In an interview, we specifically asked one of the VC partner members about the participants. Their reply:

We actually targeted startup[s] that we thought were too early for stand-alone investment from our VC, but that was still really a rock solid. Startups that we were completely confident, but we thought they were too, just a tad bit too, early [for us] to bring to the table [for investment], as far as introducing them to our investment community in Silicon Valley (VC1).

This excerpt indicates a critical aspect of how the management of the accelerator, specifically the VC partner, selected the participants, namely, they maintained a "requirement" of the nascent stage of the startup participants, albeit with market potential and scalability.

We term this characteristic of participants a "requirement" so as to emphasize the operational limit of the startup accelerator, which, in turn, defines the formalized function of this assemblage. The accelerator utilized its intensive approach to produce its model of supporting the startups. Other approaches, say, a startup incubator with a different mission, for example, to develop a business plan (Luik et al., 2019), would simply not share the same intensity. The accelerator model is characterized by its plethora of activities, tasks and events, both formal and informal, over the 12 weeks of the acceleration program (see Figure 1). We also found that many of the accelerator's formal and informal activities are geared toward preparing the startups for the Final Demo-Day, corresponding with the larger aim of their being seeded and ready for their next development stage.

In other words, the combination of an intensive 12-week approach, the various activities on the program, and the Final Demo-Day is a manifestation of the formalized function of an accelerator. This configuration captures the intensity of *seeding*, namely, the process in which the selected

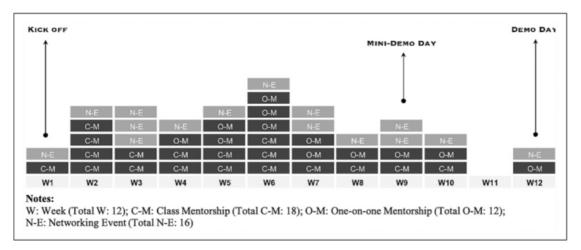


Figure 1. Timeline of the acceleration program.

startup participants are being nurtured to be ready for the next funding stage, also known as the early funding stage. Moreover, this formalized function of *intensive seeding of scalable startups* also gives the accelerator assemblage a certain operational "limit"—it involves startups only at a very specific stage of their development, and with the specific aim and arrangements of intensive programming suitable only for those kinds of participants. There is an emphasis on "the team, the product, and the market" (as quoted from VC2 in an interview with them) of a startup company, which, coupled with our findings from other interview data with other accelerator members, are key criteria in the selection process. These criteria imply that the program involves providing critical support to the startups' business, technology, and operations so as to be ready for operating on a bigger market scale.

Thus, our understanding based on this analysis is that the disparate elements of the assemblage do not just connect under the reciprocity of the form of content ("seed accelerator") and form of expression ("seed funding"). There is also a functional effectuation for the provision-ing of the accelerator's elements within its formalized function as an assemblage. This formalization of provision-ing as the intensive seeding of the scalable startups thus brings about the operational mechanism of the startup accelerator. The formalized function then effectuates the function of this assemblage; not just because the participant selection was held before the program started, but because the formalized function co-existed within the accelerator's life-cycle. In other words, the selected startup participants, hub management, VC team, mentors, and other investors all follow this line of provision mechanism. Nevertheless, per the nature of an assemblage as a multiplicity, these formalizations are also subject to change of de/re-territorialization, as we will see in the next subsection.

# In medias res of the accelerator

Finally, we use the concept of *territorialization* from Deleuze and Guattari's assemblage theory to analyze from where the formalization of the accelerator derives and what possibilities such formalization may open up. In light of the nature of an assemblage as a multiplicity, we argue that these lines of de-territorialization and re-territorialization happen differently in our findings regarding the interactions in the startup accelerator. In one instance (Snapshot 2), there was a changing course of

meeting in a mentorship session. A mentorship with a typical mentorship-consultation session was taken beyond its limits of knowledge transfer as the mentor offered an investment. In another instance (Snapshot 1), a regular monitoring and evaluation meeting became a game-changing meeting by its participants agreeing to intensify preparations for the Mini Demo-Day to ensure the startups' readiness for the Final Demo-Day.

