

## CORRADO GINI AND ITALIAN STATISTICS UNDER FASCISM \*

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### 1. INTRODUCTION

Many studies in the history of statistics in the last decade have pointed out the importance of quantification in the process of nation-building (DESROSIÈRES, 2000, pp. 50-52). Silvana PATRIARCA (1996) has shown the deep political (national) hue that statistical publications took in the decades of Italian Risorgimento; the actual building of official statistics in liberal Italy embodied this peculiar feature, in the context of the elaboration of an administrative culture permeated by scientific positivism as much as by nationalism (LANARO, 1979).

From a different perspective, quantification was also a way for administration to find out and suggest "objective" (impersonal) solutions to pressing political issues, enhancing its own neutral role. In the same terms, quantification was a "technology of distance" and political impersonality also for the rising social sciences. Yet, this legitimating strategy contradicted administrative and scientific aspirations for a "rationalization" of government by means of "experts in authority" (PORTER, 1995, p. 146). A tension between technocratic ambitions and quantitative, accountant-like neutrality goes through the history of Italian official statistics, flashing on the rare occasions of explicit conflict with the political power.

I would like to argue here that the "nation", as the object of scientific study and administrative government, but also as a more or less legitimate political bias in both scientific and administrative tasks (not only under Fascism), played an important part in deciding between those alternative ideas of official statistics. From this point of view, the peculiar idea of science professed by Gini can be useful to shed light on the foundation of Istat and on its changes after his resignation.

### 2. OFFICIAL STATISTICS AND SOCIAL SCIENCES IN LIBERAL AND FASCIST ITALY

The history of Italian statistics in liberal Italy can be read as the result of the rise, transformation and fall of an administrative project that had its forerunner in

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the Lombardy-Venetia statistical tradition (SOFIA, 1988) and its main representative, Angelo Messedaglia. This was the main Italian supporter of a "science of administration" that saw in statistics (queteletian statistics) a privileged tool of rationalization of State action, after the failing of constitutional aspirations of 1848.

This project, far from being dismissed after the unitary and constitutional solution given with the Risorgimento to the Italian national question, inspired the reorganization of statistical services implemented by Luigi Bodio during the Seventies. Bodio's organizational and arrangement abilities allowed Italian official statistics to improve its performance in a relatively short time. In his time, intellectuals and politicians prominent inside public administration asserted the importance of statistics for the State management of social problems and called for a "scientification" of government as a solution to political instability. The most lucid mind among them was Carlo Francesco Ferraris, who explicitly upturned the terms of the problem as put by Messedaglia thirty years before, assigning to the State administration the function of assuring the continuity of institutional life not against the arbitrary will of an absolute government but against the dangers of social and political unrest.

In this perspective, official statistics, like other technical functions grown inside administration, from health services to the management of cultural assets, could find in Francesco Crispi's "authoritarian reformism" of the Eighties a political support to their claims for a central role in State administration and in the government of society. But Crispi's fall after the failure of Italian colonial expansion efforts in 1896 put a stop to technocratic ambitions and marked a turning point in administrative history. The rise of a formalistic doctrine in public and administrative law with Vittorio Emanuele Orlando's theory of positive jurisprudence implied the dismantling of the special, technical services that had grown during the previous decade.

Statistics was not an exception (FAVERO, 2001). Since the first Nineties, still under Crispi's government, it suffered budget reductions and in fact the 1891 census was even canceled. The compression of expenses and publications was partly compensated by the elevation of Bodio, in his official statistics capacity, to the role of economic adviser of the premier. Yet, in the parliamentary context of liberal Italy, statistics suffered for the sole support of executive power to the authority of statistical experts. After 1896, many surveys had to be suspended and the regularity of publications could not be assured. Only some years after the turn of the century, in a context of reorganization of State functions, did official

statistics recover a bit, without taking back its ancient attributions and competences.

During the quarter-century long crisis of Italian official statistics, alongside with transformations brought about by the industrial revolution in the North-West of the country and by World War First, a main shift occurred in the perception of economic, social and demographic items. Concerns about national and international business and industrial trends met with a widespread debate about unemployment, popular housing and universal medical service. In the meanwhile, the academic achievements of marginalism at the turn of the century interrupted, or at least opened the brackets in the so far dominant historical and empirical approach to economics and policy (CARDINI, 1993).

In population issues, the gradual change in the attitude of administration and politics towards childhood mortality and maternity problems can be interpreted as a symptom of a rising movement from malthusian fear for population excess to depopulation worries (IPSEN, 1999, pp. 2-3). It is noteworthy that this change in administrative worries and public opinion feelings occurred on the basis of mainly qualitative and incomplete data, given the insufficiency of official statistics of the period (DE SANDRE-FAVERO, 2003, p. 27).

