On some confirmations in genomic entrepreneurship

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*'The fundamental unit of selection, and therefore of self-interest,
is not the species, not the group, nor even, strictly, the individual.
It is the gene, the unit of heredity.'*

.... Richard Dawkins

Abstract

    Entrepreneurship is an intricate phenotype. Are entrepreneurs born or made or developed or adopted? What makes an entrepreneur think outside the box and pursuing avant-garde paths to attain entrepreneurial goals? Alvin Toffler mentioned of various 'Waves' viz. Agrarian, Industrial and so on. Economics and Business Management, today, is experiencing inestimable waves viz. Heterodox Wave, Genetic Wave, Molecular Wave, Cellular Wave, Hereditary Wave, ['Infoplosion' or 'Info-Tectonics' Wave, Capability Approach Wave, Institutional Wave, Behavioral / Experimental Wave [Cognitive and Emotional dimensions / Develops and uses experiments typically with human subjects], Evolutionary Wave, Cognitive Wave, Information Wave , Artificial [Synthetic and / or Fabricated] Intelligence Wave and Neuro Wave, to list a few, from a rational perspective. Of central interest in this paper is Managerial Business - Economics Wave. It deals with, with complex, deep-rooted problems, gears and technique to dissect market demand, assess expenses, establish pricing strategies, assess risks, and appreciate competitive dynamics. Is entrepreneurship a genetic trait?

    Of recent origin is emergence of incorporating genetic and biological markers into entrepreneurship. Issue that confronts is; is there a need to sync molecular genetics and entrepreneurial business data to genomic entrepreneurship; under umbrella of 'Genoeconomics'? Does this mean that entrepreneurship is in genes? Do genes determine entrepreneurial success? Can genetics or molecular genetics and entrepreneurial data predict response to multifarious behavioral intercession? Can genetics calculate retort to intricate behavioral interference? Are genetic markers of interest for entrepreneurship research? What challenges occur when analyzing genetically informative facts? How, if at all, should entrepreneurs use and combine molecular genetics and business data? What challenges arise when analyzing genetically informative data? The moot issue is; can entrepreneurship be genetic? Can an entrepreneur be 'genetically-inclined'? One debatable question is; why do entrepreneurial parents have entrepreneurial children? What kinds of opportunities will genetic mapping of entrepreneur offer business entities? Do the big Five Personality Traits [Openness, Conscientiousness, Extraversion, Agree-Ableness and Neuroticism] play a role? Do genetic factors influence tendency to acquire skills and develop attributes relevant to entrepreneurship? Is it crucial to emphasize that a genetic predisposition to entrepreneurship should definitely, unequivocally, not be confounded with genetic determinism? This paper aims to seek a conceptualistic conformation to the above issues

    "Our brains are best suited for certain situations. We prefer to think in causal terms, and we like predictable outcomes. We want to open doors when we know whats behind it. When we dont know, we undervalue potential outcomes".   (Schweitzer; 2021)

Introduction

Biology and neurosciences have entered management arena. This amalgamation coupled up is influx of AI, entrepreneurial responsibility, new world of work framework, and art of making decision with scant information. In such a scenario, sense organs in human body have been experimented to find precise data and information. Algorithmic entrepreneurial decision introduces a critical question; what constitutes substantiation in entrepreneurial decision sciences. This mandates holistic thinking and deep understanding since paradigm for entrepreneurial decision control is emerging. This ceases conservative philosophy, appreciate how to engage and influence cerebral of entrepreneur and help activate openness to new ideas. Aim of this paper is to challenge orthodox philosophy of decision making by entrepreneurs. This is by identifying methods to test causal relations, heterodoxically employ empirical cognitive and neural approach (es) to causal reasoning and ascertain relation between genetic - management data to reveal neural paths in entrepreneurial decision making.

Research in entrepreneurship has largely ignored biological factors [Ahmed Maged Nofal, Nicos Nicolaou & Scott Shane; 2018]. An emerging trend in Social and Behavioral Sciences, Heredity, Hormones, Bodily Processes, and Neuroscience, as 'Pillars of Biology', stand as contributory agents towards role of Biology to Entrepreneurship. Quantitative genetics and molecular genetics are the two approaches that examine the influence of biology to entrepreneurship ['Nature versus Nurture']. There appear to be methodological, theoretical and paradigm changes as regards Biology in Entrepreneurship [Alvarez S., Barney J. B.; 2020]. This reflects the impact of genetic architecture on brain and biology of entrepreneurs [de Holan P. M.; 2014]. Research from the social sciences has variously attributed the success of these individuals to risk-taking, aggression, and sociability [David G. Rand; 2010]. The moot issue is, is there a genetic predisposition to entrepreneurship [Bönte W., Procher V. D., Urbig D.; 2016]?