We thus leverage these movements of "seed accelerator" (form of content) and "seed funding" (form of expression) to make two arguments on the (re/de-)territorialization of the accelerator, summed up here on the following terms: first, both forms of content and of expression are deterritorialized from other kinds of assemblage (such as an incubator, and an investment entity); and second, they are then re-territorialized in the current accelerator assemblage. We thus argue that the accelerator assemblage, in a general sense, is in the in-between of bodies, a condition we capture with the term "in medias res" meaning that the accelerator assemblage is both a result of the transformational movement of previous assemblages and will furthermore be the subject of deterritorialization.

We demonstrate the above two arguments via the following illustrations. The first instance is in relation to the accelerator's "seed accelerator" form of content. This form of content manifests in the application of numerous mentorship sessions—30 in all (see Figure 1)—which is a lot compared to the other formal activities. Most, if not all, of them contain excessively basic topics for startup founders already experienced in running their own startups. We read this disjuncture as a deterritorialization of the form of content of class mentorship from another assemblage (i.e., the incubator assemblage, with which class mentorship is more commonly associated). In turn, this form of content re-territorialized in the accelerator assemblage. This disparity in territorialization can be seen in the interview responses we received in relation to these four-week mentorship classes. For example, SF1 comments: "the basic is like a lecture ... [class mentorship] could be one time only to give a general insight. After that, [we should have] the tailored [approach], based on the need of each startup." An alumni member, SA1, comments: "most of us had launched our service products, so some of them [the mentorship sessions] are too basic for us." In this sense, we argue that class mentorship becomes the subject of de-territorialization because there is another practice (i.e., tailored support mentorship) that is relatively more suitable with the organizational principle of "seed accelerator."

Similarly, we argue that the "seed funding" form of expression is a result of de-territorialization from an investment assemblage (e.g., vocabulary of "funding" expression), to be re-territorialized into the accelerator assemblage. We illustrate these movements of territorialization through the "import" of funding-related expressions and the shifting theme of conversation during the mentorship session (Snapshot 2). We also argue that this de-territorialization of "seed funding" expression from another assemblage and its re-territorialization into the accelerator assemblage brings about impact on the expressions used by the mentors and founders. For instance, the usual topics for a mentorship session are how the product can provide a solution to a proposed problem space or how to validate the proposed product. In contrast, the conversations in Snapshot 2 and Snapshot 3 leaned toward securing the next funding stage.

The current startup accelerator may also de-territorialize in how it continues functioning, particularly in view of how the startup accelerator stands as a joint program between the Corporation and the VC. For instance, the Corporation, as a collaborator, might think about utilizing different models rather than a startup accelerator. If we think through the forms (of content and expression) of the accelerator assemblage, we can also come up with alternatives. "Seed accelerator," with the function of intensive seeding, can be de-territorialized into a form of content where an accelerator may support the scaling-up of later stage startup companies as opposed to early stage companies.

"Seed funding" awareness can be de-territorialized into a form of expression that entails Series-A funding (i.e. funding between US\$2-15 million) awareness as opposed to seed funding (i.e. funding between US\$10,000-2 million) awareness. These possibilities all create the conditions in which the startup accelerator, as a (de/re-)territorialized assemblage, always remains "in media res."

# Conclusion

In summary, our analysis has shown the underlying organizational principles of the startup accelerator as an assemblage in terms of its formalized function as to intensively seed scalable startups. The accelerator achieves this seeding by, on the one hand, organizing its array of bodies (humans, activities, infrastructure) through the form of content of "seed accelerator" and, on the other hand, simultaneously structuring its expressions (terms, themes, and expectations) through the form of expression of "seed funding." Eventually, the startup accelerator sits in medias res, which captures the temporary equilibrium of both forms of the accelerator assemblage ("seed accelerator"—"seed funding") as subject to de-territorialization and re-territorialization that can transform the current assemblage.

