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RESEARCH PAPER

Exploring Generalizations: A Doctrinal Analysis of Meanings, Kinds, and its Function in the Judicial Process of Proof

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PAPER INFO	ABSTRACT
Received:	The present study aims at analyzing the definitions, kinds, and
February 21, 2022	functions of generalizations in the judicial process of proof. This is a
Accepted:	multi-stage and fact-oriented process in which specific laws are
May 28, 2022	applied on established facts. These facts are established with evidence
Online:	produced by the parties which is subsequently evaluated by judges.
May 30, 2022	Generalization plays significant role in the evaluation of evidence
Keywords:	which necessitates its thorough understanding. Though a few
Functions of	researchers have examined generalization in legal context, however,
Generalizations	there exists ambiguity regarding its definition, kinds and functions.
Generalization,	The present study, which is doctrinal in nature, intends to fill this gap.
Judicial Process of	The present study argues that generalizations are general statements
Kinds of	about how things generally happen in the world Additionally, it
Generalization	argues that generalization has various types according to their nature
*Corresponding	nurpose source and probative value Similarly this research has
Author	identified six various roles which generalization discharges in the
sajidali10@hotmail.c	indicial process of proof
om	judicial process of proof.

Introduction

The judicial process of proof refers to a number of steps in the course of the administration of justice through the established system of courts. The various researchers have divided the whole process of proof into three stages; discovery stage, testing stage and justification stage. At the discovery stage, different hypotheses are formed about what happened in a case, these hypotheses are tested at the pursuit stage and one hypothesis is selected as the best. Similarly, at the justification stage, the decision to select a particular hypothesis is justified by giving reasons (Bex, 2011, pp.21). This paper concerns with the meaning and functions of generalizations in the second stage i.e. the pursuit stage. During this stage, the parties to the litigation adduce evidence to establish disputed facts and the judges reasoning with evidence to draw conclusions. They evaluate the evidence with general knowledge or generalization. The generalization becomes the basis to draw inferences from evidence in the chain of reasoning at trials. So, generalization is the integral element of evidential reasoning. The generalization is the opposite of particularism and it allows making decisions about specific matters on the basis of the features of group or the class to which the target belongs to (Schauer, 2006, pp. 19-20).

The understanding of generalization and how it works in the judicial process of proof in general and in evidential reasoning in particular is very important in legal reasoning (Anderson & Twining, 1991; Schum, 1994). It is imperative for the legal fraternity to have deeper understanding of the generalization to avoid reasoning errors in the judicial process of proof. (Saunders, 1993, pp. 367-369). However, there is scarcity of research on the meaning, kinds and the functions of generalizations in the process of judicial proof. Due to the scarcity of the literature on this topic, many researchers have pointed out that it is a neglected area in law (Walton, 2005, pp.35). The present study is doctrinal in nature and it intends to fill this gap as it explores the meaning, kinds, features and functions of generalization in the process of proof. This article has four sections other than introduction. The second section discusses the meaning and features of generalization as discussed in the literature and in Qanoon-e-Shahadat Order. The third section explores the kinds of generalization, the fourth section explores the various roles of generalization in the judicial process of proof and the last section concludes the article.

Conceptualizing Generalization and its Features

Generalization has various meanings in the literature since different researchers have defined it differently. This section is devoted to conceptualize generalization by exploring the definitions and features of generalization as discussed by different researchers.

As far as the definition of generalization is concerned, it has been defined in several related ways. The Oxford dictionary says that generalization refers to a general statement that is based on only a few facts or examples. Picinali (2012) defines generalization as a statement which expresses a synthetic relationship between the happening of a fact belonging to distinct class and of prototype. Koehler & Shaviro (1990) view generalization as 'the relative frequency with which an event occurs or an attribute is present in a population', which is constituted by a group of similar people or events. To Cohen, generalization refers to the generalized statement about how the world works, about the human actions and intentions and about their surrounding and their interaction with the environment (Cohen, 1977, pp-274-276; Bex, 2011, pp.18). Anderson & Twinning (1991) define generalization as a general proposition which is deemed to be true and is used expressly or impliedly to establish a conclusion (Walton, 2005). Schum (1994) thinks that generalization fastens evidence with inference and Christian Dahlman calls generalization as warrant which justifies the conclusion about hypothesis (Walton, 2005b, pp-15). Similarly, Walton (2005b, pp-15) believes that generalization is a statement which describes the feature of a group and it narrates how things go generally. He further adds that generalization is a type of statement that ascribes some property to a group of individual or things, as opposed to a particular statement about a specific thing. Sometimes a generalization is called a rule, or general rule, because it states how things generally go in a wide range of specific cases (Walton, 2005b, pp. 18).