Prima facie, what makes an entrepreneur think outside the box and pursuing avant-garde paths to attain entrepreneurial goals? Alvin Toffler mentioned of various 'Waves' viz [van der Loos M. J. H. M., Rietveld C. A., Eklund N., Koellinger P. D., Rivadeneira F., Abecasis G. R., Ankra-Badu G. A., Baumeister S. E., Benjamin D. J., Biffar R., Blankenberg S., Boomsma D. I., Cesarini D., Cucca F., de Geus E. J. C., Dedoussis G., D and Satpathy; 2022] Agrarian, Industrial and so on [van der Loos M. J. H. M., Rietveld C. A., Eklund N., Koellinger P. D., Rivadeneira F., Abecasis G. R., Ankra-Badu G. A., Baumeister S. E., Benjamin D. J., Biffar R., Blankenberg S., Boomsma D. I., Cesarini D., Cucca F., de Geus E. J. C., Dedoussis G., D and Satpathy; 2022]. Economics and Business Management, today, is experiencing inestimable waves viz [van der Loos M. J. H. M., Rietveld C. A., Eklund N., Koellinger P. D., Rivadeneira F., Abecasis G. R., Ankra-Badu G. A., Baumeister S. E., Benjamin D. J., Biffar R., Blankenberg S., Boomsma D. I., Cesarini D., Cucca F., de Geus E. J. C., Dedoussis G., D and Satpathy; 2022]. Heterodox Wave, Genetic Wave, Molecular Wave, Cellular Wave, Hereditary Wave, ['Infoplosion' or 'Info-Tectonics' Wave, Capability Approach Wave, Institutional Wave, Behavioral / Experimental Wave [Cognitive and Emotional dimensions / Develops and uses experiments typically with human subjects], Evolutionary Wave, Cognitive Wave, Information Wave , Artificial [Synthetic and / or Fabricated] Intelligence Wave and Neuro Wave, to list a few, from a rational perspective [Lerner D. A., Alkærsig L., Fitza M. A., Lomberg C., Johnson S. K. ;2020].

Questions addressed are How cogent should an entrepreneur be? How do affect and cognition interact in entrepreneurial decision making? How do affect and cognition interact in entrepreneurial decision making? And how moved is the *entrepreneur* during decision moment? Methodology to investigate neural computational is to scan positioning of eye movements. Role of eye movements help in gaining, possessing and tracing visual inducements, during decision formation. Current proof suggests that orientation of eye movement can be a result of intensification in decision formation. Of central interest in this paper is Managerial Business - Economics Wave [Lerner D. A., Alkærsig L., Fitza M. A., Lomberg C., Johnson S. K. ;2020]. It deals with, with complex, deep-rooted problems, gears and technique to dissect market demand, assess expenses, establish pricing strategies, assess risks, and appreciate competitive dynamics. Is entrepreneurship a genetic trait [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. Of recent origin is emergence of incorporating genetic and biological markers into entrepreneurship. Issue that confronts is, is there a need to sync molecular genetics and entrepreneurial business data to genomic entrepreneurship; under umbrella of 'Genoeconomics' [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. Does this mean that entrepreneurship is in genes [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. Do genes determine

entrepreneurial success [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. Can genetics or molecular genetics and entrepreneurial data predict response to multifarious behavioral intercession [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. Can genetics calculate retort to intricate behavioral interference [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. Are genetic markers of interest for entrepreneurship research [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020].

What challenges occur when analyzing genetically informative facts [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. How, if at all, should entrepreneurs use and combine molecular genetics and business data [Rietveld C. A., Slob E. A. W., Thurik A. R.;2020]. What challenges arise when analyzing genetically informative data [Nicolaou N., Lockett A., Ucbasaran D., Rees G.; 2019]. The moot issue is, can entrepreneurship be genetic [Nicolaou N., Lockett A., Ucbasaran D., Rees G.; 2019]. Can an entrepreneur be 'genetically-inclined' [Nicolaou N., Lockett A., Ucbasaran D., Rees G.; 2019]. One debatable question is why entrepreneurial parents have entrepreneurial children [Nicolaou N., Lockett A., Ucbasaran D., Rees G.; 2019]. What kinds of opportunities will genetic mapping of entrepreneur offer business entities [Nicolaou N., Lockett A., Ucbasaran D., Rees G.; 2019]. Do the big Five Personality Traits [Openness, Conscientiousness, Extraversion, Agree-Ableness and Neuroticism] play a role [Nicolaou N., Lockett A., Ucbasaran D., Rees G.;2019]. Do genetic factors influence tendency to acquire skills and develop attributes relevant to entrepreneurship [Nicolaou N., Lockett A., Ucbasaran D., Rees G.; 2019]. Is it crucial to emphasize that a genetic predisposition to entrepreneurship should definitely, unequivocally, not be confounded with genetic determinism? This paper aims to seek a conceptualistic conformation to the above issues.

Eyes are windows to the soul. There is a strategic logic as to why the five sense organs are co - located to each other. The pair of eyes work to observe watch and perceive. The ears to hear and pay attention to the language of communication received. The nose works to smell (Olfaction) and get to know of things. Tongue to taste and skin to feel. The common thread that links all these organs is that they are all located between the chin and the head. An additional link that all these sense organs receive and transmit, send or convey information, to a common recipient i.e. brain. Brain in turn controls thought, memory, emotion, touch, motor skills, vision, breathing, temperature, hunger and every process that regulates our body (Wikipedia; 2024 & Parincu, A. M. T., Capatina, A., Varon, D. J., Bennet, P. F., &Recuerda, A. M.; 2020). Functioning on the basis of a hybrid methodology, brain (and eyes) provides an algorithm for cognitive architecture of decision dynamics.

Biology and neurosciences have entered management arena in a mega way (Boyatzis, R., & McKee, A.; 2011 and Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A.; 2019). This amalgamation coupled up is influx of AI, entrepreneurial responsibility, new world of work framework, and art of making decision with scant information (Boyatzis, R., & McKee, A.; 2011 and Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A.; 2019). In such a scenario, sense organs in human body have been experimented to find precise data and information (Boyatzis, R., & McKee, A.; 2011 and Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A.; 2019). Algorithmic entrepreneurial decision introduces a critical question; what constitutes substantiation in entrepreneurial decision sciences (Boyatzis, R., & McKee, A.; 2011 and Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A.; 2019). This mandates holistic thinking and deep understanding since paradigm for entrepreneurial decision control is emerging (Boyatzis, R., & McKee, A.; 2011 and Ceschi, A., Costantini, A., Sartori, R., Weller, J., & Di Fabio, A.; 2019). This ceases conservative philosophy, appreciate how to engage and influence cerebral of entrepreneur and help activate openness to new ideas. An area that merits analysis is how an entrepreneur decides and how do the sense organs (especially the eyes) play a pivotal role in decision making (Wikipedia; 2021)?