The demographic debate in the first decades of nineteenth century was a confrontation of many voices. Most Italian social scientists of the previous generation had seen in mass emigration a painful but favorable solution to Italian over-population; these positions were still influential, but were increasingly contradicted by younger and more nationalistic scholars; Carl IPSEN (1996, pp. 40-49) gives a broad picture of this debate. It is interesting to note that the same arguments were employed to maintain different conclusions: for example, BENINI (1901) identified in urban élites the propagators of favorable birth control practices; MORTARA (1911) used the same remark to support nationalist views about the harmful effects of urbanism.

The nationalistic discourse in social sciences produced arguments and theoretical materials that the fascist government would use to implement its authoritarian, then totalitarian and racist population policy (MAIOCCHI, 1999). More than that: the same discourse was already pervasive before the war in the higher ranks of civil service, preparing the ground for a technocratic assent to Fascism (LANARO, 1979) and for a radical repression of socialistic inclinations in the lower ranks.

The case of economics is somehow peculiar. The political attraction of economists such as Pareto and Pantaleoni towards nationalism is well-known, but it was confirmed in its fascist acceptation when Alberto De' Stefani was appointed

as Finance and Treasury Minister in 1922. His resignation in 1925 put an early end to the liberist phase of fascism and to its idyll with academic economics. The theoretical weakness of the empiric approach of the regime to economic policy issues in the financial emergency of the Twenties and in the economic crisis of the Thirties (BINI, 2000, p. 21) and the institutionalization of a corporative mechanism of political representation of economic interests between 1925 and 1934 opened the way to some attempts to set "corporative economics" against the marginalist tradition (MICHELINI, 1999, also for an analysis of GINI, 1924).

But the fascist regime since the early Thirties abandoned in fact (even if not in propaganda) the corporative model, and most radical proposals were repudiated in the second Conference on Corporative Economics held in Ferrara in 1932, that marked its reduction "to a case of applied economics, which did not modify the content of pure theory" (GUIDI, 2000, pp. 36-37), and the revenge of orthodox economists.

The path was only apparently more linear in the demographic field. Nationalism had since its origins embraced populationist views, and they became part of fascist ideology when Mussolini's movement seized the power in 1922 and sought the alliance with nationalists. Mussolini himself was obsessed by the (de)population problem, to such a degree that he expressed his concerns in the famous 1927 Ascension Day Speech. The imposition on academics of the oath of allegiance to fascism in 1931 made it impossible to dissent from his demographic policy.

Still, there were contrasting interpretation of population issues. Livio Livi proposed an alternative interpretation of demographic trends to Corrado Gini's organicistic and biological reading of the same phenomena. So Gini was certainly not the only Italian demographer, and perhaps even not the most influential (IPSEN, 1998, pp. 584-586). But his academic, scientific and political authority was enhanced in the late Twenties by the conspicuous favor of Mussolini, who choose him to preside over the reorganization of statistical services.

The deposit of Gini's papers, unpublished works and correspondence at ACS offers then an important source for the studies on Italian statistics under Fascism (MONTEVECCHI, 2002). I would like to use this occasion to put on the table some questions that could be answered by this kind of documentation.

### 3. CORRADO GINI

Corrado Gini had built up, since 1912, an organicistic interpretation of society sustained with statistical arguments. In his vision, logical, functional and empirical reasoning hold together with a finalistic interpretation in which the

national collectivity was the beginning and the end of historical evolution. In this perspective, the convergence among the different disciplines comprised under the definition of "human sciences" was the result of an organicistic principle.

That is, his cyclical theory of population (or "integral demography") gave a biological explanation to demographic decline of civilized populations in terms of senescence of the genetic heritage: only its renovation by cross-breeding with "younger" races could give birth to a new population. This theory presented some points of contradiction with empirical evidence; in particular, Gini tried unconvincingly to explain the recent rapid decline of fertility as the final effect of a long-term erosion of the reproductive instinct that finally would permit the rationalization (and denaturalization) of sexual life.

What's more, in spite of Gini's own support to populationist policies, even Mussolini's efforts to contrast depopulation seemed doomed to failure if it was a matter of biological processes, as Livio Livi and Guglielmo Tagliacarne polemically remarked (TREVES, 2001, pp. 180-187). Indeed, GINI (1928; 1930, p. 40) at first opposed to economic subsides to large families as an useless and dangerous push to rationalize reproductive functions, but in 1931 "insistence by the dictator seems to have convinced the professor to abandon some of his skepticism regarding the efficacy of pronatalist incentives" (IPSEN, 1998, p. 590): as Ipsen asks, was this change of mind motivated by conviction or opportunism? Gini preferred to lay stress on the effectiveness of ruralist measures as a mean to modify the trend of population genetic senescence by changing environment conditions, putting the most prolific stocks in the best position to explicit their reproductive strength. This perspective allowed him also to conceive the racial unity of national (Italian) population as molded by the environment in spite of its genetic heterogeneity.