The main significances of this analysis are two tenets of understanding with which to understand the startup accelerator's interrelational organizational principles through assemblage theory as a framework which not been applied to this topic before. The first tenet is the mapping of the startup accelerator's modes of operation, and movement of form of content and form of expression, as an assemblage of humans, activities, infrastructure, terms, themes, and expectations. This new light of organizational principle thus advances understanding of the accelerator's operations and in particular, opens up that understanding to the possibilities of different agendas and modes of operation. Second, as discussed in our territorialization analysis, this mapping provides an opportunity to think of developing the startup accelerator by, for instance, re-arranging its different elements through the de/re-territorialization of the "seed accelerator" and "seed funding" forms. In turn, it also extends our understanding of the startup accelerator's formalization of "intensively seeding the scalable startups," particularly in thinking through its limitations and advantages, and paving the way for further strategic thinking on startup acceleration.

Our assemblage analysis of this accelerator in Jakarta, while not representative of all accelerators in Indonesia, also shows that startup acceleration in Indonesia tends to be driven by their modes of operation to grow quickly with the support of seed funding from collaborations of VCs and multinational corporations. At the time of the study, the dominant provisional model of support in Indonesia is the incubation model. However, the change of emphasis to an acceleration model for supporting startups has attracted various elements, including from outside of Indonesia, to be actively involved with acceleration processes. Our mapping of form, content, disjunctures, and discontinuities of the accelerator through assemblage thus show their creative encounters of "seed accelerator" and "seed funding," and their implications for the cycles of generating, accelerating, and funding new technologies in emerging economies such as Indonesia. The interactions of the accelerator's elements are not prescribed, but are exposed for variation. Modes of operations are also always subject to change as the consequences of the processes of re/de-territorialization.

To that extent, our model of the accelerator assemblage through this particular case study also illuminates further possible explorations in thinking through startup acceleration in general, including exploring different support/provision mechanisms for startup companies. The merit of understanding the startup accelerator model through assemblage can thus lead to different implementations with different operational action and different sources of funding, such as government agencies. Through further research, such as comparisons with other startup accelerators

which might also be alternatively framed as fixed and functional organizations, we can think through greater diversity of the accelerator's underlying organizing principles. In turn, that understanding can be extended to think of ever more radical and innovative possibilities or approaches for different kinds of support organizations.

# 7 Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

# Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by Directorate General of Higher Education, Indonesia

## ORCID iD

Jandy Luik https://orcid.org/0000-0003-2521-012X

### References

Bone J, Allen O and Halley C (2017) Business Incubator and Accelerators: The National Picture. BEIS Research Paper number 7. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment data/file/608409/business-incubators-accelerators-uk-report.pdf.

Brown B (2020) Re-assemblage (Theory, Practice, Mode). Critical Inquiry. 46(Winter).

Buchanan I (2015) Assemblage theory and its discontents. *Deleuze Studies* 9(3): 382–392. DOI: 10.3366/dls. 2015.0193

Clarysse B, Wright M and Hove JVan (2015) A Look Inside Accelerators: Building Businesses. Nesta.

Cohen S (2013) What do accelerators do? insights from incubators and angels. *Innovations: Technology, Governance, Globalization* 8(3–4): 19–25. DOI: 10.1162/INOV a 00184

Cohen S and Hochberg YV (2014) Accelerating startups: the seed accelerator phenomenon. SSRN Electronic Journal. DOI: 10.2139/ssrn.2418000. (March): 1–16.

Cohen S, Fehder DC, Hochberg YV, et al. (2019) The design of startup accelerators research policy. Research Policy 48(7): 1781–1797. DOI: 10.1016/j.respol.2019.04.003

Croteau D (2006) The growth of self-produced media content and the challenge to media studies. *Critical Studies in Media Communication* 23(4): 340–344. DOI: 10.1080/07393180600933170

Deleuze G (1988) Foucault. Minneapolis: University of Minnesota Press.

Deleuze G and Guattari F (1986) Kafka: Toward a Minor Literature. Minneapolis: University of Minnesota Press.

Deleuze G and Guattari F (1987) A Thousand Plateaus: Capitalism and Schizophrenia. Minneapolis: University of Minnesota Press.