How cogent should an entrepreneur be (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How do affect and cognition interact in entrepreneurial decision making (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How do affect and cognition interact in entrepreneurial decision making (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How do affect and cognition interact in entrepreneurial decision making (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A.

Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How do affect and cognition interact in entrepreneurial decision making (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How can biases affect entrepreneurial decision making (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? Are the brains of optimistic, hopeful, confident, and resilient leaders different (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How strongly did you imagine the thoughts and feelings of this person (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How much compassion did you feel for this person (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))?, and how moved were you during the decision moment (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? The humanization subscale assessed the effects induced by the priming manipulation using the questions: to what extent did you see this person as a human being, rather than a means to an end (Satpathy; 2020, 2023 & Yoon, Carolyn, Richard Gonzalez, Antoine Bechara, Gregory S. Berns, Alain A. Dagher, Laurette Dubé, Scott A. Huettel et al. ; 2012))? How responsible did you feel for this person's well-being? and to what extent did you see this person as a human being with needs, desires, and feelings? How does a brain build a cognitive code?

Entrepreneurs aim at decision satisfying necessary and sufficient conditions of optimization through mathematical analysis (Algumaei, M., Hettiarachchi, I. T., Farghaly, M., & Bhatti, A. ;2023). One way to investigate neural computational is to scan positioning of eye movements linked to optical consideration (Algumaei, M., Hettiarachchi, I. T., Farghaly, M., & Bhatti, A. ;2023). Investigating eye movements is expedient in providing evidence of orientation of decision behaviour replicating computational decision (Algumaei, M., Hettiarachchi, I. T., Farghaly, M., & Bhatti, A. ;2023). Role of eye movements, intentional or reflex, help in gaining, possessing and tracing visual inducements, during decision formation (Algumaei, M., Hettiarachchi, I. T., Farghaly, M., & Bhatti, A. ;2023). Current proof suggests that orientation of eye movement itself may not be an essential constituent. Rather, it can be as a result of intensification in contact to incitement as an influential factor in decision formation. An important question is how entrepreneur makes complex decisions. In such a scenario, pertinent issue is how Entrepreneur is going to decide when engulfed in a situation of seen and unseen forces within environment of Artificial (Fabricated and / or Synthetic) Intelligence (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? Will entrepreneurial decision making be the same as it was in the Classical / Neo - Classical era (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What would be the challenges (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What about the tsunami of information waves (Infoplosion or Info-Tectonics) (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What about the degrees of significant signal-detection problem intrinsic in complex circumstances (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What are our basic cognitive operations (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? How do we use them in judgment, economic entrepreneurial decision, action, reason, choice, persuasion, and expression (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? Do entrepreneurial decision makers know what they need to know (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? How do entrepreneurial decision makers choose (Satpathy; 2022, 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What are the best incentives? When is judgment reliable (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? Can negotiation work edifice (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? How do cognitive conceptual resources depend on social and cultural location (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? How do certain products of cognitive and conceptual systems come to be entrenched as shared knowledge and method (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What makes these biases adaptive and when are they adaptive (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? What are the boundary conditions for these biases to be adaptive (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)? When and which biases can be both adaptive and mal-adaptive at the same time, for instance, leading to positive individual but negative group or societal consequences (Satpathy; 2023 &

Krajbich, I., Oud, B., & Fehr, E.; 2014)? What are the implications (Satpathy; 2023 & Krajbich, I., Oud, B., & Fehr, E.; 2014)?

Aim of this paper is to challenge orthodox philosophy of decision making by entrepreneurs (Serra, D. ;2021). This is by identifying methods to test causal relations, heterodoxically employ empirical cognitive and neural approach (es) to causal reasoning and ascertain relation between genetic - management data to reveal neural paths in entrepreneurial decision making (Serra, D. ;2021). Questions addressed are How cogent should an entrepreneur be Daniel Kahneman, Amos Tversky, ;1972 and Dimov, C., Khader, P. H., Marewski, J. N., &Pachur, T. ;2020). How do affect and cognition interact in entrepreneurial decision-making Daniel Kahneman, Amos Tversky, ;1972 and Dimov, C., Khader, P. H., Marewski, J. N., &Pachur, T. ;2020). How do affect and cognition interact in entrepreneurial decision-making Daniel Kahneman, Amos Tversky, ;1972 and Dimov, C., Khader, P. H., Marewski, J. N., &Pachur, T. ;2020). And how moved is the entrepreneur during decision moment Daniel Kahneman, Amos Tversky, ;1972 and Dimov, C., Khader, P. H., Marewski, J. N., &Pachur, T. ;2020). Methodology to investigate neural computational is to scan positioning of eye movements. Role of eye movements help in gaining, possessing and tracing visual inducements, during decision formation. Current proof suggests that orientation of eye movement can be a result of intensification in decision formation. Purpose is to exhibit empirical mosaics in neuro - trajectory shifts(s) of entrepreneurial decision circuit. Objective is to monitor undercurrents of neurobiological motorists in Entrepreneurial decision making. Effort is to explicate how neural investigations appreciate mental tectonic shifts in decision framework.