The main consequence that Gini derived from his theory was that, at an international level, young nations ought to expand at older nation's expense: if the peaceful way of emigration was prevented, an expansionist war was the necessary solution to the demographic problem. Gini's cyclical theory of population was then in first place a theory of imperialism. Fascist colonial ambitions found justification in the hunger for land of Italian growing population - but presupposed the explicit exclusion of "lower races".

As some critics stressed, the cyclical theory of population was politically intended to "put a pseudo-scientific foundation under a nationalistic complex" (REUTER, 1931, p. 648, quoted in IPSEN, 1996, pp. 226-227). As for him, Gini fiercely admitted that since 1911 his efforts were aimed to find empirical basis for his nationalistic bio-demographic views, based on the belief, then shared with

Mussolini, that number was power and that the *optimum* of population was in fact the *maximum* (TREVES, 2001, pp. 131-139).

These views inspired also Gini's opposition to the "scientific parliamentarism" of international meetings, excluding similar approaches as non-scientific. For GINI (1940b), the same concept of science involved a nationalistic, political engagement (TREVES, 2001, pp. 231-237), as he stated in a review to MYRDAL (1940). Was this vision compatible with scientific verification and rules? I suggest that Gini's finalistic inductivism implied not only some stubborn indifference to findings contrasting with his theory, but even an interesting critical attitude towards the conventionalist implications of other approaches.

The biological determinism of population phenomena had to be empirically proved, and Gini engaged with the CISP (founded in 1930 in opposition to the neo-malthusian approach of the IUSSP) in extensive field research on this. But his holistic theory seemed quite insensitive to falsification (DE SANDRE, 2002). The link between demography and other social sciences was, in Gini's perspective, a functional one. Statistics supplied abundant data already supporting his mainly logic (not only empirical) demonstration that the progressive concentration of wealth had demographic causes, involving social differential fertility; in this case too, he utilized the results of empirical research rather as an inventory of arguments than as a tool for testing his hypothesis (TREVES, 2001, pp. 172-179).

For Gini, differential fertility was the engine of social mobility: from this point of view, he proposed his own theory of social replacement as the correct interpretation of the social circulation and substitution of élites theorized by Vilfredo Pareto. Demographics was somewhat the real scientific instrument in Gini's organic social science, allowing objective measurement of the functional connections between phenomena. Gini's sociology and economics were determined by demography and biology. Economy was, therefore, driven not by rational, but deterministic functional laws: hence the need for an analysis of economic pathology (GINI, 1924), focused not on equilibrium but on cyclical dynamics of growth and senescence. From a similar distrust in market rationality followed his alarmism about the dangers of procyclical effects of economic forecasting: not information, but regulation was needed to assure the working of an industrial economy.

GINI (1926) discussed explicitly this problem on the occasion of a meeting of the League of Nations Committee of experts on the so-called "business barometers". He observed that the widespread knowledge of economic indexes tended to make shorter the lapse of time between interdependent movements of several economic variables. Only in the cases in which the reaction of the belated

variable on the earlier one was fulfilled as a compensation, the effect would be that of mitigating fluctuations of this one. Should that not be the case, the belated variable would tend with its variations to react on the earlier variable, which determined it, making its variations more marked, this way triggering off, instead of a regulation mechanism, a vicious circle. Gini wished then, for instance, a development of money and credit control as an instrument to mitigate economic fluctuations, but opposed a wider circulation of economic information that would have had destabilizing effects.

Again, the political implications of these views on State intervention were evident; but the methodological consequences of this kind of reasoning were still more interesting.

#### 4. STATISTICAL THEORY

Gini's argument entailed many assonances with the rising epistemological debate on decision theory and probability. Some economists were raising in the same years the problem of anticipations, starting precisely from the interference of economic forecasts with the points of orientation of operators. MORGENSTERN (1928) showed that the use of forecasting for stabilization purposes could endanger the "rationality" of economic process, displacing the connection between means and ends. In his opinion, the case called for a resolution of the *ceteris paribus* condition in economic theory, and revealed the intrinsic unfitness of economic data for inductions using the formal technique of probability analysis, given their lack of homogeneity and of independence. Did Morgenstern know Gini's remarks, and was Gini acquainted with the Vienna circle philosophical debate on logical positivism, which influenced Morgenstern's approach to economic theory? Gini's writings on economics of the Twenties have only few statistical references, and no economic ones. Perhaps his correspondence would say more.