Deleuze G and Parnet C (1987) Dialogues. New York: Columbia University Press.

Havens T, Lotz AD and Tinic S (2009) Critical media industry studies: a research approach. *Communication*, Culture & Critique 2: 234–253. DOI: 10.1111/j.1753-9137.2009.01037.x

Isabelle DA (2013) Key factors affecting a technology entrepreneur's choice of incubator or accelerator. Technology Innovation Management Review 3: 16–22. DOI: 10.22215/timreview/656

LeCompte MD and Schensul JJ (2010) Designing & Conducting Ethnographic Research: An Introduction. In: Ethnographer's Toolkit. 2nd ed. New York: AltaMira Press.

Levine E (2001) Toward a paradigm for media production research: behind the scenes atgeneral hospital. Critical Studies in Media Communication 18(1): 66–82. DOI: 10.1080/15295030109367124

Luik J, Ng J and Hook J (2018) "More than just space". In: Proceedings of the 2018 designing interactive systems conference (DIS 2018), New York, June 2018. ACM, pp. 1269–1281. DOI: 10.1145/3196709. 3196758

Luik J, Ng J and Hook J (2019) Virtual hubs. In: Proceedings of the 2019 CHI conference on human factors in computing systems, New York, 2019. ACM. DOI: 10.1145/3290605.3300471

Massumi B (2002) Like a thought. In: Massumi B (ed), A Shock to Thought: Expression After Deleuze and Guattari. London, New York: Routledge.

Miller P and Bound K (2011) The Startup Factories: The Rise of Accelerator Programmes to Support New Technology Ventures. Discussion paper London. Available at: www.nesta.org.uk.

Nail T (2017) What is an assemblage?. SubStance 46(1): 21-37.

Pauwels C, Clarysse B, Wright M, et al. (2016) Understanding a new generation incubation model: the accelerator. *Technovation* 50-51(51): 13–24. DOI: 10.1016/j.technovation.2015.09.003

# Author biographies

Jandy Luik is an assistant professor in communication at the Department of Communication Science, Petra Christian University, Indonesia. He holds a PhD degree from the University of York, United Kingdom. He is the author of *Media Baru: Sebuah Pengantar* (Prenada Media Group, 2020). He has research interests in media and communication studies, new media and digital culture, media studies and creative industries.

Jonathan Hook is Senior Lecturer (Associate Professor) in Interactive Media at the Department of Theatre, Film Television and Interactive Media, University of York. His research is situated in the field of Human-Computer Interaction (HCI) and explores the design and development of novel interactive technologies for creative settings and practices. His current work focuses on data-driven storytelling and using responsive video-based media to help more people understand the data that increasingly surrounds our society and culture.

Jenna Ng is Senior Lecturer in Film and Interactive Media at the University of York, UK. She is the editor of *Understanding Machinima: essays on filmmaking in virtual worlds* (Bloomsbury, 2013) and the author of *The Post-Screen Through Virtual Reality, Holograms and Projection Mapping: Where Screen Boundaries Lie* (Amsterdam University Press, 2021). She publishes mainly on digital and visual culture, but also has research interests in interactive storytelling, the philosophy of technology, the posthuman, computational culture, and the digital humanities.

# Framing the startup accelerator through assemblage theory: A case study of an intensive hub in Indonesia

ORIGINA	ALITY REPORT					
6 SIMILA	% ARITY INDEX	6% INTERNET SOURCES	5% PUBLICATIONS	3% STUDENT PAPERS		
PRIMAR	RY SOURCES					
1	docplay Internet Sour			1 %		
2	Submitted to Napier University Student Paper					
3	www.jonathanhook.co.uk Internet Source					
4	epdf.tip Internet Sour			1 %		
5	Mazzei, Lisa A., and Alecia Y. Jackson. "Voice in the agentic assemblage", Educational Philosophy and Theory, 2016.  Publication					
6	sfbay-ar Internet Sour	narchists.org		1 %		
7	journals Internet Sour	s.sagepub.com		1 %		