Stampioen, Jan Jansz, De Jonge | Encyclopedia.com

(*b*. Rotterdam, Netherlands. 1610; The Hague, Netherlands [‘quest;], after 1689)

mathematics.

Stampioen’s father (of the same name, whence the cognomen *de Jonge*) made astronomical instruments and was an official surveyor and gauger until his removal from office in 1660 for breach of trust.[1] The son began his own career in 1632 with an edition of Frans van Schooten the Elder’s sine tables, to which Stampioen appended his own fully algebraic treatment of spherical trigonometry.

In 1633, while a mathematics teacher in Rotterdam, Stampioen took part in a public competition, during which he challenged Descartes to resolve a quartic problem involving a triangle with inscribed figures. Descartes derived the correct equation but did not solve it explicitly, and Stampioen rejected the solution as incomplete.[2] The issue was dropped for the moment, but Stampioen had made an enemy of Descartes and would soon feel the effects.

After being named tutor to Prince William (II) in 1638, Stampioen moved to The Hague, where he opened up a printing shop and in 1639 published his *Algebra ofte nieuwe stelregel (Algebra, or the New Method)*, which he had completed in 1634. Despite the general title, the work focused on a new focused method of determining the cube root of expressions of the form $a+\sqrt{b}$ and on the method’s application to the solution of cubic equations. In order to attract attention to his forthcoming book, he assumed in 1638 the alias Johan Baptista of Antwerp and posed two public challenges, the more difficult of which demanded the calculation of a traversing position for a siege gun (as stated, a cubic problem). Then he immediately published a solution under his own name. Soon thereafter, he presented another challenge requiring the determination of the position of the sun from the condition that three poles of given heights placed vertically in the ground each cast shadows reaching to the feet of the other two.[3]

A young surveyor in Utrecht, Jacob van Waessenaer, also published a solution to the first, or Antwerp, challenge, employing the methods of Descartes’s *Geometry*. Stampioen’s rejection of this solution prompted Waessenaer to publish a broad-scale critique of Stampioen’s mathematics, emphasizing the inadequacies of the “new methods.”[4] The exchange of pamphlets lasted two years and soon involved Descartes, who may in fact have been behind Waessenaer from the beginning.[5] With a wager of 600 gulden riding on the outcome, the issue was adjudicated in 1640 by VanSchooten and Jacob Gool, who found in Waessenaer’s favor.[6]

Judging from their correspondence, Constasntijn Huygens agreed with Descartes that Stampioen behaved badly during the dispute. Nonetheless in 1644 Huygens engaged Stampioen for a year as mathematics tutor for his two elder sons. Constantijn. Jr., and Christiaan.[7] Thereafter, Stampioen faded from public notice. A brief reprise of the Waessenaer dispute in 1648. and topographical map published in 1650, and a mention of his having served in 1689 as an expert in a test of a method for determining longitude at sea are the only traces left of Stampioen’s later life.

NOTES

1. The British Museum Catalogue (Ten-year supplement, XXI. col. 148) lists a copy of the *Sententien, by den Hove van Hollant gearresteert, jegens lan lanssz Stampioen en Quirijn Verblas. Gepronuncieert den acht en twintichsten Lulij Anno 1660*. For further details, see Bierens de Haan’s “Bouwstoffen,”cited in the bibliography.

2. For details, see the letter from Descartes to Stampioen in Charles Adam and Paul Tannery, eds., *Oeuvres de Descartes*. I (Paris. 1897), 275–280, and the editorial note in *ibid*. 573–578

3. Newton, in his deposited lectures on algebra, published in *Universal Arithmetick* (London, 1707). states the problem as follows: “When, somewhere on Earth, three staves are erected perpendicular to the horizontal plane at points *A*. *B*., and *C*-that at *A* being 6 feet, that at *B* 18 feet and that at *C* 8 feet, with the line AB 33 feet in length- it happens on a certain day that the tip of stave A’s shadow passes through the points *B* and *C*, that of stave B, however through *A* and *C*, and that of slave *C* through the point *A*. What is the sun’s declination and the polar elevation? in other words, on what day and at what place do these

events occur? (Derek T. Whiteside. ed., *The Mathematical Papers of Isaac Newton*, V [Cambridge, 1972]. 267.) Newton's complete solution of this problem, which involves conic sections, occupies pp.266–278 of this edition.