This kind of debate influenced certainly, via L.J. Savage and John von Neumann (INGRAO-ISRAEL, 1987, p. 297), DE FINETTI's (1931; 1937) radical criticism against objective probability on bayesian basis, and perhaps his attempts at proving the aberrant consequences of the application of pure market logic in economic theory. De Finetti worked under Gini's direction in the Istat mathematical and cartographic department from 1927 to 1931, and they published together (DE FINETTI-GINI, 1931) some calculations on the future development of Italian population (IPSEN, 2002).

What's more, they both expressed strong corporatist positions: De Finetti supported Ugo Spirito's proposals for a corporatist reform of property right, and

GINI (1925b) published a minority report on the resolutions of the constitutional commission asking for corporatist representatives not being mixed with elective ones. GINI's (1927) theory of State was explicitly intended to find the way to impose "national" interests on individual and partial ones, replacing the "arithmetic equality" between individuals with a "geometric equality" to assure a proportionality between the political weight of opinions and their importance in the State perspective (PRÉVOST, 2001, p. 115). The supremacy of the "nation" was in fact the main link connecting power and science in Gini's idea of the Fascist State.

A radical disbelief in individual rationality, and in the effectiveness of market self-regulation, seemed closely connected with the refutation of any optimistic assumption of a normal (probabilistic) distribution of social and economic data, good only for equilibrium conditions hardly proven true in a pathological reality.

Gini realized after the First World War that nothing assured that in a group of men, who were average with reference to one characteristic, the intensity of any other characteristic had the respective average of the group as probable value (what GINI instead did assert in 1914, p. 10). This considerations invalidated every estimate of probable error, and supported his rejection of sampling procedures. Gini got awareness of this problem since the 1926 (GALVANI-GINI, 1929) tentative "purposive selection" of the 1921 census bulletins, pointing out inconsistencies in the proposals for a representative sampling put forward by JENSEN (1926a; 1926b), MARCH (1926) and BOWLEY (1926) at the sixteenth session of the International Statistical Institute held in Rome in 1925 (DESROSIÈRES, 1993, pp. 282-284). Some years later, in the 1939 (1940a) and 1943 (1945; now in GINI 2001) lectures at the Italian Statistical society meetings, Gini expressed a more detailed bayesian refutation of the use of statistical inference to assess a confidence interval suggested by FISHER (1930) and NEYMAN (1934). In the 1943 lecture, he quoted excerpts from his exchange of letters with Ronald Fisher testifying a long discussion that could be interesting to read thoroughly.

His reflections on sampling resulted in a neat preference for exhaustiveness in survey procedures, and in the request of statistical centralization in order to produce reliable data for policy-making. It might be possible, more maliciously, to interpret Gini's criticism towards sampling techniques as a tool to expand the province of Istat, and his own power. But it would be simplistic, since his confidence in the role of official statistics was based on the belief that only a scientifically-based policy and administration could assure the lasting vitality and prosperity of the nation.

In this perspective can be interpreted GINI's (1942) appraisal of the public opinion poll techniques in use in the United States, as a tool of which could be made a more correct use in authoritarian than in democratic systems (PRÉVOST, 2001, p. 122; TREVES, 2001, p. 198): here, the poll would be an instrument for scientific investigation of some interesting and fleeting social aspects, and not a dangerous element of interference in the process of political decision-making, as it was there (on the late reception of poll surveys in Italy see RINAURO, 2002). As DESROSIÈRES (2000, p. 40) argues, the need for exhaustive surveys and the rejection of the approximation implied in sampling methods actually found their main justification in the public nature of national official statistics; the strong emphasis put by Gini and his pupils (FORTUNATI, 1937) on the key political tasks assigned to statistics in a corporatist system enhanced the mistrust in representative methods of survey.

Gini seemed to repeat somewhat the traditional Italian statisticians' "administrative" opposition, at international level, against the first experiments of representative surveys, inserting it into his organicist vision implying the supremacy of collectivity on individual. When Bodio was the secretary of the International Statistical Institute, he first did actively contrast Kiaer's 1905 proposals for forward research on this matter (DESROSIÈRES, 1993, pp. 276-282). Also from this point of view, Gini was evidently bound to an administrative national tradition that went back to the "science of administration" project I've mentioned above; Carlo Francesco Ferraris was an important (and under-evaluated) theoretical presence in Gini's education, as documented in the obituary notice he wrote (GINI, 1925a) but also by the revealing fact that Ferraris's personal archives are stored inside Gini's papers deposited at ACS.