These definitions provide a useful insight about what is generalization in general and in legal context in specific. However, each definition discusses different aspects of generalization. So, it is necessary to identify the common theme/s in these definitions to make a general statement about the meaning of generalization. A careful examination of the above definitions of generalization reveals six major themes. Firstly, generalizations are statements which show synthetic relationship between two objects/ classes. Secondly, the two objects or classes share striking similar features with each other. Thirdly, generally the statements based on generalizations are accepted as true. Fourthly, these generally held true statements may relate to objects, classes, actions and intentions of human beings, their environment, and the relative frequency of happening of certain facts in the world. Fifthly, these statements are used either explicitly or impliedly to draw conclusions. Sixthly, these statements are made sometimes after observing one instance or sometimes after observing various instances. While keeping in view these six major themes, one can conclude that generalizations are the generally believed true and concise statements after observing particular instances about human beings including their behavior, intention and actions and about the happening of various events in the world. These statements show a synthetic relationship between two entities belonging to the same class and sharing common features. To have a deeper understanding of the generalization, it is imperative to carefully study the features of generalization other than discussing the definitions of generalization.

In this regard, various researchers have associated numerous features with generalization which can be summarized in nine points. Firstly, some researchers think that generalizations do not have universal application. They maintain that generalizations have certain exceptions which do not allow their application in specific circumstances. For instance, Bex (2011, pp. 18) argues that generally the application of generalization is not universal instead there are certain exceptions to their application. Secondly, many researchers are of the view that the generalizations are the warrant or justification for the arguments which can be described in the logical form i.e. if-then (Bex, 2011). For instance, if a witness under oath says that an event happened then it is presumed that he is speaking the truth. Thirdly, some researchers claim that when a particular generalization is intended to be applied on two facts, there must be causal relations between them. However, generalization may be causal or non-causal and both are applied in judicial decision making. Fourthly, generalizations are defeasible in nature i.e. it is generally assumed that the generalizations are true until proved contrary and these enable a reasoner to legitimately move from one inferential step to another (Schum, 2001).

Fifthly, generalizations are inductive in nature. Sixthly, generalizations are expressed in the fuzzy terms when these are used as warrant. To Bex (2011), when generalizations are used in judicial trials, these are expressed in fuzzy terms like sometimes, most of the times etc. Seventhly, the fact-finders use various generalizations in juridical trials and each type of generalization has its own probative value. In addition to this, their probative value may be weaken or strengthened by producing supporting or attacking evidence. Eighthly, mostly generalizations in judicial trials are not based on empirical testing or scrutiny. Bex et all (Bex et al., 2003, pp. 141) point out that generalizations used in judicial trials cannot be tested since the practical context of a trial makes it impossible. Lastly, generalizations may be based on people's beliefs; hence these generalizations may be suffered from people's prejudice, bias and beliefs. For instance, Twining (1999) maintain that generalizations are usually based on folk beliefs, which may be infested with value judgments, preconception and thought etc (Bex et al., 2003, pp. 141).

The discussion in this section leads to the conclusion that generalizations are the generally believed true and concise statements after observing particular instances about human beings and about happening of various events in the world. Generalizations offer a license for an argument and show a synthetic relationship between two entities belonging to the same class and having some common features. In addition to this, generalizations speak about causal or non-causal relations between two entities and may have certain exceptions to their application. The generalization are mostly not empirically tested hence these have varying probative force which can be weaken or strengthen by producing ancillary evidence. From this perspective of generalization, it is important to note that the existing legal framework also allows using general knowledge or generalization in legal proceedings. For instance, article 129 of the QSO permits to consider the ordinary behavior of witnesses or how things ordinarily happen in the world while evaluating evidence. This article also permits the

judges to assume the occurrence of natural events, human conduct and public and private business. Likewise, article 90 to 101 permit the judges to assume that certain official documents are genuine, or certain official acts have been performed in accordance with law. Similarly, article 112 makes it mandatory for the judges that they will use their common knowledge about laws created by statutes or precedents, about public holidays, the course of proceedings of national, provincial and local legislature, the names of court officers of all Pakistani courts and their seal, the names of person holding public offices, the geographical division of time, the flags of all sovereign countries, extent of Pakistani territory and the commencement and cessation of hostility between Pakistan and any other country. Similarly, article 69 permits to use general statements based on general reputation about a man's character.