Methodology

Effort is to explicate how neural investigations appreciate 'tectonic shifts' in decision framework (Opris, I., Ionescu, S. C., Lebedev, M. A., Boy, F., Lewinski, P., & Ballerini, L.; 2020). This paper adopts a new approach to essence of neuroeconomics; How does entrepreneur craft entrepreneurial decisions (Sanfey, A. G.; 2007 & Lebiere, C., Pirolli, P., Thomson, R., Paik, J., Rutledge-Taylor, M., Staszewski, J., & Anderson, J. R.; 2013). What parts of eye aid decision? What ocular - impressions depict in cycle of entrepreneurial decisions? An eye movement experiment was adopted based on Tobii equipment on on single subject (N=01). The fixations were calibrated as under.

Time to First Fixation %‡4.JPG_2_N	Time to First Fixation %‡4.JPG_2_Mean	Time to First Fixation %‡4.JPG_2_Sum	Time to First Fixation %‡4.JPG_3_N
Time to First Fixation %‡4.JPG_3_Mean	Time to First Fixation %‡4.JPG_3_Sum	Time to First Fixation %‡4.JPG_4_N	Time to First Fixation %‡4.JPG_4_Mean
Time to First Fixation %‡4.JPG_4_Sum	Time to First Fixation %‡5.JPG_5_N	Time to First Fixation %‡5.JPG_5_Mean	Time to First Fixation %‡5.JPG_5_Sum
Time to First Fixation %‡6.JPG_6_N	Time to First Fixation %‡6.JPG_6_Mean	Time to First Fixation %‡6.JPG_6_Sum	Time to First Fixation %‡6.JPG_7_N
Time to First Fixation %‡6.JPG_7_Mean	Time to First Fixation %‡6.JPG_7_Sum	Time to First Fixation %‡7.JPG_10_N	Time to First Fixation %‡7.JPG_10_Mean
Time to First Fixation %‡7.JPG_10_Sum	Time to First Fixation %‡7.JPG_8_N	Time to First Fixation %‡7.JPG_8_Mean	Time to First Fixation %‡7.JPG_8_Sum
Time to First Fixation %‡7.JPG_9_N	Time to First Fixation %‡7.JPG_9_Mean	Time to First Fixation %‡7.JPG_9_Sum	First Fixation Duration %‡4.JPG_1_N
First Fixation Duration %‡4.JPG_1_Mean	First Fixation Duration %‡4.JPG_1_Sum	First Fixation Duration %‡4.JPG_2_N	First Fixation Duration %‡4.JPG_2_Mean
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First Fixation Duration %‡4.JPG_4_N	First Fixation Duration %‡4.JPG_4_Mean	First Fixation Duration %‡4.JPG_4_Sum	First Fixation Duration %‡5.JPG_5_N

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First Fixation Duration %‡7.JPG_10_N	First Fixation Duration %‡7.JPG_10_Mean	First Fixation Duration %‡7.JPG_10_Sum	First Fixation Duration %‡7.JPG_8_N
First Fixation Duration %‡7.JPG_8_Mean	First Fixation Duration %‡7.JPG_8_Sum	First Fixation Duration %‡7.JPG_9_N	First Fixation Duration %‡7.JPG_9_Mean
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Total Fixation Duration %‡4.JPG_4_N	Total Fixation Duration %‡4.JPG_4_Mean	Total Fixation Duration %‡4.JPG_4_Sum	Total Fixation Duration %‡5.JPG_5_N
Total Fixation Duration %‡5.JPG_5_Mean	Total Fixation Duration %‡5.JPG_5_Sum	Total Fixation Duration %‡6.JPG_6_N	Total Fixation Duration %‡6.JPG_6_Mean
Total Fixation Duration %‡6.JPG_6_Sum	Total Fixation Duration %‡6.JPG_7_N	Total Fixation Duration %‡6.JPG_7_Mean	Total Fixation Duration %‡6.JPG_7_Sum
Total Fixation Duration %‡7.JPG_10_N	Total Fixation Duration %‡7.JPG_10_Mean	Total Fixation Duration %‡7.JPG_10_Sum	Total Fixation Duration %‡7.JPG_8_N
Total Fixation Duration %‡7.JPG_8_Mean	Total Fixation Duration %‡7.JPG_8_Sum	Total Fixation Duration %‡7.JPG_9_N	Total Fixation Duration %‡7.JPG_9_Mean
Total Fixation Duration %‡7.JPG_9_Sum	Fixation Count %‡4.JPG_1_N	Fixation Count %‡4.JPG_1_Mean	Fixation Count %‡4.JPG_1_Sum
Fixation Count %‡4.JPG_2_N	Fixation Count %‡4.JPG_2_Mean	Fixation Count %‡4.JPG_2_Sum	Fixation Count %‡4.JPG_3_N