Considering these archival and "genealogical" suggestions, one could ask if Gini was just an extreme representative of an "administrative" project which finally found in Fascism the means to build a scientific administration. In other words, did the technocratic ambitions of Italian statistics finally come to fruition in Fascism, giving birth to institutions lasting much longer than their political supporters? And does the institutional history of Istat support this interpretation?

##### 5. GINI AND THE ISTAT

The foundation of the Istat (July 9 1926 law n. 1162) followed the pre-war model of State-agencies with temporary employees, that was widely used by Mussolini to isolate key functions from a State machinery that De Stefani's administrative reform was bringing back in line: Istat was put under the *Duce's* orders and supposed to fulfill typical State-functions. The reorganization of the

statistical service fell on the so-called totalitarian turn. In the space of two years, Mussolini changed sharply the institutional framework, but also the course of the monetary, economic and demographic (as well as cultural) policy (LANARO, 1979, pp. 219-285). In his outlook, the control on statistics was strategic.

In 1926 Gini was appointed personally by Mussolini to the preside the CSS, with authority for the organization of the newly-founded Institute. Gini's political role of Mussolini's "adviser" on demographic issues protected somewhat Istat from straight propaganda exploitation, assuring its political loyalty and allowing it to put back into perspective distortions resulting from political enthusiasm for Mussolini's "demographic battle", in order to supply the government with reliable data (D'AUTILIA-MELIS, 2000, pp. 66-67). The importance assigned to population matters was evident from the activity of the research department, put under Livio Livi's direction until his wrangle with Gini in 1928.

The reorganization of official statistics was started along the lines of a "coordination" strategy, keeping scattered statistical services within state administration but imposing on their actions the scientific criteria set by the CSS. Gini went farther, fighting against any periodical publication competing with Istat official ones: on May 20 1928 Giorgio Mortara wrote to Alberto De' Stefani, who favorably reviewed his *Prospettive economiche*, he was afraid that their colleague Gini would provoke an *ukase* for the liquidation of him, or at least of his *Prospettive* (MARCOALDI, 1986, p. 193).

This approach met with the strong resistance of the branches of administration which had developed statistical services for their own use. Central and local bodies not following CSS (and Istat) official instructions produced unreliable data that undermined the function Gini assigned to official statistics as intended in the first place to forecast population flows and trends.

Another problem was the strong opposition met by Istat autonomous staff policy in the accounting department of the Ministry of Finance, which had the last word on administrative steps as the central supervisory body. The reformation of Istat (May 29 1929 law n. 1285) canceled the need for the agreement of the Ministry of Finance on internal regulations. The 1929 law detailed also Istat functions and provinces, sanctioning its authority on statistical matters all over State administration, and marked other important changes.

Presidential powers were increased at the expenses of the CSS authority, but also the powers of the general director were enhanced; in this position, after Alberto Mancini's and Santino Verratti's brief terms of office, in 1929 Alberto Molinari was chosen. At the same time, Istat was also assigned the official task to designate national representative in international scientific meetings on statistical

subjects: Gini's scientific and academic authority was thus enhanced by the law. What's more, the law made an explicit decision for centralization, calling for a gradual passage of all statistical services under Istat's authority, yet without providing any administrative tool to put into effect this intention. In fact, it assigned the task to Gini's authoritarianism (that was no problem) and to his diplomatic ability in establishing collaborative relationships with other administrations. But close attention to such arrangements was not among Gini's strengths, whereas it had been one of Bodio's in a quite similar situation fifty years before.

The shift in Gini's strategy from coordination to centralization (PRÉVOST, 1997, p. 441) had no real success, but put in evidence the resistance of autonomous powers grown within the State machinery in the lack of a common language to connect different administrative cultures. The employees of the many administrative statistical services were able to produce meaningful quantitative information from official records, thanks to the direct knowledge of bureaucratic mechanisms that were unintelligible for Istat statisticians (D'AUTILIA, 1999, pp. 221-224).

From a long-term, different perspective, the way out from this situation had been found by Gini in improving the specialization and the educational standard of statistical staff in every branch of administration. In 1910 he had founded the first statistical laboratory inside the University of Cagliari, and continued the active promotion of statistical studies establishing a statistical institute in the University of Padua in 1920, the School of statistics in the University of Rome in 1927, up to the first Faculty of statistics, still in Rome, in 1936. In 1930 a statistical qualification for the hiring of all statistical personnel was instituted (March 24, 1930, decree n. 436).