Kinds of Generalization

Having discussed the definition and features of generalizations, this section intends to describe the different forms and classes of generalizations. It is worth mentioning that a number of considerations are deliberated upon while classifying generalization into different classes. For instance, (Anderson et al., 2005, pp. 266) point out that the purpose, source and reliability of the generalizations play decisive role in its classification about disputed questions of fact.

Various researchers have classified generalization into different kinds on the basis of the source, nature objective, purpose and reliability of the generalization. For instance, Anderson (1999, pp. 458-59) classified generalization on the basis of source and reliability in fact-finding context. On the basis of the source of generalization, he created five kinds including scientific generalization, expert generalization, general knowledge generalization, experienced based generalization, and belief generalization. Similarly, he classified generalizations, on the basis of their reliability, into two kinds namely generally accepted generalizations (like law of gravity) and generalizations based on prejudices (like flight from the scene) (Anderson, 1999, pp. 459). Similarly, (Anderson et al., 2005, pp. 266) have classified generalization, on the basis of their reliability, in two kinds namely well tested, generally accepted generalizations and untested generalization based on false stereo types. He further created their two sub-classes namely synthetic-intuitive generalization and context specific generalizations (Anderson, 1999, pp. 459). To him, synthetic-intuitive generalizations are those generalizations which a person synthesizes or intuits from his stock of knowledge and beliefs. On the other hand, context-specific generalizations are those generalizations which are made specific to draw a particular inference because it is necessary to make the argument explicit(Anderson, 1999, pp. 460).

On the same line of inquiry, Anderson et al., (2005, pp. 265) classified generalizations on the basis of four points namely their generality, reliability, source and commonality. Their generality axis involves two types; the generalization in the abstract form and generalization which have been specified to the extent of a specific case. Similarly, their reliability axis involves three major types. In the first sub-category, they include four types of generalizations including generalizations based on scientific laws (like law of gravity), scientific opinion by a qualified expert, and widely shared conclusions based upon common experience (for instance, everyone knows that a driver must stop for a red light). In the second type, they include commonly held beliefs which are either un-provable or unproven (for instance, fleeing the scene of a crime is evidence of a guilty conscience). In the third type, they include biases or prejudices that may be strongly held irrespective of available data (for instance, women do not make good trial lawyers; men are generally poor single parents; whites cannot fairly sit as jurors when a black is on trial, etc.) (Anderson et al., 2005, pp. 102). Similarly, they divide generalization on the basis of source-axis into generalizations based upon repeated personal experience, generalizations based on acquired knowledge and "synthetic/intuitive" generalizations. They add two more classes namely case specific generalization and background generalization in the above list (Anderson et al., 2005, pp. 266). They point out that case specific generalization may be expressed or implied and may be based on case specific information which may include local practices, personal habits and character established on generalization refers to the generalization which is based on shared stock of knowledge. They also divide generalization into scientific generalization, general knowledge generalization, experienced based generalization, and belief based generalization.

Scientific generalizations are generally established with the testimony of expert witness and are based on scientific principles, laws, knowledge and research. The reliability of such generalization depends upon the nature of scientific research and its acceptability (Anderson et al., 2005, pp. 270). Generalizations based on general knowledge are accepted and applied in the case undisputedly because these are accepted and recognized undisputedly in the community. Generally the courts take judicial notice of the generalizations based on general knowledge (Anderson et al., 2005, pp. 270-71). Likewise, experienced based generalizations are formed either with first- hand experience of a particular person or it may be the cumulative experience of the community. Similarly, belief generalization refers to those generalizations which are based on common knowledge or common sense. An important feature of such generalizations is that at times the source of such generalizations may be pointed out and sometimes its source cannot be traced (Anderson et al., 2005, pp. 271).