Fixation Count %‡4.JPG_3_Mean	Fixation Count %‡4.JPG_3_Sum	Fixation Count %‡4.JPG_4_N	Fixation Count %‡4.JPG_4_Mean
Fixation Count %‡4.JPG_4_Sum	Fixation Count %‡5.JPG_5_N	Fixation Count %‡5.JPG_5_Mean	Fixation Count %‡5.JPG_5_Sum
Fixation Count %‡6.JPG_6_N	Fixation Count %‡6.JPG_6_Mean	Fixation Count %‡6.JPG_6_Sum	Fixation Count %‡6.JPG_7_N
Fixation Count %‡6.JPG_7_Mean	Fixation Count %‡6.JPG_7_Sum	Fixation Count %‡7.JPG_10_N	Fixation Count %‡7.JPG_10_Mean
Fixation Count %‡7.JPG_10_Sum	Fixation Count %‡7.JPG_8_N	Fixation Count %‡7.JPG_8_Mean	Fixation Count %‡7.JPG_8_Sum
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Total Visit Duration %‡4.JPG_1_Mean	Total Visit Duration %‡4.JPG_1_Sum	Total Visit Duration %‡4.JPG_2_N	Total Visit Duration %‡4.JPG_2_Mean
Total Visit Duration %‡4.JPG_2_Sum	Total Visit Duration %‡4.JPG_3_N	Total Visit Duration %‡4.JPG_3_Mean	Total Visit Duration %‡4.JPG_3_Sum
Total Visit Duration %‡4.JPG_4_N	Total Visit Duration %‡4.JPG_4_Mean	Total Visit Duration %‡4.JPG_4_Sum	Total Visit Duration %‡5.JPG_5_N
Total Visit Duration %‡5.JPG_5_Mean	Total Visit Duration %‡5.JPG_5_Sum	Total Visit Duration %‡6.JPG_6_N	Total Visit Duration %‡6.JPG_6_Mean
Total Visit Duration %‡6.JPG_6_Sum	Total Visit Duration %‡6.JPG_7_N	Total Visit Duration %‡6.JPG_7_Mean	Total Visit Duration %‡6.JPG_7_Sum
Total Visit Duration %‡7.JPG_10_N	Total Visit Duration %‡7.JPG_10_Mean	Total Visit Duration %‡7.JPG_10_Sum	Total Visit Duration %‡7.JPG_8_N
Total Visit Duration %‡7.JPG_8_Mean	Total Visit Duration %‡7.JPG_8_Sum	Total Visit Duration %‡7.JPG_9_N	Total Visit Duration %‡7.JPG_9_Mean
Total Visit Duration %‡7.JPG_9_Sum	Percentage Fixated %‡4.JPG_1_N	Percentage Fixated %‡4.JPG_1_Mean	Percentage Fixated %‡4.JPG_1_Sum
Percentage Fixated %‡4.JPG_2_N	Percentage Fixated %‡4.JPG_2_Mean	Percentage Fixated %‡4.JPG_2_Sum	Percentage Fixated %‡4.JPG_3_N
Percentage Fixated %‡4.JPG_3_Mean	Percentage Fixated %‡4.JPG_3_Sum	Percentage Fixated %‡4.JPG_4_N	Percentage Fixated %‡4.JPG_4_Mean
Percentage Fixated %‡4.JPG_4_Sum	Percentage Fixated %‡5.JPG_5_N	Percentage Fixated %‡5.JPG_5_Mean	Percentage Fixated %‡5.JPG_5_Sum
Percentage Fixated %‡6.JPG_6_N	Percentage Fixated %‡6.JPG_6_Mean	Percentage Fixated %‡6.JPG_6_Sum	Percentage Fixated %‡6.JPG_7_N
Percentage Fixated %‡6.JPG_7_Mean	Percentage Fixated %‡6.JPG_7_Sum	Percentage Fixated %‡7.JPG_10_N	Percentage Fixated %‡7.JPG_10_Mean
Percentage Fixated %‡7.JPG_10_Sum	Percentage Fixated %‡7.JPG_8_N	Percentage Fixated %‡7.JPG_8_Mean	Percentage Fixated %‡7.JPG_8_Sum
Percentage Fixated %‡7.JPG_9_N	Percentage Fixated %‡7.JPG_9_Mean	Percentage Fixated %‡7.JPG_9_Sum	

Fixation Data

Meancpl_PRE	Meancpl_MID	Meancpl_POST	Meancc_PRE	Meancc_MID	Meancc_POST	Meand_PRE	Meand_MID
'meanIS1_PRE'	'meanIS1_MID'	meanIS1_POST	'meanIS2_PRE'	'meanIS2_MID'	meanIS2_POST	'meanIS3_PRE'	'meanIS3_MID'
'meanIS5_PRE'	'meanIS5_MID'	meanIS5_POST	'meanIS6_PRE'	'meanIS6_MID'	meanIS6_POST	'meanIS7_PRE'	'meanIS7_MID'
'meanIS9_PRE'	'meanIS9_MID'	meanIS9_POST	'meanIS10_PRE'	'meanIS10_MID'	meanIS10_POST	'meanIS11_PRE'	'meanIS11_MID'
'meanIS13_PRE'	'meanIS13_MID'	meanIS13_POST	'meanIS14_PRE'	'meanIS14_MID'	meanIS14_POST	'meanIS15_PRE'	'meanIS15_MID'