Istat expanded in 1930 and 1931 in order to fulfill the task of agriculture and population census; the Institute also took part in the Rome Population Congress organized by Gini himself (IPSEN, 1996, pp. 204-206). But the economic and financial crisis persuaded the Ministry of Finance in the same year to reduce by a third the budget of the Institute, a step that Gini opposed in vain. In this predicament, the problem of Istat position before the Ministries became crucial: to deal with them, Gini had to appeal more and more often to the political authority of the Head of the Government, assigning in some way to Mussolini the role of a "minister of Statistics". Thus, he systematically went over the head of the office of the Prime Minister, from whose perspective Istat was just a state agency supervised by the Prime Minister, far from ministerial standing. Hence a trial of strength with the representative of the Prime Minister Office inside the

CSS, Guido Beer, that lasted all through 1931 and perhaps undermined the relationship of trust between Gini and Mussolini (LETI, 1996, pp. 150-151; D'AUTILIA-MELIS, 2000, pp. 82-85). Was that the cause of Gini resignation in December?

There was probably more. The first Thirties marked a new, more discreet, course correction in Mussolini policy, revealed in the unofficial censure of the corporatist economic measures proposed by Ugo Spirito, Rodolfo Benini and De Finetti at the Ferrara conference (GUIDI, 2000, p. 39). The regime consolidation required more obedience than enthusiasm.

Sandrine BERTAUX (1999, pp. 589-590) suggests also that the DE FINETTI-GINI (1931) projection of Italian population proved the propagandistic target of Mussolini's population policy (60 millions people in 1960) unattainable; for fascist propaganda aims Gini's alarmist and "militant" attitude was perhaps a problem. From this perspective, the shift in Istat attitude towards population problems during the Thirties could be interpreted as a result of a sort of "normalization" of its political role, involving a reduction of the standing and authority of statistics inside State administration.

In the Italian case, the failure of fascist demographic policy (GLASS, 1940; TREVES, 1976) resulted in the 1930s in a "statistical silence" (discarding inquiries on its effectiveness) rather than in an implementation of more effective, totalitarian measures. Only in the second half of the decade, the comparison with Nazi successful population policy (WEINDLING, 1988) convinced Mussolini to renovate the "demographic battle" with more radical and "qualitative" actions. In population issues, the technocratic influence of Istat was then restrained at advantage of other, less autonomous branches of administration.

## 6. ISTAT AFTER GINI

Since 1930, Molinari had instituted new internal rules, initiating a taylorist reorganization of procedures and forms and increasing mechanization in the extraction of data. After Gini resignation, Mussolini appointed as president of Istat Franco Savorgnan, who mostly left organizational tasks to the general director and was more compliant in his relationships with other administrations, arresting in fact the centralization process. In this context, only technical and bureaucratic choices were left possible: it was up to Molinari to drive the growth and change of the Institute.

In the Thirties, Istat activity focused more and more on the censuses (a 1931 demographic and agricultural census, a 1936 "snapshot" demographic one, a 1937-1939 industrial one), implying an increase of the number of temporary

employees, with the consequence of a growing instability of the staff. In 1933 Molinari overturned the traditional Istat strategy, introducing an internal roll of the staff, laying the foundations for a bureaucratic rationalization (and consolidation) of the Institute at the time when the budgetary reductions imposed by the Ministry of Finance were restricting the margin for maneuver.

In 1935, the Ethiopian War and the implementation of autarkic policy imposed further restrictions on the activity and the publications of Istat. It was, together with the new census, the occasion for a restructuring of the internal departments of the Institute: in 1936 was established a permanent Census Office and an autonomous staff department; the General Direction was reinforced and the research department was merged with economic statistics under Molinari's own direction. This step was a sign of a shift in official statistics attention to economic issues, in the context of the implementation of an autarkic economy.

The growing emphasis and engagement in the construction of standard economic indices of prices, wages, and so on, in those precise years, was the general solution (PORTER, 1995, p. 81; STARR, 1987) adopted to reconcile the technical specialization of statistical studies, assuring the autonomy of the statistical service, with its public and administrative accountability, that had become essential after the giving up of Gini's technocratic ambitions. Still, in indices publication different aims overlapped: in the case of wages, for instance, propaganda requirements converged with the actual use of the indices to fix wage policy administrative measures, putting Istat in an awkward position in front of scientific opinion (for the political and historical debate on official wage indices see FAVERO-TRIVELLATO, 2000, pp. 262-263).