Walton divides generalization into three types; universal generalization, inductive generalization and defeasible generalizations. To him, a universal generalization is absolute in nature having no exception; it says something about each and every individual of the given kind. Similarly, inductive generalizations are not universal and these generalizations tell in a specific number about the features of a class. He maintains that such generalizations may be statistical or non-statistical (non-statistical generalizations may be converted into statistical generalization). For instance, 'most frogs are insect-eaters' or '76.8 per cent of frogs are insect-eaters'. Likewise, defeasible generalizations state that particular types of individual normally have a certain feature but this statement has certain exceptions in certain circumstances (Walton, 2005b). For example, the generalization 'Birds fly' says something generally about the birds. But this statement is true even though there are some birds, such as penguins and ostriches that do not fly. It is to be noted that such generalizations are applied upon specific type of a particular class and if these generalizations are not applied upon that type, generalizations remain true but their application is contested.

Similarly, Pundik (2017, pp. 192-93) classified generalization into deterministic generalization and probabilistic generalization. To him, deterministic generalizations have no exception; for instance, the generalization that human beings die without oxygen can be used to infer with certainty that the victim died if it is known that he had no oxygen. On the other hand, probabilistic generalization is not universal and it admits certain exceptions. For instance, it is thought that smoking causes cancer but it is not sure that every smoker will suffer from cancer. Lastly, Schauer (2006, pp. 7) talked about two types of generalizations; the generalizations that have no statistical or factual basis and those that do. The generalizations which have statistical backing are called non-spurious generalizations and the generalizations which lack statistical support are called spurious generalizations.

The above discussion indicates that the various kinds of generalization introduced by numerous researchers are overlapping. These definitions convey the same idea but in varied words and terminologies. These various types of generalizations show that the classification of generalizations indicates the source of generalization, their application, their acceptability, their backing, and their generality. Additionally, the classification of generalization becomes significant when evidential arguments are evaluated. If the applied generalization is absolute, based on scientific knowledge and empirically tested, the argument will be strong otherwise it will be weak.

Functions of Generalization in the Process of Proof

Having discussed the various kinds of generalization, this section explores the role of generalization in the judicial process of proof. Many researchers have identified and discussed numerous function of generalization in the judicial process of proof and these functions can be described in the following six points.

Firstly, judges and advocates use generalizations to formulate one or more theories of their cases. A number of researchers have propounded the definitions of case theory and three definitions are discussed to understand the meaning of case theories. McElhaney (1994, pp. 78) defines case theory as "the basic underlying idea that explains not only the legal theory and factual background, but also ties as much of the evidence as possible into a coherent and credible whole. Miller (1994, pp. 487) added that it is an explanatory statement linking the "case" to the client's experience of the world. Anderson et al., (2005, pp. 17) defined it as a logical statement about a case on the basis of given and acceptable evidence. Due to the significance of case theory, it is necessary to construct at least one case theory in the case since judges and the lawyers construct their arguments in light of the constructed case theory. David Schum is of the view that the case theory may be formulated with adductive reasoning coupled with generalization. Similarly, Anderson et al., (2005) argue that generalizations play very significant role in the formation of case theory. They point out that case theories are the products of analyses that require, among other things, significant generalizations that are likely to influence the fact finders.

Secondly, generalization is used to evaluate witnesses' testimony. Twinning (1994, pp. 334) points out that the process of proof revolves around mainly fact-finding and generalizations are necessary for factual reasoning. The fact-finding depends upon evidence and witnesses' testimony is the most frequent type of evidence to establish the questions of facts. However, it is also necessary to evaluate the content and credibility of witnesses. The fact finders evaluate the content of testimony and credibility of witnesses by relying upon the generalizations. Pundik (2017, pp. 27-28) argues that some type of generalizations is necessary to accept or reject witnesses' testimony. He illustrated his point by citing an example from Twelve Angry Men where an old lady testified that she saw the accused. He added that her testimony was discredited because it was proven that she was not wearing her glasses at that time. He further added that judges relied on the generalization that people with weak eyesight and without glasses may err in identifying a person (Pundik, 2017, pp. 6). Additionally, all kinds of evidence in the judicial trial require the express or implied application of generalizations since without generalization there is nothing left but just the evidence which is not of much importance (Pundik, 2017, pp. 7). Other than eyewitnesses' testimony, generalization is also used to evaluate expert-witnesses' testimony (this generalization is based upon scientific knowledge). The scientific knowledge has proved that certain objects behave in certain manners in specific circumstances. The fire arm identification is a good example on