'meanIS17_PRE'	'meanIS17_MID'	meanIS17_POST	'meanIS18_PRE'	'meanIS18_MID'	meanIS18_POST	'meanOS1_PRE'	'meanOS1_MID'
'meanOS3_PRE'	'meanOS3_MID'	meanOS3_POST	'meanOS4_PRE'	'meanOS4_MID'	meanOS4_POST	'meanOS5_PRE'	'meanOS5_MID'
'meanOS7_PRE'	'meanOS7_MID'	meanOS7_POST	'meanOS8_PRE'	'meanOS8_MID'	meanOS8_POST	'meanOS9_PRE'	'meanOS9_MID'
'meanOS11_PRE'	'meanOS11_MID'	meanOS11_POST	'meanOS12_PRE'	'meanOS12_MID'	meanOS12_POST	'meanOS13_PRE'	'meanOS13_MID
4.76935494594695	3.77815161001057	4.05274262863998	0.036588418359458	0.069118010659086	0.086889531611542	0.434640522875817	0.502614379084967
1.72952214385831	2.89159125119204	0.168950424601593	0.569614070373413	2.07949635641145	0.024843776780323	0.045886990774073	1.29571679194266
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3.50479377039872	2.46886401729825	0.189138036537095	0.299231600579291	2.07880852027191	1.24453607980225	0.034328833027025	0.113848495489966
0.97986460378069	4.40820859882584	2.39470386315116	3.34566229600427	4.97165203039749	0.623542251195416	0.002943553599264	0.0364756842317
0.028820903333812	0.023432790467177	0.026494063345465	0.006864887122972	0.2242953468419	0.011946773800002	0.775848644716696	1.0719457771252
1.06221338954201	1.64302729382723	1.40750609563324	0.748910230618164	1.30144596653534	1.2517946820225	0.465118738221993	1.11953322183625
1.07959913990909	2.03091216108785	1.72343280190014	1.17640835145372	2.02859729918536	0.942226393624024	0.574155541393185	2.13388819681712
1.21768133048939	1.78656726700945	1.60112104575669	0.848186811325569	1.40013049909752	1.47671457844849	0.643303476345023	1.0834918001024
0.221224652515781	1.18952914781573	0.569588418878133	0.517141785540733	1.04218267129682	0.963418403765178	0.662881031511005	1.42576594462872
3.14829495405972	3.12128693667845	4.12157098622588	0.118072000059449	0.068177592645147	0.055718943579187	0.426470588235294	0.474509803921569
3.58062986200838	0.209085436990738	0.133851021823704	1.53391210947659	0.411011003081302	0.25088309555811	0	1.32682344110594
0.009392433098682	0.055577803670476	0.073991718358291	1.04552793937842	0.255431582859528	0.072687408894037	4.73347231589283	1.48265014074094
0.094112320322366	0.30701816776532	6.43172907137261	0.444099886929202	5.00577798494118	0.392834073141924	0.004096197764654	0.639237820016248
5.28738320115841	2.87625359003095	3.68249098861573	6.01363652168022	9.89240555093028	2.43279531166612	0.038209263509808	0.051553576578347
0.141501246609298	0.042193200897835	0.245683872390225	0.206928125292441	0.143802842474506	0.085147143286366	2.04243220102233	1.47935915474636
2.16577156486448	1.57023936537419	1.19639824241147	1.93443211853626	1.68056049407276	1.02204492286689	1.71346133223136	0.752185609381171
1.94543172018504	1.8804912758705	1.35088623479043	1.85272585157904	1.73519882380048	1.08423383556975	2.48099641021547	1.81453620603851
2.05333178265122	1.11188649934362	0.788325211633051	2.14569885214584	1.50758648198643	1.3181993082357	1.26257793913992	1.02339288332876
1.41478544773624	1.0516027884378	0.558940298176634	2.22574343214423	1.30495934927271	1.16027060720516	1.5829314448577	0.773594241979086

A complicated question is entrepreneurs' brainiacs[Beurton, P., Falk, R., and Rheinberger, H.-J. (eds.); 2000]? How does an entrepreneur juggle between forces seen and unseen, felt and not - felt, perceived and not perceived, calculated and not calculated[Beurton, P., Falk, R., and Rheinberger, H.-J. (eds.); 2000]? How does an entrepreneur plan towards succession planning [Beurton, P., Falk, R., and Rheinberger, H.-J. (eds.); 2000]? Is it always that the entrepreneur plans to hand over his business to his children [Beurton, P., Falk, R., and Rheinberger, H.-J. (eds.); 2000]? Are his children well equipped mentally, physically and brain -

wise to take over the entrepreneurial responsibilities? Is there a point in conducting a gene mapping or brain mapping or tests of those sorts? What patterns emerge from a gene mapping or brain mapping and how would it aid in depicting the horoscope of becoming an entrepreneur? A spur of the moment thought is, does luck play a part in becoming an entrepreneur? Interestingly, what it takes to thrive in entrepreneurship that creates, nurtures and manages the business entity? Is it in the blood or genes or in their brains?

Issue that confronts is, is there a need to sync molecular genetics and entrepreneurial business data to genomic entrepreneurship; under umbrella of 'Genoeconomics' [Beurton, P., Falk, R., and Rheinberger, H.-J. (eds.); 2000]? The answer in today's scenario is a 'Yes'. The architecture and functionality of genes do depict linear progression and make conform all the significant cellular processes as to make available 'in sequence', 'the design' of the entrepreneurial mind set[Wilson, R. A., Barker, M. J., & Brigandt, I., ;2007]. Research in philosophy of molecular genetics is generating new-fangled thoughts about fundamental concepts of universal philosophical curiosity together with reductionism, information, and causation[Wilson, R. A., Barker, M. J., & Brigandt, I., ;2007].