The need for economic data in order to regulate prices and wages and to arrange autarkic economic programming drove, in fact, Istat financial recovery in 1937. In the same year the industrial census by product sectors was started; as Molinari stated, he himself since 1933 entrusted preliminary research on the matter to Benedetto Barberi (D'AUTILIA-MELIS, 2000, pp. 94-95), a young statistician with brilliant prospects (in 1945 indeed Barberi succeeded Molinari). As economic statistics became the privileged object of interest for Istat, in 1937 demographic policy was separated into a Central Demographic Office, with research functions inside the Ministry of the Interior: Mussolini preferred to manage directly the re-launch of fascist population policy. In 1938, after the introduction of racial legislation, the office was transformed in a directorate for demography and race (Demorazza).

In 1938 staff regulations inside Istat were modified, with the abolition of temporary employees: it was the final step in the "normalization" of the Institute;

yet, the outbreak of war in Europe in 1939 upset the bureaucratic routine putting a stop to publication activity and decimating the staff with the first recalls to arms in 1940. Italy's entrance into the war offered also the chance to the Fascist Party to redirect Istat, by claiming the need to split the General Direction of the Institute to assure the political loyalty of the staff (Molinari never joined the Party: LETI, 1996, p. 162).

In 1941 Giuseppe Adami was appointed to the new-established staff directorate; in 1943, after the armistice, the reconstitution of a Fascist government in the North of Italy and the replacement of Savorgnan, he was to become Commissary of the Istat, renamed National Statistical Institute and moved to Venice and then to Menaggio under the Salò Republic.

Molinari did not move to North but stayed in Rome, where he managed the statistical activity of the Institute before and after the liberation of Rome in 1944, until his suspension from the office in 1945. Brought on trial before the purge commission, he was acquitted and sat in the Economic Commission of the Constituent Assembly, passing then to the economic division of the United Nations Relief and Rehabilitation Administration (UNRRA) in Italy and in 1948 to the direction of the Association for the development of industry in the South of Italy (SVIMEZ).

To the General Direction of Istat was appointed Benedetto Barberi, who kept the office until 1962; the Presidents Alberto Canaletti Gaudenti and Lanfranco Maroi did not intervene on the effective reorganization managed by Barberi in the early Fifties. The old problem of the centralization or coordination of statistical services did not come up again after the war: Barberi focused on the "innovative reconstruction", centered on the development of the national accounts system and on the introduction of current sample surveys on industrial, financial and labor matters.

This choice got ahead of the difficulties originating in the administrative survey practices in use inside State ministries and agencies, referring to local bodies such as municipalities and Chambers of Commerce. From 1951 to 1953, in spite of the criticism from the representatives of manufacturers and workers' associations inside the reconstituted CSS, Barberi started new sample surveys on value added, on family budgets and on labor forces, following the instructions of international organizations and the US statistics model. This strategy enhanced the neutral, accounting role of official statistics dismissing any explicit technocratic ambition, even toning down its public, government- and state-functions (in 1956 Marcello Boldrini came to the point of suggesting to denationalize Istat; MARUCCO, 2000, p. 129). Every reference to the "nation" (as

national and nationalistic) as the political and scientific justification for an hegemonic attitude inside state administration was no more legitimate.

Yet, aside from the post-war turn in political discourse and context, there's an interesting element of continuity, suggesting that the actual shift from "power" to "impersonality" in official statistics has to be searched in the Thirties. Even the major change in the attitude towards survey techniques, from exhaustivity to sampling, was linked to discussions from the late 1930s inside CSS and probably to Barberi's own researches on the ways to carry out the industrial census.

During the forced cessation of the surveys because of the war, in 1941 the CSS discussed on the establishment of an economic activities register, supported since 1933 by Gaetano PIETRA (1934) and Paolo FORTUNATI (1932) in a corporatist perspective. Barberi opposed the project asserting the unfeasibility of a continued and comprehensive survey of industrial production and explicitly proposed the alternative use of representative samples. At the time, the explicit reference model was the use of "estimates" in Ernst Wagemann's German Institut für Wirtschaftsforschung; Barberi anyway showed full knowledge of state-of-the-art sampling techniques (FAVERO-TRIVELLATO, 2000, pp. 271-276).

That debate resulted in nothing more than the institution of a research commission; but it is noteworthy as a sign of the emergence of methodological positions inside the Istat of the late Thirties that were irreconcilable with the exhaustive (and organicist) approach to statistical investigation that was Gini's one.

The exchanges of communications between Gini and Molinari, Barberi and other statisticians, demographers and economists of the Thirties, as documented in Gini's papers, could hence be useful to focus on what has emerged as the main turn in the history of Istat, the 1932 changing at the top. After an initial "militant" phase, during the Thirties Istat lost some powers but consolidated its autonomy by means of an increasing specialization, based on a technical education of the employees and the scientific organization of their work.