4. Waessenaer's two major tracks are *Aanmerckingen op den nieuwen Stel-Regel van J. Stampioen, d'Jonge* (Leiden, 1639): and *Den On-wissen Wis-konstenaer I. I. Stampioen ontdeckt Door sijne ongegronde Weddinge ende mis-lucte Soluten van sijne eygene questien. Midtsgarders Eenen generalen Regel om de Cubic-wortelen ende alle andere te trecken uyt twee-namighe ghetulien: dewelcke voor desen: niet bekent en geweest. Noch De Sotution van twee sware Geometrische Question door de Algebra: dientich om alle te leeren ontbinden* (Leiden, 1640).

5. That is the conclusion of Bierens de Haan in his "Bouwstoffen,"cited in the bibliography below. 79ff.

6. stampioen published the judgment, entitling it so as to make himself appear the winner: *Verclaringe over het gevoelen by de E.H. professoren matheseos der Universiteit tot I.eyden uyt-ghesproken.. nopende den Regel fol. 25 van J.Stampioen. Welcke dese Verclaeringhe soodanigh ghetstelt is,dat yeder een daer uty can oordeelen dat denRegel fol. 25 beschreven van Johsan Stampioen de Jonge in sijuen Nieuwen Stel-Regeal, seer licht, generael, ende der waerheydt conform is, om daer door den teerling-wortel te trecken utyt tweenaemighe ghetallen* (The Hague. 1640). Judging by Descartes's a complaints to Henricus Regius (Bierens de Haan,"Bouwstoffen."99), the decision was formulated in a manner vague enough to permit such a contrary reading.

7. See Christiaan Huygens, *Oeuvres complètes* XXII (The Hague, 1950), 399ff., and *ibid*., I (The Hague, 1888), 15, for the list of mathematical works suggested by Stampioen as a syllabus for Huygens' sons.

I Original Works. Stampionen's major works include his *Kort byvoeghset der sphaerische triangnlen* appended to his edition of Frans van Schooten. *Tabula sinuum* (Rotterdam. 1632): and his *Algebra, ofte Nieuwe stel-regel waer door allens ghevonden wordt Inde wisconst, wat vindthaer is*. . . (The Hague, 1639).

BIBLIOGRAPHY

The challenges and disputes of 1633 and 1638– 1640 gave rise to several polemic pamphlets, a complete listing of which can be found in either of Bierens de Haan's articles listed below. The more important items are "Solutie op alle de question openbaer angeslagen ende voorgestelt door Ez. de Decker" (Rotterdam. 1634): "Questie aen de Batavische Ingenieurs. Voorgestelt door Johan Baptista Antwerpiensis. Volghens het spreeckWordt: laet const blijken. Met goet bewys" (1638: for a more easily accessible statement of the problem, see *Oeuvres de Descartes*,C. Adam and P. Tannery, eds., II [Paris, 1898], 601ff.); "Wiskonstige Ontbinding. Over het Antwerpsch Vraegh-stuck toe-ge-eyghent alle Lief-Hebbers der Wis-Const" (The Hague. 1638); and "WisKonstigh Ende Reden-Maetigh Bewijs. Op den Reghel Fol. 25, 26 en 27, Van sijn Boeck ghenaemt den Nieuwen Stel-Regel" (The Hague, 1640).

Bibliographical details of Stampioen's map are given by Bierens de Haan in his "Bouwstoffen" (see below), 114.

II Secondary Literature. The most complete biography is that of Cornelis de Waard in *Nieuw Nederlandsch Biografisch Woordenboek*, II (Leiden, 1912). cols. 1358–1360, See also David Bierens de Haan, "Bouwstoffen voor de geschiedenis der wis- en natuurkundigen weteschappen en de Nederlanden. XXX: Jan Jansz. Stampioen de Jonge en Jacob à Waessenaer," in *Verslagen en mededeelingen der Koninklijke Akademie van Wetenschappen, Afdeeling Natuurkunde*, 3rd ser.. **III** (Amsterdam,1887). 69—119: and "Quelques lettres inédites de René Descartes et de Constantyn Huygens," in *Zeitschrift für Mathmematik and Physik*, 32 (1887), 161–173. Further bibliography can be found in these three articles.

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