Does this mean that entrepreneurship is in genes[Colyvan, M., Linquist, S., Grey, W., Griffiths, P. E., Odenbaugh, J., & Possingham, H. P., 2009]? Do genes determine entrepreneurial success[Colyvan, M., Linquist, S., Grey, W., Griffiths, P. E., Odenbaugh, J., & Possingham, H. P., 2009]? Can genetics or molecular genetics and entrepreneurial data predict response to multifarious behavioral intercession[Colyvan, M., Linquist, S., Grey, W., Griffiths, P. E., Odenbaugh, J., & Possingham, H. P., 2009]? Can genetics calculate retort to intricate behavioral interference[Colyvan, M., Linquist, S., Grey, W., Griffiths, P. E., Odenbaugh, J., & Possingham, H. P., 2009]? Are genetic markers of interest for entrepreneurship research [Colyvan, M., Linquist, S., Grey, W., Griffiths, P. E., Odenbaugh, J., & Possingham, H. P., 2009]? The answer in today's scenario is a 'Yes'. This discussion boils down to 'heritable trait' [Dretske, F.; 1991]? This argument incorporates that organisms inherited qualities that their parents had developed all the way through reaction to various ecological demands [Dretske, F.; 1991]? New technologies open new transom into genetic domains, make new phenomenon reachable, or shed a dissimilar light on known entities and process [Dretske, F.; 1991]?

Fixation Grid
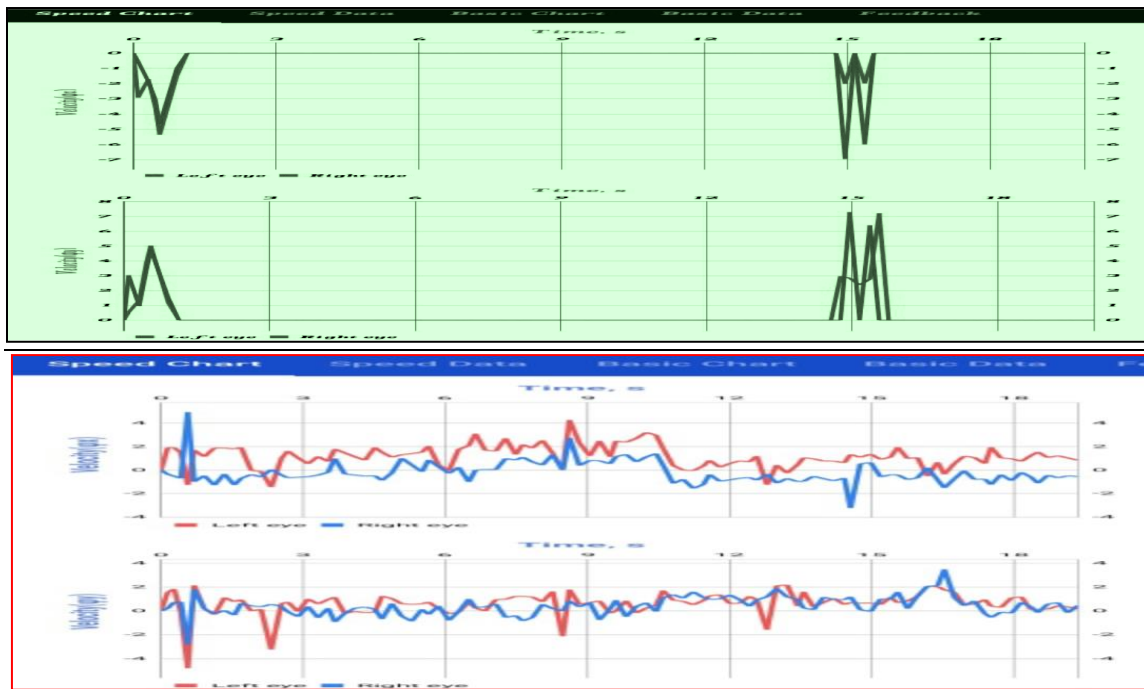
Neural Computation

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xmlns='http://www.w3.org/2000/svg'
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id='track16'
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id='track24'
d='m 47.04,691.9 h 40.944 v 27.624 H 47.04 Z'
id='optoTrack38'