the point. Firearms identification has relied on the hypothesis that there is a unique signature left by a firearm on the elements of the fired round, i.e. the striation marks on the bullet or a number of marks on the cartridges. (Bonfanti & De Kinder, 1999) observed a number of instances and generalized their observation by pointing out that each firearm leaves different and specific marks on bullets and cartridges. They applied this generalization on number of studies and found that the generalization was confirmed.

Thirdly, generalization is used to move from one inferential stage to another in the judicial process of proof. The inferential process in judicial trial is a multi-stage process which requires a movement from one inferential stage or step to another. This moment requires a legitimate ground to move from one step to another. This legitimate ground is called warrant or generalization which justifies the movement from one inferential stage to another (Schum, 20011). Fourthly, generalization is used as gap filler in the judicial process of proof when there is lack of evidence regarding a particular fact. Anderson et al., (2005) argue that when there is lack of evidence about a question of fact, back ground generalization will be used to fill this gap. Abimbola (2013) illustrated how generalization is used as gap filler. He maintained that in a letter to The Honolulu Advertiser on 5 December 1974, Vincente Romero, the Consul General of the Philippine Consulate General, advanced the following argument:

"As an academic, Professor Benedict J. Kerkvliet has given himself away as biased and unscientific ... it is pathetic to see Professor Kerkvliet, a non-Filipino, deploring political and social conditions in a foreign country like the Philippines when his own country calls for social and moral regeneration."

He explained that in this argument, the Consul General relied upon an unstated generalization about foreigners in drawing his conclusion that Professor Kerkvliet is "biased and unscientific." He did not offer any evidence whatsoever in support of his claims about the Professor's prejudice. The argument simply relied on the generalization that foreigners are unable to view issues from the perspective of an insider who understands the intricacies of the local issues (Abimbola, 2013, pp. 6).

Fifthly, generalization in the judicial process of proof is viewed as glue between evidential arguments and inference. The judges draw inferences from proffered evidence to decide legal issues which means that there is a close connection between evidence and inference. It is necessary to create a link between evidence and inference to justify the fact that inference is valid (Pundik, 2017, pp. 12). The generalization creates that link which connects evidence with inference. Schum (2002) argues that generalization creates a justifying link between evidence and inference. He pointed out that the generalization and ancillary evidence works like glue between evidential arguments aiming at chaining of reasoning and hypothesis (Schum, 2002, pp. 309). Sixthly, generalization is used in the judicial process of proof to determine the probative value of evidential arguments and inference. The probative value of argument or inference refers to the degree to which evidence supports a particular conclusion (Walker, 1996, pp. 1095). One of the objectives of fact-finding is to evaluate the inference from the evidentiary propositions. Anderson et al., (2005, pp. 101) argue that the probative value of inference depends upon the generalization which has been used in the evidential argument to draw that particular inference. Walker (2002, pp. 232) adds that the probative value of conclusion of an evidential argument is determined with the type of generalization used in the argument; if the generalization is weak, inference will also be weak.

The above discussion shows that generalization occupies central place in the judicial process of proof. Moreover, the judges and lawyers rely upon generalization at every step in

the judicial process of proof; they use generalization to formulate case theories, to evaluate every type of evidence, to link evidence with proof, to move from one inferential stage to another, to fill the evidential gaps and to estimate the probative value of evidence and inferences.

Conclusions

The present study intended to explore the meaning, kinds and function of generalization in the judicial process of proof. The discussion in this study leads to the conclusions that generalizations are the statements which describe that how generally human being behave, how normally different events occur, how various objects behave generally and how different things are generally done in the world. Additionally, generalizations are not empirically tested and applied in all circumstances rather these have certain exceptions. Moreover, generalization has been accommodated into various kinds on the basis of their source, application, acceptability, backing, and generality. Furthermore, generalizations are used to formulate case theories, to evaluate every type of evidence, to link evidence with proof, to move from one inferential stage to another, to fill the evidential gaps and to estimate the value of the probative force of evidence and inference.

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