These choices proved to be far-sighted, since they assured the institutional continuity of official statistics through the war, the fall of Fascism and the Nazi occupation of the country, up to post-war decades. Still, it is important to point out that this continuity in persons and practices was (so to speak) merely factual: the meaning that those same persons attached to these practices was in most cases completely different, given the changed scientific and political framework they were part of. It's evident that personal, more than official papers could say more on this kind of issues.

#### ABBREVIATIONS

ACS	Archivio Centrale dello Stato
CISP	Comitato Italiano per lo Studio della Popolazione
CSS	Consiglio Superiore di Statistica
ISTAT	Istituto Centrale di Statistica
IUSSP	International Union for the Scientific Study of Population

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#### ABSTRACT

In this paper, I try to interpret the history of Italian statistics under Fascism in a longer term perspective, showing the links between the establishment of Istat in 1926 and a century-old theoretical economic and administrative tradition that assigned a central function to statistics in the government of the nation. Along these lines, the demographer, sociologist and statistician Corrado Gini, put at the head of Istat, laid the foundations of the Institute in a specific technical training of the staff and in the production of exhaustive and reliable data. His papers, recently deposited at ACS in Rome, will perhaps shed some light on the issues I pose here. Gini's organicistic theory of society (and his corporatist theory of economy) can be interpreted as an effort to comprehend the field of human sciences, from biology to politics, in an organicist perspective. But it never became hegemonic in Italian scientific debate, and in some way Gini's absolutist attitude inside administration was an obstacle for Mussolini's needs for arrangement and consensus. After the resignation of the first from Istat in 1932, official statistics went through a restructuring due to financial and editorial limitation. In this context, the target of surveys shifted from population-centered concerns to a wider attention for economic and social issues. The internal debate on "corporatist statistics" reveals the long incubation of the apparently innovative solution given in post-war years to the problem of statistical centralization with sample surveys, a solution that Gini scientifically opposed beginning in 1929. From a different point of view, the same debate reveals the role played by technical specialization in assuring the autonomy, but also the continuity of official statistics during and after Fascism, reproposing its essential role in a context where its political function was changing from control to information.

**KEYWORDS:** Corrado Gini; official statistics in fascist Italy; population theory; statistical methods.

**JEL CLASSIFICATION:** B31, N44

#### CORRADO GINI E LA STATISTICA NELL'ITALIA FASCISTA

##### SOMMARIO

Mi propongo qui di inquadrare la storia della statistica italiana del periodo fascista in una prospettiva di lungo periodo, mettendo in evidenza i nessi che legano la fondazione dell'Istat nel 1926 a una tradizione "amministrativa" unitaria che assegnava alla statistica un ruolo centrale nel governo della nazione. Inserendosi consapevolmente in questa linea, il demografo, sociologo e statistico Corrado Gini, posto a capo dell'Istat da Mussolini, pose le fondamenta dell'Istituto nella

formazione specialistica del personale e nella produzione di dati affidabili ed esaurienti. Le sue carte, recentemente depositate presso l'ACS, potranno forse dare qualche risposta alle questioni che intendo porre in questo intervento, che in parte si configura come una riflessione preliminare allo scavo archivistico. La teoria demografica e il corporativismo economico di Gini possono essere interpretati come un tentativo di unificare l'intero campo delle scienze sociali, dalla biologia alla politica, in una prospettiva organicista. Tuttavia, le posizioni di Gini non furono mai dominanti nel panorama scientifico italiano, e in qualche modo il suo autoritarismo scientifico, ma anche nei rapporti all'interno dell'amministrazione, finì per rappresentare un ostacolo per le esigenze di consenso e compromesso proprie della politica mussoliniana. Dopo le dimissioni di Gini nel 1932, l'Istat conobbe una ristrutturazione dovuta a restrizioni finanziarie ed editoriali. In questo contesto, l'attenzione delle indagini finì per spostare il proprio fuoco dalle questioni demografiche ad una più ampia attenzione per le tematiche sociali e soprattutto economiche. Il dibattito interno al CSS sulle "statistiche corporative" rivela la lunga incubazione, nel corso degli anni Trenta, della soluzione innovativa data nel dopoguerra al problema della coordinazione delle funzioni statistiche attraverso l'implementazione di indagini campionarie periodiche. A questa soluzione Gini aveva opposto forti obiezioni teoriche sin dal 1929. Quel dibattito appare sintomatico del ruolo peculiare giocato dalla progressiva specializzazione delle tecniche statistiche nell'assicurare l'autonomia, ma anche la continuità della statistica ufficiale durante e dopo il fascismo, favorendone un mutamento di funzione politica dal controllo all'informazione.

PAROLE CHIAVE: Corrado Gini; statistica ufficiale nell'Italia fascista; teorie demografiche; metodi di rilevazione statistica.