id='track36'
d='m 47.04,691.9 h 40.944 v 27.624 H 47.04 Z'
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id='track44'
d='m 47.04,691.9 h 40.944 v 27.624 H 47.04 Z'
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id='track52'
d='m 88.464,691.9 h 50.76 v 27.624 h -50.76 z'
id='optoTrack62'
id='track60'
d='m 88.464,691.9 h 50.76 v 27.624 h -50.76 z'
id='optoTrack74'
id='track72'
d='m 88.464,691.9 h 50.76 v 27.624 h -50.76 z'
id='optoTrack82'
id='track80'
d='m 139.7,691.9 h 55.224 v 27.624 H 139.7 Z'
id='optoTrack90'
id='track88'
d='m 139.7,691.9 h 55.224 v 27.624 H 139.7 Z'
id='optoTrack102'
id='track100'
d='m 139.7,691.9 h 55.224 v 27.624 H 139.7 Z'
id='optoTrack114'
id='track112'
d='m 139.7,691.9 h 55.224 v 27.624 H 139.7 Z'
id='optoTrack122'
id='track120'
d='m 195.41,691.9 h 41.4 v 27.624 h -41.4 z'
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id='track128'
d='m 195.41,691.9 h 41.4 v 27.624 h -41.4 z'
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id='track140'
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id='track668'
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id='optoTrack690'
id='track688'
d='m 139.7,676.42 h 55.224 v 15 H 139.7 Z'
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id='track696'
d='m 195.41,676.42 h 41.4 v 15 h -41.4 z'
id='optoTrack706'
id='track704'
d='m 195.41,676.42 h 41.4 v 15 h -41.4 z'
```

Analysis
GT Xmm and GT Ymm

	GT Xmm	GT Ymm
Average	53.6454	37.56731
SD	46.07925	27.86904
Minimum	0.228	0.228
Maximum	124.488	58.368
Correlation Coefficient between X and Y	0.059095	

coefficient (rs):	0.059095
N:	2510
T statistic:	2.964672

DF:	2508
p Value	0.003059

Pearson's correlation between GT Xmm and GT Y mm

t-Test: Paired Two Sample for Means		
	GT Xmm	GT Ymm
Mean	53.64540239	37.56731
Variance	2124.144008	776.9929
Observations	2510	2510
Pearson Correlation	0.059095335	
Hypothesized Mean Difference	0	
Df	2509	
t Stat	15.36244575	
P(T<=t) one-tail	2.84034E-51	
t Critical one-tail	1.645461174	
P(T<=t) two-tail	5.68068E-51	
t Critical two-tail	1.960909938	

t-Test between GT Xmm   and GT Y mm

Xmm and Ymm

	GT Xmm	GT Ymm
Average	58.73349986	34.96853
SD	45.01363509	24.92231
Minimum	0.244872	0.002782
Maximum	164.8438632	104.0674
Correlation Coefficient between X and Y	0.110136819	

coefficient (rs):	0.110136819
N:	2510
T statistic:	5.549405033
DF:	2508
p Value	3.16724E-08

Pearson's correlation between Xmm and Y mm

t-Test: Paired Two Sample for Means		
	Xmm	Ymm
Mean	58.7335	34.96853
Variance	2027.035	621.3693
Observations	2510	2510
Pearson Correlation	0.110137	
Hypothesized Mean Difference	0	
df	2509	

t Stat	24.29744
P(T<=t) one-tail	1.4E-117
t Critical one-tail	1.645461
P(T<=t) two-tail	2.7E-117
t Critical two-tail	1.96091

t-Test between Xmm   and Y mm
AOI-X and AOI-Y

	GT Xmm	GT Ymm
Average	2.614343	1.839841
SD	32.59004	21.60089
Minimum	0	0
Maximum	546	256
Correlation Coefficient between X and Y	0.628113	

coefficient (rs):	0.628113
N:	2510
T statistic:	40.42531
DF:	2508
p Value	1.4E-275

Pearson's correlation between Xmm and Y mm

t-Test: Paired Two Sample for Means		
	AOI_X	AOI_Y
Mean	2.614342629	1.839840637
Variance	1062.53435	466.7842232
Observations	2510	2510
Pearson Correlation	0.628112678	
Hypothesized Mean Difference	0	
df	2509	
t Stat	1.528300477	
P(T<=t) one-tail	0.063282002	
t Critical one-tail	1.645461174	
P(T<=t) two-tail	0.126564004	
t Critical two-tail	1.960909938	

t-Test between Xmm   and Y mm
Time REL and AOIX Vs AOIY

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
TIM REL	2510	1.05E+08	41915.79869	5.87E+08
AOI_X	2510	6562	2.614342629	1062.534
AOI_Y	2510	4618	1.839840637	466.7842

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit

Between Groups	2.94E+12	2	1.46981E+12	7512.965	0	2.996925
Within Groups	1.47E+12	7527	195636757.3			
Total	4.41E+12	7529				

Pitch – Gaze ANG – DIFF GZ

	PITCH GT	PITCH DATA	GAZE GT	GAZE ANG	DIFF GZ
Average	4.285543	7.753364	12.7785	23.08164	11.9605
SD	3.179111	5.232118	5.163941	30.90108	29.84877

Issues

What challenges occur when analyzing genetically informative facts [Garson, J.; 2019]? How, if at all, should entrepreneurs use and combine molecular genetics and business data[Garson, J.; 2019]? What challenges arise when analyzing genetically informative data[Garson, J.; 2019]? The moot issue is; can entrepreneurship be genetic [Garson, J.; 2019]? Can an entrepreneur be 'genetically-inclined' [Garson, J.; 2019]? One debatable question is; why do entrepreneurial parents have entrepreneurial children [Garson, J.; 2019]? What kinds of opportunities will genetic mapping of entrepreneur offer business entities? Do the big Five Personality Traits [Openness, Conscientiousness, Extraversion, Agree-Ableness and Neuroticism] play a role? Do genetic factors influence tendency to acquire skills and develop attributes relevant to entrepreneurship? Is it crucial to emphasize that a genetic predisposition to entrepreneurship should definitely, unequivocally, not be confounded with genetic determinism?

Conclusion

Biological species are often examples of a 'natural kind'. This subject is of recent origin. Thoughts differ. Opinions are diverse. Arguments are powerful and it is a never-ending debate [in terms of 'reductionism' vs. 'anti-reductionism']. There is a call for a comparative analysis between; set of ontological, epistemological, and methodological claims [Sokal, R. R. and T. J. Crovello; 1970]. This area of research replicates long-standing disagreement [self-consciously naturalistic, recognizing no profound discontinuity] [Sokal, R. R. and T. J. Crovello; 1970]. It would be safe to conclude that molecular biology does have the kind of theory based around a set of laws or a set of mathematical models that is familiar with management sciences [Sokal, R. R. and T. J. Crovello; 1970].

1. Eye movements steady images on retina.
2. Eye movements are behaviours (pattern).
3. Eye movements depict a pattern – image.
4. Eye movements depict the flow of information (inwards) through the iris, pupil, and retina to the brain.
5. Eye movements can be calibrated in lab conditions to process data input and information output.
6. Question is how much information can be obtained from single fixation?
7. Question is about perceptual span varies as function of difficulty of distractor agent?
8. Eye movements determine what one sees, attends to, and remembers about surroundings.
9. Results suggest scientific and practitioner perspectives and explain how deep significant entrepreneurial decision tectonic shifts(s) influence decision plates.

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